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CONTENTS.

Original Communications.

THE TREATMENT OF OPIUM ADDICTION.

By DR. J. B. MATTINSON, BROOKLYN, N.Y.

Read before the American Association for the cure of Inebriates, Oct. 22, 1884.

Several years have passed since the writer had the pleasure of reading before this society a paper on the subject of opium addiction.

During this time his professional attention has been largely, and, of late years, exclusively devoted to the study and treatment of this toxic neurosis, and, with increasing experience has come improved therapeutics, all of which warrant him in again inviting attention to a topic, that, though accorded but little thought by the profession at large, possesses a great and growing importance, the extent of which, perhaps, will be none the less appreciated, by the reflection that many of those who fall victims to its steady advances, are recruited from the ranks of our own confreres.

Opium addiction is a *disease*, a well-marked functional neurosis, and deserving recognition, as such, to a greater degree than it has hitherto received. In the vast majority of cases, the *vice* theory of its origin is incorrect, so that, with few exceptions, the term "opium habit," is a misnomer, implying as it wrongly does, an opiate using quite under individual control.

As elsewhere stated, "The Genesis of Opium Addiction," *Detroit Lancet*, Jan., 1884, two causative factors exist—necessity and desire, but the result, if the opiate be sufficiently long continued, is essentially the same—a condition of disease, as evidenced by various functional ills.

The central tracts involved are the cerebro-spinal and sympathetic systems. Deviations from health noted, are due to departure from the normal tone of one or both of these centres. Organic lesions are rare, possibly, some instances of renal or brain disease—the usual ultimate result being a state of marasmus, impaired nutrition and profound nerve depression, ending in death.

In the paper to which reference has been made, attention was invited to a new method of treatment, and as this is largely the same we now employ, some improved changes will be noted in passing. We re-assert that it is based on the power of certain remedial resources to control abnormal reflex sensibility, and accomplishes, largely, two cardinal objects, minimum duration of treatment and maximum freedom from pain.

It is a fact well attested by clinical observation that the ravages of opium excess are spent mainly on the nervous systems before noted, inducing changes that give rise to great nervous disturbance when the opiate is peremptorily withdrawn, unless some mitigating measures be interposed, and which, even in the process of very gradual withdrawal, is seldom, if ever, entirely avoided.

A recital of the varied symptoms of abrupt opiate renouncing is not here needed. Let it suffice to say we regard them all, certainly the most important—the aches, pains, yawnings, sneezings, shiverings, nausea, vomiting, diarrhoea, restlessness, delirium, convulsions, exhaustion, collapse—as reflex indications of great irritation in those centres, and any method having the power to counteract and control this condition must contribute vastly to the patient's comfort and cure.

Heretofore, two plans have obtained in the treatment of opium addiction. One, which may well be called heroic, the entire and abrupt withdrawal of the usual opiate, invariably gives rise to great distress of mind and body, to relieve which various remedies are, at the time, resorted to. Those not fully informed, and desirous of knowing the extent of this suffering, which is far from imaginary as some would have us believe, should consult Levinstein's work, in which are given details of twenty-four cases of hypodermic morphia addiction treated by this method, which the author, by a process of logic, neither safe nor sound, declares to be the best. *This statement we emphatically dispute.* No treatment that entails such suffering as in the cases cited, can claim pre-eminence over one more humane and equally effective. A study of the resultant effects in the instances alluded to reveals evidence of dire distress, in seven cases so extreme, perilous collapse, that a temporary return to hypodermic morphia became imperative to avert a fatal termination.

The other plan, consisting in a very gradual decrease of the usual opiate, meanwhile toning up the system to make amends for the accustomed narcotic, secures the desired result at much less discomfort, and we know of no reason why it should not be just as permanent. It is, however, open to the objection of requiring a much more protracted treatment, a point of importance when time is limited, while it also tends to exhaust the patient's patience, and many refuse to continue till success is secured.

The method we commend is a mean between these extremes, and consists in producing a certain degree of nervous sedation and consequent control of reflex irritation by means of the bromides, though we refer, specifically, to the *bromide of sodium*, having used that exclusively in cases under our care. This plan, which, so far as we are aware, is original with ourselves, is merely a new application of a well-established principle, for the power of the bromides to subdue abnormal reflex irritability is so constant that it may be looked upon as an almost invariable sequel of such medication. Dr. Ed. H. Clarke, in his valuable treatise on the bromides, says "diminished reflex sensibility, however different physiologists may explain the fact, is one of the most frequent phenomena of bromidal medication that has been clinically observed, and is, therapeutically, one of the most important." The testimony of other observers is to the same effect. Gubler, Cuttman, Laborde, Voison, Damourette, Sulenberg, Claude Bernard, Brown-Sequard, and Echoverria, all giving evidence as to the power of these agents over abnormal reflex action, and at the same time, over the general nervous system. Admitting that the symptoms of opiate disusing pertain almost exclusively to the domain over which the bromides exert so decided a control, we have a new field presented for the exercise of this valuable power, and the fact, proven conclusively by our experience, that it *does* exert this happy effect, fully supports the idea advanced as to the pathology of this disease.

In speaking of the bromide of sodium, let it be understood that we refer entirely to the influence of the *continued dose*, by which we mean its administration twice in the twenty-four hours, at regular intervals, so as to keep the blood constantly charged with the drug. A most important difference exists between the effect of this mode of exhibition and that of the single dose, or two or three doses so nearly together as to form practically one, for, in the former case, the system is constantly under the bromide influence, while in the other the drug being largely eliminated in a few hours, the blood is nearly free from it a large portion of the time. Results obtainable from the continued use cannot be gotten from the single dose, and, as a consequence, its value is far greater in the disease under consideration.

Again the action of the continued dose being somewhat remote, three to five days usually elapsing before there is decided evidence in this direction, much more desirable results are secured by its employment for several days *prior* to an entire opium abandonment, meanwhile gradually reducing the opiate, than if the withdrawal be abrupt and then reliance placed on the bromide; for, in one instance, the maximum sedative effect is secured at the time of maximum nervous disturbance from the opium removal, and its counteracting and controlling influence is far in excess of that to be had from its employment after the lighting up of the nervous irritation. What, then, we term *preliminary sedation* forms a peculiar and valuable feature in our giving of the bromide, and it is this special point we commend, our experience having convinced us that we have in it an unequaled means of obviating the discomfort incident to the treatment of this disorder.

The value of the various bromides depends on their proportion of bromine. Bromide of potassium contains 66 per cent, sodium 73, and lithium 92 per cent. We should, therefore, expect a more powerful influence from the latter agent, and, according to Weir Mitchell, it has a more rapid and intense effect. The sodium, however, answers every purpose, and has several points in its favor over the other bromides, is pleasanter to the taste, more acceptable to the stomach, causes little cutaneous irritation, and much less muscular prostration. In this connection, recent experiments and observations by Drs. Ringer and Murrell on the superior value of the sodium salt are of interest and may be found in the *British Medical Journal*, 1883.

Either of the bromides, in powder or concentrated solution, is somewhat irritant, sometimes producing emesis, and in any event, delaying its absorption. A practical point, then, is that it be given largely diluted. Dr. Clarke says, " there should be at least a drachm of water to each grain of the salt." We give each dose of the sodium in six or eight ounces of cold water, and have never known it to cause vomiting.

To secure the requisite degree of sedation within a limited period, it is essential that the bromide be given in full doses. We are convinced that failure in its use, in any neurosis, is very often due to a non-observance of this point. Our initial dose of the sodium is 60 grains, twice daily, at twelve hours intervals, increasing the amount 20 grains each day, *i.e.*, 70, 80, 90 grains, and continuing it 5 to 7 days, reaching a maximum dose of 100 to 120 grains twice in 24 hours. During this time of bromidal medication, the usual opiate is gradually reduced, so that from the eighth to the tenth day it is entirely abandoned. A decrease of one-quarter or one-third the usual daily quantity is made at the outset, experience having shown that habitues are almost always using an amount in excess of their actual need, and this reduction occasions little or no discomfort. Subsequently, the opiate withdrawal is more or less rapid according to the increasing sedation, the object being to meet and overcome the rising nervous disturbance by the growing effect of the sedative, in other words, maximum sedation at the time of maximum irritation.

Exceptions to this may occur. Some patients are so weak and anæmic, on coming, that a previous tonic course is deemed judicious, the usual opiate is continued for a time, and, meanwhile, with good food, tonics and other measures an effort is made to improve the impaired condition, and with success, for we have seen patients gain markedly in strength and weight during this roborant regime.

Sometimes, a patient, before placing himself under our care, has reduced his daily taking to the lowest amount consistent with his comfort. If so, the initial large reduction is not made, but the decrease is gradual throughout. Again, in some instances, no reduction is made for two or three days, at the end of which the bromide effect is secured, in part, and the decrease is then begun. And in all instances, this rule governs, *each case is a law unto itself and the length and amount of the bromide giving and consequent rate of opiate decrease is determined entirely by individual peculiarity as shown both before and during treatment.*

Surprise may be expressed and objection made regarding the extent of the bromide doses, but the fact must never be overlooked that we are not to be governed in the giving of any remedy by mere drops or grains, but by the *effect produced.* Again one effect of opium addiction is a peculiar nonsusceptibility to the action of other nervines, necessitating their more robust giving to secure a decided result. More, under the influence of certain abnormal conditions, doses which ordinarily are toxic become simply therapeutic. The annals of medicine abound with instances in support of this statement, and among the most striking may be noted the following : Dr. Southey read before the Clinical Society of London notes of a case of tetanus which occurred in a boy ten years old. The first symptoms of trismus were observed two days after a severe fright and drenching due to the upsetting of a water butt. They steadily increased up to the date of his admission to St. Bartholomew's Hospital, on the eighth day of his illness, when the paroxysms of general opisthotonos seized him at intervals of nearly every three minutes. Each attack lasted from fifteen to thirty seconds, and although between the seizures the muscles of the trunk became less rigid, those of the neck and jaw were maintained in constant tonic cramp. The patient was treated at first with chloral, ten grains, and bromide of potassium twenty grains, every two hours, and, afterwards, with the bromide alone in sixty grain doses every hour and a half. When about two ounces were taken in twenty-four hours, the attacks became less frequent, but at first each

separate seizure was rather more severe, and on the evening of the eleventh day he was able to open his mouth better. On the thirteenth day the bromide was decreased to twenty grains every three hours, and on the fourteenth day was discontinued altogether. When the bromide had been omitted twenty-four hours the attacks returned at intervals of an hour, and the permanent rigidity of the muscles of the neck was re-established. His condition now steadily became worse, so that on the eighteenth day of his illness it became necessary to resort to the previous large doses, one drachm, every hour and a half. After three such doses, the expression became more natural, and he was able to open his mouth again; but it was not until the twenty-fifth day of the disease that it was possible to discontinue the remedy. The patient remained in a state of remarkable prostration and drowsiness, sleeping the twenty-four hours round, and only waking up to take his food for eight days, and passed all his evacuations under him. He subsequently steadily and rapidly convalesced. The bromide produced no ache or other disagreeable effect, and certainly seemed to exert a markedly controlling influence upon the tetanus.

Surely, under ordinary circumstances, no one would think of giving such doses of bromide, but here, under the antagonizing influence of the intense reflex irritation, their effect was vastly beneficial, conducing, beyond question, to the patient's cure.

Given as we commend, no effect is usually noted before the second or third day. Then patients mark an increasing drowsiness, which deepens into slumber, more or less profound, so much so at times that it is difficult to remain long awake. With this is a growing aversion to active exercise, not solely due to lessened muscle force, but largely to mental hebetude. Some cases are met with in which the hypnotic effect is not very decided, but the rule is as stated. Sometimes a saline taste and increased saliva with the bromic breath are noted, and the tongue becomes furred. Acne is usually absent. The renal secretion is, almost invariably, largely augmented. We have known patients to pass more than 100 ounces in the twenty-four hours, and we have noticed this, that where the renal activity is not increased, or is diminished, the sedative effect of the drug is more prompt and decided. The practical point of this is obvious, such cases require a less prolonged bromide giving.

With some there is slight transient loss of co-ordinating power in the fingers, and, exceptionally, in unusually sensitive subjects, there may occur mild startings of the fore-arm tendons. These, however, soon subside, and their going is largely hastened by local faradic seances.

Another bromide symptom, and a curious one it is, refers to a peculiar form of aphasia, as shown by using one word for another,—Brown for Jones, cake for comb, etc. This may persist for several days. Dr. Clarke refers to such instances, and says, "they are hints of a distinct organ of language, and suggest the notion that, inasmuch as the drug we are considering paralyses reflex, before it does generally, sensibility, language may be the expression or correlation of a peculiar reflex power."

Another similar symptom is an odd effect on the memory, the loss of a word or a sentence, and entire inability to regain them at the time, so that the train of thought is abruptly ended. These, though often amusing, are sometimes quite annoying to the patient, but possess no other importance and soon pass away.

Before dismissing this phase of the treatment we must again insist upon the fact that all cases of opium addiction do not require the bromide alike. This is a point of prime importance, and failure to put it in practice, is, doubtless, often the main secret of ill-success or unpleasant results in its use. The patient, as well as his disease, must be treated, and he who uses the bromide, as Fothergill asserts Opie mixed his colors, "with brains," will accomplish far more than the tyro who sets himself up in the treatment of this or any other disorder, and fails to be guided by good judgment. To follow a mere routine giving of the bromine, or any other remedy, unvaried by individual condition, is a sorry showing of professional incapacity. We have lately learned of a case of this kind, presenting a lamentable lack of discretion. The patient, a medical man, addicted to morphia, having decided upon self-treatment, began a plan of operations with the bromide, taking it himself for several days, and then its hypnotic effect asserting itself he gave orders that it should be given him some days longer, and this senseless advice being blindly followed by his attendant, he sank into a stupor which persisted for more than a fortnight. A more indiscreet and foolish performance is seldom heard of, and illustrates anew, in another sense, the truth of that trite legal proverb as to the mental status of the individual who is both lawyer and

client. Let it be distinctly understood that some cases of opium addiction are ineligible for the bromide treatment. Those complicated with serious lesion of the heart or lungs should be excluded, and those in which there is marked general debility should always be accorded a previous tonic course. Lastly, as before asserted, *in each and every case where it is given, the extent of its continuance is to be governed entirely by individual peculiarities as indicated both before and during treatment.*

We now desire to call attention to another point, which our experience has convinced us is of value. We refer to the treatment just after the habitual hypodermic or other opiate is abandoned. Supposing a case where at the end of five to seven days, as individual peculiarity may determine, the desired sedation is secured and the usual opiate reduced to a minimum, say 1-6 to 1-2 gr. each dose, instead of an entire discontinuance, we change the order of affairs and make a break in upon the routine taking, the "habit," so to speak, by giving one full dose, per orem, in the evening. This ensures a sound all-night sleep from which the patient awakes greatly refreshed, and often quite surprised at his good condition, which usually persists during the day. The next evening at about the same hour, the maximum bromide dose and two-thirds of the previous opiate are given. The third evening the same amount of bromide and one-third the first evening's opiate. This ends both opiate and bromide. Exceptionally, the full single dose of opium and sodium is given only one or two evenings. During the following day, if the patient be quiet, nothing is given. Should there be minor discomfort, one-half ounce doses of Fld. Ext. Coca, every second hour, have a good effect. Cases, occasionally, require nothing else. If, however, as usually occur, despite the coca, the characteristic restlessness sets in, we give full doses of Fld. Ext. Cannabis Indica, and repeat it every hour, second hour or less often, as may be required. When the disquiet is not marked, this will control. If more decided measures be called for, we use hot baths, Temp. 105 to 112, of 10 to 20 min. duration, and repeated as required. A short shower or douche of cold water often adds to their value. Nothing equals them for this purpose. Warm baths are worthless. The water must be *hot*, much so as one can bear. We have repeatedly known a patient to fall asleep while in the bath.

And, just here as to "full doses" of the hemp. The dose of the books is useless. As before stated, addiction to opium begets a peculiar tolerance of other nervines, and they must be more robustly given. We give 60 minims Squibbs Fld. Ext., repeated as mentioned, and have never noticed unpleasant results. Small doses are stimulant and exciting, large ones sedative and quieting, hence the latter are seldom followed by the peculiar haschish intoxication. And, lest some timid reader should regard this as reckless dosing, we hope to calm his fears by saying that the toxic power of hemp is feeble, and that these doses are the result of an experience of the drug in many cases, in which smaller ones have failed of the desired effect.

At this writing, two lady convalescents, still insomniac, are nightly taking these full doses with good effect in securing sleep. One recent lady patient, who did not lose a single night's slumber during treatment, and whose need for a soporific ended in eight days, took no other hypnotic whatever. We have used it of late more largely than ever, and with growing confidence in its sleep-giving power, taking, in this regard, almost exclusively, the place of chloral.

Regarding this insomnia, Levinstein and other German writers assert that it will "resist every treatment during the first three or four days." This may be true with them, considering their method, and is, of itself, added proof that they are lamentably lacking in the therapeutics of this disease. Under the plan we pursue, no such sleepless state is noted, and in ordinary, uncomplicated cases, patients can usually be promised recovery without the loss of a single entire night's slumber.

Chloral during the first four or five nights of opium abstinence, fails as a soporific, often causing a peculiar excitement or intoxication, patients talking, getting out of bed and wandering about the room, followed, it may be, after several hours, by partial sleep. Later, in full doses, we prefer 45 grs. at once, rather than three 15 gr. doses; alone or with a bromide, it can be relied on as a hypnotic, but we have thought that in some cases, where it secured sleep, patients, the next morning, felt a certain languor, of which it was, largely, the cause. Some who use the hemp, mention a feeling of fullness about the head and eyes, with occasional confusion of thought, but seldom complain of pain, having noted only one such case.

The bromide, baths, hemp, and coca, with or without capsicum, of which more later, are, therefore, main remedies for the restlessness and insomnia, two symptoms which, with a third, sneezing, are invariable sequelae of opium withdrawal, and, wanting which, patient is surely deceiving his physician.

For relief of neuralgic pains in various parts, which sometimes occur, varied measures suffice. At the head of the list are electricity and the local application of ether. As to the value of the galvanic current in neuralgic headache, so common in opium habitues, and the manner of using it, the reader is referred to a paper on "the prevention of opium addiction," in the *Louisville Medical News*, Feb. 23, 1884. The same agent is effective in relieving limb and lumbar pains, though here a much stronger current is required than can be used with safety about the head. Sometimes a strong faradic acts well, and where one fails, trial should always be made of the other. Local hot baths, sitz or pediluvium, are often of great service for this purpose. Chloroform, locally, relieves; so too, massage.

Regarding the ether, those who have never employed it, will, we are sure, be surprised at its pain-easing power. It matters not how it be applied, spray, drop or lavement, it is potent for good.

These three, electricity, ether, hot water, are our main anodynes, and one special point in their favor is entire freedom from unpleasant gastric or other results.

For relief of minor neuralgic pains other remedies, at times, suffice. Croton chloral, in 5 gr. doses, every hour, is sometimes quite effective in tri-facial disorder. Tonga, in one drachm of fluid extract every hour, is often a reliable anodyne. Its value in some cases seems increased by combining it with the various salicylates. Caffein or guarana occasionally relieve.

Externally, menthol, in solution, two drachms to the ounce of alcohol used with a brush, as a spray, or the menthol cone, is sometimes of service, so, too, the well known camphor and chloral combination, bi-sulphide of carbon and various minor local anæsthetics.

Under this plan of treatment, disorder of stomach or bowels is rare. Our rule is to give an active mercurial or other cathartic, in the outset, if there be evidence of alvine disorder, and then secure regular action by such laxative as is found most agreeable. If the latter be so relaxed as to require restraint, xxx minim doses of fld. ext. colo, or 60 gr. doses of sub. nit. bismuth, every two to four hours often serve a good purpose. They are best given in capsule. If, however, the diarrhœa persists more than 24 hours, the most effective measure is to give a full opiate, tinct. opii., per mouth or rectum, preferred at bedtime. This promptly controls, gives a full night's sleep, and the trouble seldom returns. Fear of an untoward effect on convalescence is unfounded. With our experience, the assertion of one writer that "it is impossible to cure the opium habit," and bridge the patient over the crisis, without having the bowels freely relaxed, seems quite absurd. We have again and again seen patients recover who had only 2, 3, or 4 movements daily. One such, lately dismissed, was a hypodermic taker of 20 grs. morphia, daily, and had been addicted for several years. Others have required a laxative enema in less than a week after the opiate withdrawal.

Formerly, an exclusive milk and lime water diet during the first two or three days of opium abstinence was deemed advisable. This regime is not now imposed, as some patients are able to do dietectic duty, and the rule is to make no restrictions unless the exceptionally occurring stomach or bowel trouble seems to require. More than one patient, habitues for years, did not vomit once. The excessive vomiting mentioned by Levinstein and Obersteiner, they practice abrupt disuse, we have never noted. The former thinks the collapse, which we have never seen observed, in several of his cases, was due to the vomiting and purging. Probably the largest factor in causing it was the exhausting general mental and physical suffering which his monstrous method entails.

If the stomach rebels, entire rest, abstinence from solid food, or all food, for a time, milk and lime water or Murdoch's food, in small amount, often does well. If more active measures be required, sinapisms, ether, Faradism externally and internally, bismuth, chloroform, Menth. pip., ice, are of value. If all fail, a full opiate, hypodermic, will promptly suffice.

Having thus crossed the opiate rubicon, treatment relates, largely, to the debility and insomnia. For the former, of internal tonic-stimulants, coca leads the list. But our experience does not warrant Morse's assertion "coca cures the opium

habit"—that is a mistake. While it is of great value in relieving the varied symptoms of lessened nerve tone, it is *not a specific*. Patients, long used to opium cannot abandon it and trust to coca alone, to carry them over the crisis. This, save in mild cases, it will not do, but, conjoined with other measures, it is strong for good. Of a reliable fluid extract, we give it sometimes before, and always after the acute restlessness, in 4 to 8 drachm doses, every two hours, or less often as required, and continue in these full doses, at increasing intervals for several days. As need for it lessens we decrease the dose to one or two drachms, and this amount, ter die, combined with other tonics may sometimes be continued with advantage for weeks. As a rule, however, its use is quite abandoned within a fortnight. Its effect, while noted in from three to twenty minutes, seldom persists more than two or three hours, so that, when the demand for it is active, it is best given at this interval. To remove the mental and physical depression, the minor neuralgiæ, and the occasionally occurring desire for stimulants observed in these cases, nothing equals it, being in this regard more nearly a specific than any drug at command: and capsicum, in doses of one-half to one drachm of the tincture, with the coca often adds to its value. For details of this drug and its uses, see "a Case of Coca Addiction," reprint of which can be had of the writer.

Another agent of much service is general faradization, 20 min. seances daily, the feet on a plate to which the negative pole is attached, while the other electrode, encased in a large sponge well wet with warm water, is applied to the entire surface, with a current strong enough to be thoroughly felt, but not painful. This imparts a grateful sense of exhilarating comfort, and is the most effective tonic at command. Thus applied or with anode to cervical spine it may be used daily so long as indicated, taking care not to overdo, for a current too strong or prolonged works mischief, overstimulating and exhausting to the extent, it may be, of several days discomfort, which nothing but time will remove. Very exceptionally, faradism disagrees and has to be abandoned.

Alternating with or following we may use the galvanic current. This is a general tonic of special value in these cases. Our method is, positive pole to nape of neck, and negative to epigastrium for five minutes; then the former behind the angle of each jaw for one or two minutes, making the entire seance of 7 to 9 minutes.

Next to the electric tonic ranks the cold shower bath. It certainly is a great invigorator, and many a patient who dreads it at first, soon comes to appreciate it most highly. If agreeing it should always be taken. With some it acts as a hypnotic. We recall one instance, in particular, of a medical gentleman, who, still somewhat insomniac, after sleeping two or three hours and awaking with no prospect of further sleep, would take a shower, followed by vigorous rubbing, and soon fall into a refreshing slumber lasting until morning.

Internal tonics of course have a place in the roborant regime, varied as the case may demand. In some cases we employ them from the outset, and the use of tinct. ferr. murr. in large doses, 15 to 20 min. thrice daily, has seemed in virtue of its tonic-astringent effect, to serve a doubly good purpose, in lessening the tendency to alvine relaxation. After the opiate disuse, an excellent combination fld. ext. coca with syr. hypophosphites iron, strychnine and quinine, two drachms of each after meals. Another, Fowler's solution or tinct. nux vomica with dilute phosphoric acid or acid phosphate. If anemic, ferric tincture or Blanchard's pills. Digitalis is often useful in many cases, cod-oil is of value, and may be continued for months. We make choice, as required, of emulsion with pepsin and quinine, emulsion with phosphates or plain oil.

Some degree of anorexia is always present, yet it may not prevent the regular meal, and need never occasion anxiety, for probably it will soon give place to a well-marked reverse condition, which may be encouraged to fullest feeding short of digestive disaster. The appetite often becomes enormous, and sometimes, restraint and digestive aid are demanded. If it be slow in returning, rousing measures will suggest themselves. In such cases it has seemed a good plan to stir up the alvine system, once or twice a week for a time, with a mild cathartic at bedtime, or a full morning dose of hunyadi.

One result of the opiate quitting and the regime noted is often a greatly improved nutrition, as shown by a notable increase in weight. One physician, not long since dismissed, gained a pound a day, and another convalescent has lately been adding to his avoirdupois at the rate of twelve pounds a fortnight.

Regarding the insomnia, Levinstein says, "sleeplessness, which is generally protracted up into the fourth week, is very distressing." For reason before given, this assertion is not surprising. Our record differs. Wakefulness is an invariable sequel, and requires soporifics for a time, but is not so prolonged and does not resist treatment. We have known a patient able to dispense with hypnotics in five days: others in eight, and nearly all within a fortnight. Sometimes, they are longer required. Two patients, both physicians, during the last year, did not regain natural sleep for three or four weeks, but this is quite exceptional.

This insomnia is of two kinds. Most patients, after the acute has been passed, soon secure sleep on retiring, but waken early, two or three o'clock, and fail to get more. Others remain awake nearly all night before slumber comes, and these are the ones who usually require soporifics the longer.

For relief of this, cannabis indica or chloral with bromide, in full doses, serve our purpose. If, as rarely happens, the wakeful state is so pronounced or prolonged, despite treatment, as to distress the patient, we never hesitate to give a full opiate sub rosa, and always with good result. In all cases drugs should be dropped soon as possible, and sleep secured by a fatiguing walk, or other exercise, an electric seance, a Turkish, or half hour's warm bath with cold douche or shower, a light meal or glass or two of hot milk, one or more of these before retiring.

Patients whose slumbers end early often note a peculiar depression on waking, and when such is the case, a lunch, milk, coffee, coca, or Murdoch's liquid food should be at their command.

It may be well, in passing, to refer to certain minor sequelae and their treatment. Occasionally a patient complains of dyspnea, or palpitation. We have never noted them but twice, both ladies. A stimulant, coca with capsicum, or Hoffman's anodyne with aromat. spts. ammonia will promptly control.

Some patients are at times annoyed by aching pains in the gastrocnemii, that may recur during several days. Fld. ext. gelsemium, in full doses, strong galvanic or faradic currents, massage, local hot baths, and topical use of chloroform or ether will relieve.

Others mention a peculiar burning in the soles of the feet which mustardizea pediluvia and full doses of quinine usually control.

Sometimes, a dry hacking, paroxysmal cough, more marked at night, may discomfort a patient for a time. It can be relieved by nitrate of silver spray 10 to 20 grs. to the ounce; a bromide of sodium gargle, 60 grs. to the ounce, or a small blister to the sternum.

Returning sexual activity, as shown by nocturnal emissions and erections, as a rule, requires no attention. We once noted, however, a case where the awakened virile vigor was so marked that repressive measures were demanded.

The periodical function of females, which, usually, is irregular or suspended, has, so far as we have observed, required no special after-treatment.

Along with what has been suggested, should be such other general hygienic measures as will add to the good secured. Patients *must* be given attractive surroundings, cheerful society, diverting occupation and amusement, and freedom from care or worry of body and mind, in fact anything, everything, that will aid in the effort to secure a return to pristine health and vigor. That the management of these cases *subsequent* to the need of *active* professional care, is of great importance, enlarged experience increasingly convinces. Neurotic or other disorders noted prior to addiction, whether genetic or not, must be relieved or removed. So, too, with those that may first appear after the opiate disusing: and when none of these are met, when there is merely a lessened power of brain and brawn, ample time, months or years, if need be, must be taken in which to get thoroughly well, if the chance of a relapse would be brought to a minimum.

It is not to be supposed that a system shattered by opiate excess will regain its normal status within a week or a month, nor that a premature return to mental or physical labor will not imperil the prospect of permanent cure. The importance of this must be insisted upon. To medical men, who compose so largely the better class of habitues, it is especially commended. Professional work must not be resumed too soon. The frequency of a narcotic return is in reverse relation to the length of the opiate abstention, and, as favoring this abstinence, prolonged rest, change of scene, foreign travel, sea voyages, all have much promise of good.

The absence of reference to certain remedies which have been mentioned by some as especially useful in the treatment of this neurosis may be briefly noted. Belladonna has been supposed to have a special value. We once used it to the extent of dry mouth and disturbed vision during the opiate withdrawal, but have quite abandoned it, for the simple reason that we found, on trial, patients did fully as well without it, and the freedom from its peculiar effect certainly added to their comfort. Whatever its antagonistic influence in acute opium taking we do not believe it possesses any such virtue in the chronic form.

Quinine in large doses, from the outset, or grs. II. to IV., increasing with the opiate reduction, has been thought to have special value. We have failed to note it, though as a tonic it is well adapted to all cases, and in some patients, 20 gr. doses as an anodyne or soporific act well.

Strychnine is another valued tonic, especially in a very gradual opiate decrease, or at weekly or fortnightly reductions. It has no other claim.

Hydrocyanic acid dilute, aconite and veratrum viride have been suggested. Why, we fail to understand.

Jamaica dogwood has been commended as an opiate substitute, and Morse lauds it extravagantly. He, however, is an enthusiast, and, as such, goes quite too far.

Regarding its use, he says; "coca cures the opium habit, Jamaica dogwood does more than this, it is prophylactic of this disorder. By its use the baneful habit is forbidden the system. This, we think, is nonsense, and have no hesitation in declaring our belief that it is a most mistaken opinion.

And, again, "As an hypnotic opium is not of greater worth," and, "as an anodyne, opium is its only peer." Our experience is entirely contrary to any such assertions. We have made frequent trial of it, the results were uneven. In a few cases the minority, as an anodyne, it seemed efficient. As a hypnotic, it always failed. Morse puts the dose at "fld. ext.: dose min. v. xv." Our ill result, certainly, was not due to the limited quantity, for we usually gave it it in *two drachm* doses. More recent trials have proved utter failures. One as an anodyne in neuralgia, four one drachm doses, half hour interval, no relief whatever. Another, as a soporific: six one drachm doses, same interval, no sleep. It is a nauseous drug, and the aversion to continuing it may sometimes account for its failure. Our patients, too, may be peculiar, but, be that as it may, we have little faith in its value, and now seldom employ it.

Avena sativa has been largely lauded. We have given it again and again, in doses large and small, in water hot and cold, at intervals short and long, and always found it *worthless, absolutely good for nothing.* Bottle after bottle has been left with us by those who made trial of it in vain, and their experience accords with many who have written us, some of whom have taken the "drug" *in ounce* doses several times daily, and used *pounds* of it in the trial, without good!!! Let no one be beguiled into the belief that oats fills the "long felt want." Correspondence has furnished material for a paper which will, we think, quite disprove its vaunted virtue.

Hyoscyamia is a powerful drug, and in some cases may be of service. We once used it, but the need for it now seldom arises. Its employment should be limited to patients in good general condition, in whom the opiate disusing is attended with unusual insomnia and motor activity. In such instances its good effect is sometimes surprising, bringing quiet and sleep with a promptness and power almost startling. We use Merck's amorphous dose 1-12 to 1-16 of a grain hypodermically. This in these patients may be deemed the usual dose. With some, however, this causes a mild delirium without sleep, and in such cases the dose must be increased. Regarding its safety, Dr. John C. Shaw, superintendent of the King's Co. Insane Asylum, has assured us that it is largely given in that institution with as little fear of ill effects as would attend the use of morphia.

The new alkaloid of Indian hemp, tannate of cannabin, commended by German authority, proved an entire failure in our hands. In ordinary insomnia, however, it may act well.

The latest claimant for professional favor as a soporific is paraldehyde. Dujardin Beaumetz lauds it, and claims special value in these cases. Our experience does not warrant such statement. In full doses, 4 to 8 grammes, 60 to 120 minims. It sometimes brings sleep; unlike chloral, in the early nights of the opium abstinence, it does not excite. In most cases both are inferior to Indian hemp. It is best given in one half to one ounce of syrup flavored with peppermint, ginger or vanilla, and then added to a wineglassful or two of ice water.

Non-mention of alcoholic stimulants has perhaps been noted. We rarely use them, the reason is varied. They are seldom called for. Very exceptionally, champagne, milk punch or ale may be indicated, but our rule is, *never to use any form unless imperatively demanded:* and the advice of Levinstein that "those who have an intense craving for alcoholic beverages may be allowed to drink wine in unlimited quantities," is, we think, *positively pernicious.* As Bartholow says, "When the nervous system is losing the loved morphia impression it will take kindly to alcohol;" and he adds: "I especially warn the practitioner against a procedure which the patient will be inclined to adopt, that is to take sufficient alcohol to cause a distinct impression on the nervous system in place of the morphia. This must result disastrously, for when the alcohol influence expires there will occur such a condition of depression that more alcohol will be necessary."

With these opinions we are quite in accord. The fact must not be forgotten that some habitues have used alcohol with morphia: others have taken morphia after addiction to the former, and, in general, habituation to any stimulant or narcotic, begets a liability to take to another in case the original one is abandoned. As a factor in release, alcohol-taking ranks next to a re-use of opium. The risk, then, is obvious, and let the physician beware lest, in the effort to aid his patient in escaping one peril, he but involves him in another yet greater.

Some details of treatment, apart from the strictly remedial, may be of interest. Our rule in making the opiate decrease is not to inform the patient as to its progress, nor the actual time when it is ended. Better tell him when days have elapsed since the last dose, and then the assurance that so long a time has gone by since his enemy was routed will, of itself, be an aid in finishing the good work. The incredulous surprise with which this knowledge is received by some patients who have made frequent but futile efforts to escape, is quite notable.

As regards the manner of taking, a radical change is made. If hypodermically, the syringe is at once discarded and a sufficient amount of morphia or opium per orem given. In many cases resort to the morphia or opium can be made at once. If so, it should be done. If not, their use giving rise to nausea, vomiting or headache, as exceptionally they may, the usual method can be resumed for two or three days, and then the bromide influence having been secured in part, the syringe may be put aside, and the opiate used without unpleasant effect.

A German writer some time ago asserted that many patients taking more than four grains, 25 to 30 grammes, hypodermically daily, will get along fairly well with the same amount of morphia by the mouth. We have not found this to be the case. On the other hand, three times the subcutaneous supply as advised by Bartholow is more than enough. An increase of one-half or double the amount will usually suffice.

Patients may demur to the change, but it should be insisted on, for experience has proven many points in its favor. In the first place, we believe there is, with some, a certain fascination about the syringe, which, once ended, makes an advance towards success in treatment. Many patients come to think that the injections are absolutely essential, and to convince them to the contrary, as the change in taking will, inspires a feeling of gladsome relief and larger confidence in a happy result.

Again the *staying* power, so to speak, of morphia or opium per orem, is much greater than by subcutaneous taking. Of this there is no question. Morphia, hypodermically, is more quickly followed by the peculiar effect of the drug, which, too, is more decided, but earlier subsides, a higher acne sooner reached, to decline more rapidly; whereas by the mouth, or in the form of opium, the rousing effect is more slowly developed, but it is on an evener plane, and more persistent. Patients accustomed to four, to eight injections daily, will do well on two or three doses per orem. One medical gentleman, now under treatment, who had been taking six injections daily, is doing perfectly well on one dose of opium by the mouth, night and morning.

As a rule, too, the change in taking brings about a marked improvement in the patients' condition. We have known them, after using the new method a few days, to declare that they felt better than for years. In many ways, notably increased appetite and improved alvine action, is the change for good.

Still more, those who quit the syringe, and take morphia or opium, usually cross the rubicon of their opiate disusing with withdrawal symptoms so largely lessened as to make this result alone ample reason for the course we commend.

During the decrease, patients are permitted, if desired, to continue their frequency of taking. As a rule, however, by reason of the greater sustaining power of morphia or opium by the mouth, it is not required.

The only restriction imposed is that a certain amount shall suffice for twenty-four hours supply, and this is daily decreased, according to individual need, at such rate as will least likely conflict with their comfort. Patients, moreover, are always instructed that if the amount allowed does not suffice they are to apply for and will be given more. Such being the case, no proper motive exists for secret taking, and if, despite this liberal proviso, it is indulged in, professional relations are suspended.

This being our plan, it will be inferred, and rightly, that we do not subject patients to such surveillance as compels their taking a bath, during which search is made for contraband morphia. Nor do we have an attendant "dogging" their steps during the decreasing regime. No patient with proper self-respect would submit to such treatment without resenting it: and it is not likely to strengthen the confidence that should always exist between patient and physician, and which, with us, is asked for and given. Very seldom is it violated. Patients come to us for relief: they are willing to aid in the effort to secure it, those who are not we decline to accept, and the result is, success.

It is sometimes asserted that all opium habitues are liars, and that, on presenting themselves for treatment, they are always equipped with a syringe and supply. Such a sweeping assertion we do not believe, *we know* it is *not true*. Why, then, should we humiliate them after such a fashion, degrade them by imposing such detective surroundings? Others may, we will not, and as yet we have no reason to doubt the wisdom of our course.

Clandestine taking, either before or after withdrawal, can always be detected. The absence of certain invariable sequelæ of an honest quitting is positive proof of deception; while the presence of morphia in the urine after the time when it should disappear, along with other symptoms, furnish added evidence beyond dispute.

It will again be inferred, and also aright, that we do not practice any such plan as Levinstein advises, when he says: "As soon as the patient has consented to give up his personal liberty and the treatment is about to commence, he is to be shown into the room set apart for him for the period of eight to fourteen days, all opportunities for attempting suicide having been removed from them. Doors and windows must not move on hinges, but on pivots, must have neither handles nor bolts nor keys, being so constructed that the patients can neither open nor shut them. Hooks for looking-glasses, for clothes and curtains, must be removed. The bed-room, for the sake of control, is to have only the most necessary furniture; a bed, devoid of protruding bed-posts, a couch, an open wash-stand, a table furnished with alcoholic stimulants, champagne, port wine, brandy, ice in small pieces, and a tea urn with the necessary implements. In the room, which is to serve as a residence for the medical attendant for the first three days, the following drugs are to be kept under lock and key, a solution of morphia of 2 per cent., chloroform, ether, ammonia, liq. ammon. annis, mustard, an ice bag, and an electric induction apparatus. A bath room may adjoin these two apartments. During the first four or five days of the abstinence, the patient must be constantly watched by two female nurses."

Now what means this rigorous regime? First, that the lack of efficient medical measures essentiates physical force. Second, that the method employed entails such distress of mind and body as to risk a suicidal ending; and that a great calamity always impends—collapse that threatens life, and demands that the Doctor be closely at hand to avert the dreaded danger!

In strong contrast with what has been quoted, during our opiate withdrawal patients are not only permitted but encouraged to go out and about, attend entertainments, and engage in social domestic pleasures; and this is continued throughout treatment, save a transient suspension following the first twenty-four hours of opium abstinence. After the first day of opiate disusing, patients are, for a time, under careful attention, and, if required, an attendant is with them, but the need for services of this sort is, usually, quite limited, and in some instances entirely dispensed with. Again and again have patients presented, who fully expected the rigorous regime imposed by Levinstein, but who were happily surprised to find it was not demanded, and who were fully convinced, before their treatment ended, that it was not at all essential.

As between this method and the barbarous plan of those who counsel and compel heroic withdrawal "comparisons are odious."

In this day of advanced therapeutics the writer holds radical opinions as to the *utter inexcusability*, the *positive malpractice* of subjecting patients of this class to that torture of mind and body the German method entails. It is wrong, grievously wrong; more, it is *cruel* to demand that they shall run the gauntlet of such suffering.

In various papers we have expressed our view on this important part of the subject, and enlarged experience tends only to confirm them. More and more pronounced is our belief "that no physician is warranted, save under circumstances, peculiar and beyond control, in subjecting his patient to the torturing ordeal of abrupt withdrawal. We are well aware that it has the sanction of men otherwise eminent in the profession, but we venture to suggest, with no lack of respect to these gentlemen, that, like a somewhat famous nautical individual, "they mean well, but they don't know." Theory is one thing, practice another, and we are quite certain, were they compelled to undergo the trial, there would be a rapid and radical change of opinion. We regard it as cruel, barbarous, "*utterly unworthy the healing art.*"

"We care not who advocates it, but speak feelingly, emphatically and advisedly on this point, for the simple reason that our experience, again and again repeated, proves beyond all dispute that the opium habitue can be brought out of his bondage without any such crucial suffering as this method of treatment entails."

Bartholow says:—"Having had one experience of this kind, I shall not be again induced to repeat it, if for no other, for strictly humanitarian reasons, since the mental and physical sufferings are truly horrible."

For proof of this and more in detail, the reader is referred to papers by the writer: "Clinical Notes on Opium Addiction," Cincinnati *Lancet and Clinic*, March 3, 1883; "Neurotic Pyrexia with special reference to opium addiction," New England *Medicat Monthly*, June, 1883; "The Treatment of Opium Addiction," *St. Louis Courier* of Medicine, June, 1883; and "A personal narrative of Opium addiction," New York *Med. Gazette*, July 7, 1883, reprints of which can be had, if desired.

More, many unaware that a more humane method is at command, and dreading the ordeal of abrupt disusing, refuse to accept it, and, continuing their narcotic, bind all the more closely "the web that holds them fast as fate." During the past year a medical gentleman nine years addicted to morphia came under our care. Six years ago he first consulted us. During this time he had read Levinstein's book, and the dread of such suffering as that author's patients underwent was, he avowed, the reason for his delay in making an effort to quit the morphia. Finally, summoning sufficient courage, though not without much apprehension, the trial was made, and with the most gratifying success, for, greatly to his surprise and pleasure, he made a notably good recovery, with so little nervous disturbance that not a single bath was called for, and with such freedom from pain that not once was an anodyne demanded, and was dismissed on the 26th day of his treatment. Commenting on his case he declared the manner of his recovery seemed "almost miraculous," and asserted that, had he ever thought so much could be accomplished at so little cost of time and discomfort his effort, years earlier, would have been made, and in a recent letter he wrote: "My own swift and easy passage of that 'one more river to cross,' is an ever recurring source of wonder and astonishment to me, and not a day passes, not a morning comes, without a keen sense of exultation at my escape from the old slavery, a blessed freedom from the old self-accusing conscience, and a return of the old instinctive habit of looking every man straight in the eyes! I think I shall never entirely get rid of a certain shadow of the past; nearly nine years of mental distress, which I thought well-nigh hopeless, most leave a deep and ugly scar at my time of life, but, thank God, that I have only the scar to trouble my memory and not the festering, corroding ever-present ulcer which made me unspeakably wretched and kept me in continual fear of discovery."

Reference to this is made simply to support our statement and convince, it may be, some hoping, yet dreading that scientific treatment has much to promise for their relief.

Before closing, let it be noted that this, beyond question, is a vincible disease, and re-assert, vide "opium addiction among medical men, that repeated experience warrants the assertion that every case of opium addiction free from organic disease, and in which there is an earnest desire to recover, be the extent and duration what it may, admits of prompt and positive relief."

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, October 24th, 1884.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Missed Abortion.—Dr. ALLOWAY read a paper on this subject.

Dr. KENNEDY said he did not like this new name, "Missed Abortion," especially if applied to the retention of a dead fœtus over five months old. He said it was well recognized that the fœtus might die, become mummified, and be retained, or, after its death, it might be expelled and the membranes alone be retained.

Dr. CAMERON also took exception to the term "missed abortion," as not being precise. He mentioned that McClintock made fun of the term by saying that when a woman went to full time it was a case of missed abortion. He prefers calling a blighted ovum a *mole.*

Dr. TRENHOLME said there was no question as to a dead fœtus being retained in some cases for several weeks or months. The only point was as to whether the specimen exhibited was so retained or not. The indications led him to question its long retention, and to regard it as one of a series of early abortions. In those cases of retained fœtuses which had come under his observation, he had found an abnormal condition of the decidua —the reflex decidua being distinct and separate from the uterine decidua, which is strongly adherent throughout. In this way the enveloped fœtus became a sort of tumor, frequently causing hæmorrhage, and its growth being interfered with, the subsequent death of the fœtus is due to the compressing force of the reflex decidua. In his cases he found the decidua very strong indeed, a good deal of force being required to rupture it and allow of the removal of the fœtus. Dr. T.'s theory is that there is sufficient vital union existing to prolong the retention, while the pressure is such as destroys life. It is only when the contents of the uterine cavity become separated to such an extent that the contained mass acts as a foreign body that uterine contractions ensue. This is true whether the contents to be expelled is an early or late product of conception. The fact of the non-union of the reflex and true deciduæ accounts for menstruation during pregnancy; also for the well-known fact that frequently no harm follows the use of the sound, nor even the application of remedial agents to the cavity. Of course the separation of any part of the placenta would be apt to be followed by uterine contractions.

Dr. CAMPBELL said he had a patient with symptoms indicating treatment by means of applications to the interior of the uterus. He first passed a sound and afterwards painted with a solution of iodine and also acid. nitrate of mercury. This was done four or five times before the real cause of her trouble was found out by her aborting.

Dr. ALLOWAY said, in reply to those gentlemen who took exception to the term "missed abortion," that if a better one could be suggested he would gladly accept it. Dr. McClintock's little joke was simply an *Irishism*, and was not intended to convey any literal meaning. Dr. A., however, drew attention to the error of confusing the terms Missed Abortion and Fleshmole. He referred to his definition of the terms relatively, as given in the body of the paper, which distinctly shewed that the term missed abortion alluded to "*a condition,*" and that a mole was "*the product*" of this condition—in fact, a pathological specimen; and that the terms could not be used with any other meaning or relationship. In conclusion, Dr. Alloway said he felt much gratified with the kindness shown by the members who had discussed his paper, more especially for their complete recognition of the correctness of his views relating to this interesting subject.

PATHOLOGICAL SPECIMENS.

Dr. SUTHERLAND exhibited the following specimens :—

1. *An Appendix Vermiformis, containing 14 snipe shot.*—This was removed from a patient who died of chronic Bright's disease, and who had been a lover of game.

2. *Intestines from a case of typhoid fever*, where the patient died on the ninth day of illness, and before ulceration had taken place. The Peyers' patches were swollen and raised about a quarter of an inch. This patient was admitted into the hospital on the sixth day in an unconscious condition, and remained so until death, three days later.

3. *A heart, showing calcification of the valves of a congenitally narrowed aortic orifice.*—Dr. Ross said this had been removed from a gentleman, a traveller, stopping at one of the hotels. He had suddenly taken ill with alarming symptoms, and was sent to the hospital. When admitted he was ruffering from dyspnœa, and died shortly afterwards.

4. *Abscess of the Liver.*—Patient, a woman, was admitted into the hospital under the care of Dr. Molson, with the following symptoms: Pain and tenderness in both iliac fossæ; worse in the right. Had a quick pulse, and was suffering from dysentery. She died in 48 hours. There was a history of having had an attack of illness, with similar symptoms, about a year ago, and lasting five weeks. The *post-mortem* showed signs of an old peritonitis in the region of the right iliac fossa; also signs of recent peritonitis in right hypochondriac region. Flakes of lymph were adherent to the under surface of the liver. On removing this organ pus was seen oozing from a small opening on its under surface, where rupture had taken place, Fifty or sixty ounces of pus were removed from the cavity in the liver.

5. *Horse-shoe Kidney,* also from a hospital patient, aged 32 years. The right half was healthy: left half was filled with pus. A large calculus in the pelvis blocked the exit of urine; several small calculi were seen in the calyces. The microscopic appearance of the right kidney was normal. Both lungs were riddled with cavities. This patient had been admitted with phthisis. On admission the urine contained 50 per cent. of albumen. There was excessive pain in the left lumbar region with frequent micturition. At first he passed large quantities of water, it became less, and, during the last 36 hours, scarcely any came away.

6. *Pyo-pneumo-Thorax, showing ulceration from a large lung cavity into the pleura.*—This specimen was removed from a man aged 27, admitted into hospital August 1st, 1884. He was a stonecutter, of steady habits, a moderate drinker, and belonged to a phthisical family. He had typhoid fever eight years ago; had coughed and expectorated ever since. He had failed rapidly during the last seven months, and had suffered with severe cough, fever and sweating. Four days before admission he took a sudden sharp pain at the left apex, and, shooting downwards, was accompanied with great dyspnœa. There were now present signs of softening tubercular deposit in the right lung; the left was leudly tympanitic, with feeble amphoric respiration. The heart was pushed to the right. Whilst in hospital there was extreme dyspnœa (orthopnœa), with irregular hectic fever and profuse sweating. On Aug. 5th, distinct succession sounds were heard; breathing amphoric, loud and distinct to the base. Dullness up to the tenth rib on leaning back; loud, clear resonance down to twelfth rib leaning forwards. This condition persisted till death took place from exhaustion on the 17th September.

Special General Meeting, Oct. 31, 1884.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

This meeting was called to consider Dr. Tuke's report on the Insane Asylums of the Province of Quebec, and generally to discuss the treatment of the insane in this province.

Dr. CAMPBELL, who opened the discussion, strongly denounced the present farming or contract system, and deplored the lack of skilled medical treatment in our asylums.

Several resolutions were read and spoken to, Drs. Trenholme, Shepherd, Kennedy, Geo. Ross, Reed, G. T. Ross, Cameron, McConnell, Mills and the President taking part.

The following are some of the chief objections mentioned by the speakers to the present system of managing the insane poor of this province: That it led to cheap everything—attendants, care, fare, etc.—and to an entire absence of skilled medical treatment, which latter want resulted in a minimum of cures and the excessive use of mechanical restraint.

Dr. CAMERON read portions from the Lunacy Act for the Province of Quebec, passed last June, and which he characterized as being very loose, incomplete, and apparently drawn by an amateur. No blame was attached to the ladies of the Long Point Asylum or to Dr. Henry Howard, the onus being placed on the Government.

Dr. HENRY HOWARD, who was not present, sent a written communication, criticising Dr. Tuke's report and expressing his disapproval of the contract system.

A committee was formed to draw up resolutions embodying the sentiments expressed at this meeting, which resolutions were to be forwarded to the Government.

Stated Meeting, Nov. 7th, 1884.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Dr. ALLOWAY exhibited the following Pathological specimens:

1. *A Fœtus of two months*, complete in its sac.

2. *A Fœtus three months old*, shewing arrest of development of the abdominal walls, and through which opening the bowels protruded.

3. *A Fibroid growth the size of an almond*, removed by him from the anterior wall of the vagina, just inside the introitus. The woman had suffered from hæmorrhages, and her health was broken down, largely, no doubt, from septic poisoning, as the little growth was sloughing. Since its removal the hæmorrhages have ceased, and the patient's health has very much improved.

Dr. TRENHOLME exhibited a *Pair of Ovaries* removed by him the day before from a woman aged 28 years, who has suffered from pelvic distress since she was 14 years old. Six years ago she had a child, after a difficult labor, from which time her sufferings have been worse, quite incapacitating her for her duties. On examining her he found in Douglass' fossa a tumor which he took to be a diseased and enlarged right ovary, and decided to operate. On opening the abdomen the left ovary was also found to be enlarged to about the size of an egg and filled with fluid. It was first removed, along with its tube. Much greater difficulty was experienced in removing the right, as it was firmly fastened down in Douglass' pouch. It was about the size of a large walnut, and filled with pus. Dr. Trenholme said the patient was doing well; pulse 82, temperature normal.

Perforation of a Typhoid Ulcer in the Colon; Peritonitis.—Dr. ROSS exhibited the specimen and related the case. The ulcer was situated about a foot from the ilio-cœcal valve. The patient was sent to hospital on the 21st day, with a good pulse, temperature 99° to 100°, the only bad symptom being tympanitis. Dr. R. remarked that it was very unusual to find a perforating ulcer in the situation of this one. They are found much more commonly in the ileum. Tympanitis had been a prominent symptom, and resisted all treatment. It did not arise from constipation and retained decomposing fæces, as is sometimes the case, as care had been taken to prevent this, and the autopsy showed the bowels to be nearly empty. It made the prognosis bad. The onset of perforation and subsequent peritonitis were well marked.

Dr. TRENHOLME asked why not perforate through the abdominal wall to let out gas.

Dr. ROSS said there were no distressing symptoms present, and it was not clear that this was always a safe proceeding.

Dr. HINGSTON remarked that it was a common thing for a farmer to open the distended abdomen in cattle.

Dr. WOOD showed a patient of his recovering from a lengthened attack of sycosis and read a paper on this subject which will appear in our next issue.

Dr. SHEPHERD said it was easy to diagnose sycosis from acne and eczema, and spoke highly of Shoemaker's treatment of parasitic skin diseases with the oleates.

Dr. BLACKADER gave his experience in treating *tinea tonsurans* by means of oleate of copper ointment. Thirty cases occurred among the children of the Hervey Institute during the past spring and summer. Marked improvement and cure followed the use of an ointment of the strength of from 1 to 8 to 1 to 12, very little irritation being produced.

Dr. CAMERON said dermatologists were finding out that vaseline, though very elegant, was not so useful a vehicle as lard for making ointments intended to cure the parasitic skin diseases. Lard, having more affinity for animal tissues, penetrates deeper. The best vehicle for oleate of copper is oleic acid. The oleic acid, of English manufacture, should first be heated, after which the oleate of copper is to be stirred in.

Dr. HINGSTON said it was necessary to make first a correct diagnosis between eczema and tinea sycosis. Tinea sycosis is a simple inflammatory disease, so that parasiticides were not necessary. He uses epilation of the diseased hairs only, a bread and milk poultice, and attendance to the digestion. He always cures this way, and in a few days.

Dr. CAMPBELL had seen six cases of the parasitic form of sycosis, and only one of the non-parasitic. He had been successful in curing six or eight cases of tinea tonsurans lately with the oleate of copper ointment.

The PRESIDENT made a few remarks, in which he said that he had seen but very few cases of this parasitic form of sycosis.

Progress of Science.

SULPHUROUS ACID IN SCARLATINA MALIGNA.

Dr. Keith Norman McDonald, writing to the *British Medical Journal*, denies the prevalent opinion that no reliance can be placed on any drug in cases of scarlatina, and does not hesitate in affirming that, when properly applied, both locally and internally, sulphurous acid is by far the most efficacious remedy that we possess. He continues, "I have had several opportunities of testing its efficacy in some of the worst cases I have ever seen, during the epidemic which has been rife in this town (Cupar Fife) for the last two months, and I am bound to say that of all remedial measures in this disease it is, in my opinion, the most reliable. My treatment is as follows: The moment the throat begins to become affected I administer to a child, say about six years of age, ten minims of sulphurous acid, with a small quantity of glycerine in water, every two hours, and I direct the sulphurous acid spray to be applied every three hours to the fauces for a few minutes at a time, by using the pure acid in severe cases, or equal parts of the acid in water, according to the severity of the case. Sulphur should be burned in the sick-room half a dozen times a day, by placing flower of sulphur upon a red-hot cinder, and diffusing the sulphurous vapor through the room until the atmosphere begins to become unpleasant to breathe.

"In the worst cases, where medicine can not be swallowed, this and the spray must be entirely relied upon; and the dark sordes that collect upon the teeth and lips should be frequently laved with a solution of liquor potassa permanganatis of the strength of about one drachm to six ounces of water, some of which should be swallowed, if possible.

"In cases presenting a diphtheritic character, the tincture of perchloride of iron should be administered in rather large doses in a separate mixture with the chlorate of potash, and equal parts of the same with glycerine should be applied locally with a camel's-hair brush several times in the day; but as in the majority of cases among children it is next to impossible to use a local application more than once, the spray and permanagate solution will prove of great service.

"As to other remedies recommended by various authors, ammonia is nasty, and can not be taken well by children: carbolic acid has the same fault, and cannot be applied properly. Gargles are also useless in children, because they seldom reach the diseased surfaces, and warm baths and wet-sheet packing are dangerous, because they are never carried out properly in private practice. The hypodermic injection of pilocarpin is a remedy that may give goo dresults hereafter, but I have had no experience in its use."—*N. Y. Med. Jour.*

GOOD REMEDIES OUT OF FASHION—EMETICS IN BRONCHITIS, STOMACH DERANGEMENTS, &c.

By CHARLES J. HARE, M.D., Cantab., F.R.C.P., &c., London.

Sometimes with us not only do things come into, but they also go out of fashion; and remembering as I do the days of yore, I think that, deluged as we now are with so-called new remedies such as hydrastin, iridin, sanguinarin, baptistin, glonoin, gelsemin, euonymin, mucuna, muscarin, the quack chlorodyne (of which I never in my life prescribed a single dose), eucalyptin, thymol, ingluvin, asclepedin, and a host of others, the advertisements of which fill the pages of our journals, I think that some valuable plans of treatment have been allowed to fall into disuse, and that there are such things as "good remedies out of fashion."

It is not long ago that, in a very urgent case of bronchitis, I advised the administration of an emetic; when the gentleman whom I had been called to meet in consultation said, "Why, I never gave an emetic to an adult in my life." In former times, it was not unusual, on the contrary, to commence the treatment of many diseases with the administration of a dose to procure vomiting; and although the remedy might then be given, sometimes indiscriminately and according to routine, only those who have seen the effects of emetics, properly and judiciously given, can conceive the beneficial effects they sometimes produce. In the early stage of an attack of croup, it was by no means unusual to give an emetic of tartarised antimony or of ipecacuanha; and it is in accordance with the experience of some of the best authorities and most practical men, and quite consonant with my own experience too, that symptoms which presented the most certain augury of a severe attack were by these means cut short, the hoarse voice resumed its natural character, and the feverish symptoms were in a few hours relieved. I know quite well that a great fear its entertained by some as to the depressing effects of emetics; but the fear is theoretical, and not practical, and those who have had most experience in the administration of them best know how groundless the fear is. In diphtheria, too, I have seen the false membranes which are out of reach of local remedies, and which the patients cough and cough in vain, and utterly exhaust themselves to get quit of, readily brought up by the action of vomiting, to the immense relief of the sufferer.

In suffocative bronchitis, the effect of emetics is sometimes magical, and by their administration in such cases not only is immense relief given, but I verily believe—I am certain—that lives are saved. You are called to a patient who has been ill a few nays, with increasing dyspnœa; she is sitting up in the bed (I draw from nature), for to lie down is impossible; she is restless, and tossing about;

the lips, and indeed the whole face, blue; the eyes watery and staring; the pulse quick and small; the cough constant; the expectoration semi-transparent and tenacious; over every square inch of the chest, front and back, from apex to base, you find abundance of bronchi; moist, sonorous and sibilant in the upper part of the lungs, and muco-crepitant, or mucous *râles* toward the bases. Ammonia and stimulants, right and good in their way perhaps, in such a case are too slow in their action; the patient is, in fact, more or less slowly, more or less rapidly suffocating. An emetic of twenty-two grains of ipecacuanha in an ounce of water is given; in ten or fifteen minutes, the patient vomits and brings up a huge quantity of that tenacious mucus, and the whole aspect of the case is altered; the distressed countenance is relieved; the breathing is at once quieter; and the patient is able for the first time for the past twenty-four hours to lie moderately low in bed, and to get some sweet refreshing sleep. The patient is, in fact, rescued from the extremest peril, and in this case, and in many similar ones too, I believe, from otherwise most certain death. Of course, in such cases the emetic is not given for its effect on the stomach, but for its collateral effect in mechanically clearing out the enormous amount of secretion which accumulates in the bronchial tubes, and which the patient is otherwise quite incapable of getting quit of; and thus the half choking, almost asphyxiated, condition is changed for one of comparative comfort, and time is gained for the action of other appropriate remedies. No doubt the secretion may, and often will, accumulate again; and I have not hesitated again in a bad cases to repeat the same good remedy; but it is a fact, and a very positive one too, that, quite contrary to what those who have had no experience in the plan suppose, the system rallies instead of being more depressed under the action of the remedy; and, in the language of one who had had thirty years' experience in the beneficial effects of ipecacuanha in some cases of exhaustion and sinking."

THE RELIEF OF TOOTHACHE.

Dr. Kenneth W. Millican thus writes, in the *British Medical Journal*, September 1, 1883: Possibly the following may be of use. I have found it very successful. It is a modification of a method recommended by Professor Babaieff to the Caucasian Medical Society. Melt white wax or sparmaceti, two parts, and, when melted, add carbolic acid crystals, one part, and chloral hydrate crystals, two parts; stir well till dissolved. While still liquid, immerse thin layers of carbolized absorbent cotton-wool, and allow them to dry. When required for use, a small piece may be snipped off, and slightly warmed, when it can be inserted into the hollow tooth, where it will solidify The ease produced by this simple method is really very great.

THE RATIONAL TREATMENT OF DYSENTERY.

The *Med. Record*, October 20, 1883, tells us that Dr. KOBRYNER (*Bull. Gen. de Therap.*, June 15, 1883), deprecates the routine treatment of dysentery:

The proper treatment, he thinks, consists in fulfilling the indications presented by the disease, and not in the routine method, based on pure empiricism, of forcing down immense doses of ipecacuanha. There are, he argues, five special indications to be followed in the treatment of the grave forms of dysentery. The first is to rid the patient of everything that may aggravate or keep up the morbid condition. This end is to be attained first by the administration of an emetic. In the milder cases this is not necessary, as the onset of the disease is usually preceded by a longer or shorter period of general malaise, when there is but little appetite. The patient eats only a little light food, and the stomach consequently is nearly or wholly empty. In dysentery of severe type, on the contrary, especially in times of epidemic, the invasion is sudden, and the patient may be seized shortly after the ingestion of a full meal. The process of digestion is suddenly arrested, and the stomach must be relieved of its load as speedily as possible. Then the rest of the digestive tract requires attention. The intestines are filled with a quantity of fecal matter which must be got rid of. This is to be accomplished by the administration of any of the ordinary salines or laxative mineral waters. In mild cases this is all the treatment usually required. The second indication is to moderate the fever. This end Dr. Kobryner attains by a restricted diet. When the fever is high the fast must be absolute, but as soon as it begins to fall some light soup may be allowed. Solid food is not allowed until the patient is absolutely free from fever. Infants at the breast may be permitted to nurse, but must take only a little milk at a time. They should not be urged if they refuse the breast. In bottle-fed infants, milk is not allowed, but they can have only light broths and a little albumen and water. The third indication is to relieve the colic. While opium is the specific for pain, it is not to be thought of in dysentery. Notwithstanding all our efforts to unload the bowels, it often happens that hard fecal masses are expelled from time to time, and if opium is given they are retained and increase the irritation. The remedy for the colic of dysentery is calomel. In spite of its ordinary action in increasing the intestinal discharges, it relieves the pain, and, in this case, diminishes the number of the dejections. The fourth indication is to restore the blood to its normal richness. This is a most important part of the treatment, and is best accomplished by perchloride of iron in doses of eight drops per diem for nursing infants, and a proportionate amount for older patients. In addition to this may be

given a drink of white of egg in water (the whites of six or eight eggs to a quart of water). It is not until the sixth or seventh day that the signs of impoverishment of the blood become evident, so that the treatment by iron and albumen is not to be begun until that time. The last indication, which is met with in only a certain proportion of cases, is to treat the intermittent character of the symptoms. Quinine is the remedy here.

PEDIATRIC APHORISMS.

The *Obstetrical Gazette* quotes the following aphorisms of Prof. Letamendi (El Dictatem). They contain great truths and offer food for reflection and study not only to the physician but every parent.

1. Children are like the mob; they always complain with reason, although they cannot give the reason why they complain.

2. Always look at the lips of a pale and sickly child; if they are of a deep red color, beware of prescribing tonics internally. At the outset you will congratulate yourself, but in the long run you will repent of having employed them.

3. As a general rule, a sad child has an encephalic lesion; a furious child, an abdominal one; a soporific child has both, though indistinctly defined.

4. An attendance on children produces in the mind of an observant physician the conviction that the half, at least, of adult transgressors are so through morbid abdominal influences.

5. A sunny living room, a clean skin, and an ounce of castor oil in the cupboard, these are the three great points of infantile hygiene.

6. To dispute the clinical value of tracheotomy in croup is waste of time to no good purpose. Croup or no croup, if there be a positive obstruction to respiration in the larynx, it is but according to reason to open a way for sublaryngeal respiration. In the days of more knowledge and less nonsense, tracheotomy will be ranked among minor surgical operations.

7. Dentition is a true multiple pregnancy in which the uterus and its fetuses become petrified in proportion as they grow. It is not the direct or the eruptive pressure, but the lateral pressure of all together, that is the most dangerous. It is from this that so many cerebral symptoms appear which can in no way be relieved by incision of the gums. The only recourse against the danger of this transverse pressure is to give the child more nourishment, in the hope that as the general condition is bettered the local condition will also improve.

8. If the incisors of the first dentition are serrated it is bad, but if those of the second formation are the same, it is worse. It foretells a number of lesions are arising from deficiency of mineral salts in the tissues. There is one only exception, and it is an important one. When the serrated incisors are seen in strong children in whom the fontanelles have closed early, it is a sign of a robust constitution. Instead of a number of small and sharp dentitions, there are a few large blunt ones.

9. To regard the eruption of the teeth as the sole factors in the general process known as the first dentition, is to perpetrate a sort of a medical synecdoche. Children get their first teeth because they are at the same time getting a second stomach and second intestines.

10. The body of a child possesses such a degree of "acoustic transparency" that in cases of necessity or convenience auscultation may be praticed with the hand, converting it into a telephone which will reveal as much to the physician as ever his ear could do.

11. In practice it is well to distinguish with precision a case in which disease is due to lumbricoids from one in which lumbricoids are due to disease. For in the former case anthelmintics are of service, but in the latter they do harm.

12. Since, until a child is able to speak clearly, his relations with the physician are purely objective, it is very necessary that we should study as carefully as do the veterinarians the exact correspondence between lesions and the expression of the patient.

13. If you wish to cure rapidly and well joint-disease in infants, you must treat them as you would a conflagration—douches, douches, and more douches, until you have succeeded in extinguishing them.

14. The entire system of the moral relation between children and adults should be changed. To speak to them incorrectly merely because they cannot pronounce well; to excite their fears aud arouse their weird imaginations simply because they are easily frightened and impressionable; to stimulate their vanity because they are naturally inclined to be vain, these and other similar actions are not only wrong, but absurd.

15. There is finally a danger to the women of contracting a vice as yet unregistered in the annals of concupiscence—mastomania, or the sensuality of nursing. When this physiological act degenerates into vice, nursing becomes so frequent as to be nearly continuous, and the result is ruin to both mother and child. Finally, the physician must here, as always, be at once wise, discreet, of good judgment, and firm.

TREATMENT OF EARACHE.

It is said, that, by the following simple method, almost instant relief of earache is afforded: Put five drops of chloroform on a little cotton or wool in the bowl of a clay pipe, then blow the vapor through the stem into the aching ear.

KINNER: REMARKS ON OTTORHEA IN CHILDREN

(Amer. Jour. of Obstetrics, November.)

Purulent discharge from the ear is one of the most common symptoms of aural disease. Otorrhea comes on gradually with little pain, and although the smell from the discharge is sometimes very offensive it is frequently allowed to continue for months. As one of the causes of otorrhea we may mention catarrhal condition of the meatus and tympanum, in which inflammation may spread to the mastoid cells, and finally the brain. The prominent symptoms are rigors, tongue very furred, rapid pulse, increase of temperature, and pain and swelling of the parts around the ear, which parts assume an erysipelatous appearance. The history of an illustrative case is given in which a strumous child, aged six years, had an inflammation of the meatus and tympanum of left ear, which spread to the mastoid region, producing an abscess. This was repeated several times, when finally a polypus was discovered in the meatus, which was removed by the wire-snare. Eventually there was recovery in the mastoid region, but the membrana-tympani was perforated, and hearing destroyed. Many cases of mastoid inflammation ought not to go on to suppuration if properly treated. The plan of treatment adopted on detecting pain or tenderness over the mastoid region and around the ear is, first to paint a strong solution of nitrate of silver (℥ss to ℥ j) or several layers of equal parts of tincture iodi and lini iodi, or with pot. iodi cum sapone, having previously applied leeches if much swelling and redness exist, and subsequently follow up the treatment with warm fomentations or poultices containing a little opium. As regards the treatment of otorrhea by dry powders, the plan adopted is to cleanse and dry the ear well with a piece of cotton-wool twisted upon the end of a grooved ear probe, then with an insufflator introduce into the meatus whatever powder seems suitable for the case; a small quantity of cotton-wool is then lightly placed in the meatus to prevent the powder falling out. This treatment is renewed night and morning. The practice of stuffing the meatus with various powerful astringent powders, pushing the powder firmly in by means of some small instrument, and then closely packing with cotton, cannot be free from danger. The various powders used are boracic, tannic, and gallic acid, alum, iron-alum, copper, lead, zinc, and so forth. If the wet treatment is preferred, the various astringents may be used; boracic acid in the proportion of one drachm of the acid to an ounce of rectified spirit makes a very nice lotion, or carbolic acid and sulphate of zinc, four grains of each to an ounce of water, or a saturated solution of boracic acid in hot glycerine, or glycerite of tannic acid. The following are a few good lotions;

℞—Acid. carbol., gr. iv.
Sodæ bicarb, gr. xij.
Sodæ bibor., gr. xij.
Glycerine, ℥ ss.
Aquæ, q.s. ad. ℥ i.

Ft. lot. ad aurem

℞—Zinc oxide.
Bismuth oxid., aa gr. v.
Glycerine, ℥ ss.
Aquæ, ad. ℥ i.

In connection with the above treatment great benefit will be obtained by the use of the Politzer bag.

SANTONIN.

Dr. Lewin advises to give santonin only in solution; and shows that in that form it reaches the small intestines more surely, is not absorbed too quickly, and is more destructive to the round worm (ascaris lumbricoides) which inhabits the small intestines, than when given in any other form. He mentions several prescriptions, of which we select the two following:

℞. Santonini,..... gr. iij;
Ol. ricini, ... f. ℥ ss;
Ol. cinæ. eth., ... gtts. iv.

Sig. A teaspoonful two or three times daily or, if elastic capsules can be taken,

℞. Capsul gelatin. elast.,
Santonini,..... gr. i;
Ol. ricini,..... f. ℥ i;
Ol. cinæ. eth., ... gtt. i;
Reple., ... No. iv.

Sig. One to be taken two or three times daily.

Santonin is also useful for the long thread-worm (trichocephalus dispar.) which resides in the cecum, and the thread-worm or seat-worm (oxyuris vermicularis) which inhabits the colon and rectum; it must there also be given in oily solution, but as an injection per rectum. (*Berlin Klin Woch.*)

SOLIDIFIED CREOSOTE.

In its application to carious teeth, creosote is often inconvenient in consequence of its fluidity producing ill-effects upon the mucous membrane of the mouth. This may be obviated by giving to it a gelatinous solidity by adding ten parts of collodion to fifteen of creosote. This, besides being more manageable than liquid creosote, also closes up the orifice in the tooth, preventing the accession of the air to the dental nerve.—*Progrès Medicale.*

TREATMENT OF COLDS.

A "cold" having been contracted, what is the best means of throwing it off? The answers to the question are legion, for they are many. In domestic practice hot, stimulating drinks have from time immemorial been held to be the best, and that they are very effectual does not admit of question. Full doses of quinine and Dover's powders have, probably, a larger number of advocates in the profession than obtains for any other means. For a number of years we have, however, relied quite exclusively on the treatment recommended by Dr. Dobell, of the Royal Hospital for Diseases of the Chest, London, and have come to regard it as the most effectual of any yet suggested: 1. Give 5 grains of carbonate of ammonia and 5 minims of liquor morphia (B. P.—morphia, gr. 1-6) in an ounce of almond emulsion, every three hours. 2. At night give ℥ jss. of spts. mindererus in a tumbler of cold water, after the patient has got into bed and been covered with several extra blankets. Cold water should be drunk freely during the night when there is thirst. 3. In the morning the extra blankets should be removed, so as to allow the skin to cool down before getting up. 4. Let the patient get up as usual, and take his usual diet, but continue the ammonia and morpha mixture every four hours. 5. At bedtime the second night, give a compound colocynth pill. Usually about twelve doses of the mixture will be found sufficient, but should the catarrh show any disposition to return after leaving off the medicine for a day, another six doses may be taken and another pill at bedtime. The beauty of this treatment lies in the fact that it does not interfere with the patient's business, and does not expose him to fresh attacks of cold, which are liable to follow exposure to the outer air after a course of hot, stimulating, diaphoretic drinks.—*Medical Age.*

FISSURED NIPPLE.

Pulverized gum-arabic is recommended as a simple and safe agent for cracked nipple. Immediately after the child has sucked, the powder should be dusted over the surface and the nipple protected from the air.—*Exchange.*

SUPPOSITORIES IN PILES.

The following formula is recommended for piles:

℞ Iodoformi,		℥ i.
Balsam Peru,		ʒ ii.
Ol. Theobromæ,		
Ceræ alb.,	aa	ʒ iss.

Divid. in suppos. No. 12.

Introduce on eafter each evacuation.

CLARK: A LETTER ON THE SUBJECT OF HYPODERMIC INJECTION OF MORPHIA IN INFANTILE CONVULSIONS.

(*Amer. Jour. of Obstetrics*, November.)

Three cases are reported. In the first a child of four years eight months had one-twelfth of a grain of morphia sulph. administered subcutaneously. Seeing no effect in twenty minutes, one-sixth of a grain was given in the same way. The convulsions soon ceased, but the child died in about a week of meningitis. Second case, child three years four months; one-sixth of a grain of morphia hypodermically; convulsions almost immediately ceased. The child died the next morning in another convulsion. Third case baby two months old; one-sixth of a grain of morphia hypodermically; convulsions ceased, and the baby made a good recovery. Fearing an overdose a little belladonna was administered, but the doctor thinks that in the convulsive condition an extraordinary tolerance of opium obtains. One-fourth of a grain of morphine is not too much to administer subcutaneously to a child two years old in convulsions. This will not be apt to need repeating.

HUGHSON: NOTE ON HYPODERMIC INJECTION OF MORPHIA IN CONVULSIONS OF CHILDREN.

(*Amer. Jour. of Obstetrics*, October.)

A boy, two years old, was brought by his father to the doctor's office, having been in convulsions for about an hour. Valerian, cold cloths to head, and sinapisms to back of neck and extremities were applied without avail. In a short time the child was totally unable to swallow, and appeared to be rapidly sinking into a dying condition. As a last resort about one-fifteenth of a grain of morphia sulph. was injected into his arm. In ten minutes he was quiet, and in twenty minutes was sleeping nicely. He had no return of the convulsions and made a good recovery. The doctor has determined in the future to resort to this treament in severe cases. The hypodermic use of morphia in large doses in puerperal eclampsia is believed by many surgeons to surpass the ordinary treatment by venesection, chloral, and so forth.

FOR CHAPPED HANDS AND FROSTED FEET.

Dr. Carl Seiler (*Polyclinic*, Jan. 15) calls attention to the value of tincture of benzoin in the treatment of chapped hands and frosted feet. It is applied by simply painting it on the skin. The stockings may be prevented from sticking to the feet by rubbing some oil over the benzoin.

A RELIABLE TÆNIAFUGE.

℞ Extract filicis macis,		ʒ iss,
Pulveris kamalæ,		ʒ ij,
Mucilaginis acaciæ,		
Syrupi simplicis,	aa	ʒ ij,
Aqua cinnamoni, ad,		℥ iij. M.

Sig.—Half to be taken at bed-time, and the other half early in the morning.

Mr. J. B. Lawson reports good results from this, in the *Medical Digest*.

THE CANADA MEDICAL RECORD

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ADHESION OF THE OMENTUM IN ABDOMINAL SURGERY.

With ordinary care in preventing hemorrhage and in staying that which does occur adhesions of the peritoneum and of the pelvic and abdominal organs covered by it do not present any very serious obstacle to the success of the average ovariotomy, hysterectomy, etc. Still there are results of adhesive inflammation that render the removal of abdominal tumors both difficult and dangerous. We saw an illustration of this lately in the case of a patient in the Western Hospital who underwent the operation for double oophorectomy. The adherent omentum was found to cover completely the whole abdominal contents, being attached in several places low down in the pelvis. The history of the case was distinctly that of repeated attacks of local peritonitis, the enlarged and thickened apron having itself been the subject of repeated attacks of inflammation.

The possibility of this condition of things ought to be ever present in the mind of the operator, otherwise it is likely to confuse him and thus lead in his efforts to get *behind* or perhaps *through* the obstruction to dangerous lesions and serious inflammation of the vascular omentum. In his instructive article on Diseases of the Fallopian Tubes in a late number of the New York *Medical Record* Dr. Gill Wylie refers to this subject in connection with the operation for removal of diseased tubes and ovaries as follows: "Where the omentum is free from adhesion it can be pushed up as one would the end of an apron. When it is adherent, as it often is, to the broad ligament and anterior wall or top of the uterus, it cannot easily be separated by pulling it from below upwards; but by passing the two fingers well to one side and getting them underneath, and separating the adhesions, many formidable looking cases can be easily managed. As the adhesions separate they should be lifted through the opening and any bleeding points tied. If the adhesions are strong and vascular, as they may be in those cases where there have been repeated attacks of local peritonitis, then the omental adhesion can be tied off, tied as low as possible, and then a little above this, and cut between the ligatures. By pulling the sides of the abdominal opening laterally with retractors we can do this without enlarging the opening in most cases.

In handling and trying the omentum care should be taken not to split or tear it, for it will invariably bleed up in the angle of the split and may be very troublesome."

Dr. Wylie was for many years Dr. Marion Sims', assistant, and he has known that celebrated gynecologist close the abdomen rather than run the risk of going through the omentum to reach the ovaries beneath it. Although the experienced surgeon may by means of some such simple procedure as that described by Wylie remove the barrier it will readily be seen how embarrassing and how formidable such a state of things might prove to the inexperienced operator.

COCAINE CHLORIDE.

A very considerable degree of interest has been manifested by the Medical Profession in the usefulness of hydrochlorate of cocaine as a local anæsthetic.

A medical student of Vienna, named Koller, has discovered that a 2 per cent. solution of the hydrochlorate of cocaine when dropped into the eye in quantities of first 2 drops and then of 3 drops, with ten minutes interval, gave, after another ten minutes interval, an anæsthetic condition of the cornea and conjunctiva, which remained for 10 to 20 minutes and then gradually passed off.

Cocaine is the alkaloid of the leaves of a shrub (the erythroxylon coca) which grows and is cultivated in South America, especially in Peru and Bolivia.

The natives there chew the leaves, and profess to derive from them greatly increased power for physical labor. It has been used in a similar way in Canada, with a like object, and the same result. It has not yet apparently given to any one any insensibility to mental fatigue.

A poisonous dose produces death in the warm-blooded animals, who are less affected by it than the cold-blooded ones, by paralysis of the respiratory centre. Its toxic effect is small and its action not cumulative.

The installation of a 2 per cent. or a 4 per cent. solution into the eye renders the conjunctiva and cornea insensible to the knife. If, however, the incisions are to be carried much deeper, as for instance in the operation for squint, then, before dividing the muscles, the solution must be applied within the incision, when, after a few minutes interval, the operation may be completed without causing the patient any pain.

It is a mydratic, though much feebler than atropia, and its mydratic effect soon passes off. From the paleness of the conjunctiva which follows its application it would seem that it causes contraction of the conjunctival vessels.

It has also been used in gynecology to render the mucus membrane of the vagina and cervix uteri insensible to operations performed upon them, and with success.

It has been found useful in laryngeal phthisis, and in operations performed upon the mucus membrane of the nose, the membrana tympani, and the lower end of the rectum and anus.

It has also been recommended in the treatment of the morphia habit and in alcoholism. In these latter cases, a solution of the hydrochlorate has been used hypodermically.

There is certainly a very large class of cases where an agent possessing the properties attributed to the hydrochlorate of cocaine would be of very great value to both operator and patient. There are a large group of every-day cases, where the question arises, which is easiest borne, the anæsthetic or the pain of the operation without the anaesthetic? and it is in these cases particularly that cocaine may become useful.

Its use is so far limited to rapidly absorbing surfaces as mucus membranes; applied to the skin it has but little, if any, effect.

LOCAL AND GENERAL.

Littré, the author of the dictionary, is said to have so regulated his life during the thirteen years he was writing his great work as to give the least possible time "to the current requirements of existence." He rose at eight o'clock and wrote for an hour while his room was being put in order. Probably he also kept an eye on the housemaid, and saw that she did not "arrange" his books and papers so that it was impossible for him to find anything after the operation had been completed.

Then he read proof until the midday meal; wrote again from one to six, and, taking one hour for dinner, returned to work and kept it up until three o'clock in the morning, or until the allotted task was completed. Then he retired to rest, to rise at eight o'clock and repeat the routine of the previous day *ad finem*. In this way he managed to prepare 415,636 pages of manuscript.

And yet this man lived to a good old age, and nobody can say that his was not a useful life, and probably a satisfactory one to himself, even if he did not die in the odor of sanctity. Still one's intellect is forever dependent upon an organism prone to resent overwork, and I believe it to be the

duty of the physician to discourage undue mental exertion. From our ancestors, who might generally be described as a hardy race of men with great stomachs and no brains, we are developing into a physically inferior race with large brains and irritable digestive apparatus.

A judicious exercise of mind and body should be the aim of the man who would make the most of himself. As I write there is too much athletics in the air, but doubtless it may do good by enticing the bookworm from his books and by making the pale student breathe the cold, exhilarating air and exercise his flabby muscles. At any rate, if we must have an extreme in Canada, by all means let us raise muscular, eupeptic, broad-chested, good-natured samples of Anglo-Saxon mediocrity, rather than dyspeptic, myopic, anæmic geniuses, with abnormal brains and endless stores of knowledge.

The *Popular Science Monthly* indirectly touches upon this subject when it refers to the action of the American Council of Education in the matter of school recesses.

The committee appointed to report upon the subject, summed up the *pros* and *cons* as follows : The opponents of the recess claim that the adoption of their measure will conserve the health of pupils by preventing exposure ; that it will tend to refinement by removing opportunities for rude behavior and boisterous play ; that it will take away the opportunity for association with the vicious and consequent corruption of morals, and that it will make things easier for the teachers. The report replies to these allegations in this style, an answer which most of us will, I think, believe to be ample : exposure to the weather during recess is beneficial, not hurtful : it gives a change from the close, foul air of the school room to the free air, with opportunity to relieve physical wants, and affords a means of ventilating the schoolroom without chilling the scholars ; that the "rude and boisterous play" of recess is only a rehearsal of what is indulged in outside of the schoolroom, with the advantage that the teacher is present to prevent excess, and that it gives needed exercise ; that moral corruption is not generated in the open practice of recess, but in secret intercourse ; and that the teacher's office is not to make things easy for himself, but by every means in his power to promote the well-being of his pupils.

Prof. Austin Flint's admirable address on "Medicinal and Non-Medicinal Therapeutic" has been widely copied and much extolled, but it appears to me that much of the material of the address can be shown to have been derived from well-known sources.

For example, his denunciation of that domestic superstition commonly called "catching cold" is almost an exact reproduction of Felix Oswald's ideas upon the subject. I have not the latter author's "Physical Education" before me nor all of his papers on "Remedial Education" (*vide Popular Science Monthly*, 1883 and 1884) but I know that it will be found in either or both of the places indicated. At any rate Dr. Flint's address is but an indication of the return all along the line of surgery and medicine to "natural" therapeutics ; already hygienic precautions and the common-sense pharmacopeia bid fair to take the place of a blind faith in the efficacy of drugs. In the meantime the cool-headed doctor will neither be a partisan of men like Bartholow, "the drug worshipper," nor a follower of "drug despisers," like Dr. Oswald. It is well to recognize the value of such pharmacopeial preparations that have stood the test of time and experience, giving them only when necessary, and refusing at the same time to dose a patient because some enthusiast has declared that miracles have been wrought thereby.

Peculiarly difficult is it, it appears to me, to place anything like a proper value on proposed remedies about which there has not been for years a concensus of approval. Temporary enthusiasm should not count for much with those who have not an opportunity to judge for themselves in hospital practice or elsewhere. Wait a year or so. All of us will remember the contrast between the predictions and results in the case of croton-chloral-hydrate, nitrite of amyl, bromoform, cundeiango, electricity, salicylic acid, the antiseptic spray, and other remedies too numerous to recount. Of course this is true of other things besides medicine ; it is only a fair sample of the tendency of human mind to run to extremes.

No ; cocaine hydrochlorate, muriate. or more properly *chloride* ($C_{17}H_{24}NO_4CL$), has nothing to do with that edible substance called *cocoa* or chocolate. The latter is derived from the bean of the *theobroma cocoa ;* the former is a salt of a rare and expensive alkaloid (present value $5,000 per pound) obtained from the leaves of *erythroxylon coca*, a native of Peru and Bolivia. This is the plant about which such remarkable stories have been told regarding its tonic and stimulating properties—how the natives can travel for days without either food or sleep by simply chewing the leaves. The alkaloid is the active principle of the plant, and until recently was considered as a chemical curiosity. The chloride is not the only anæsthetic salt, as the citrate has lately been employed by German dentists for "preparing" sensitive teeth before filling them. It is made into small pellets which are wrapped in wadding and placed in the hollow of the tooth. All sensation is soon destroyed, and the tooth can easily be cleaned out and filled without pain.

P. A. LAVER, M.D.

MONTREAL, January 15, 1885.

PERSONAL.

The Hon. Dr. Robitaille, ex-Lieutenant-Governor of the Province of Quebec, has been nominated a Dominion Senator, in place of his brother, who has resigned.

The Hon. Dr. Ross, Premier of the Province of Quebec, had recently a large public dinner given to him at Three Rivers by his political friends.

Dr. Roddick, one of the editors of the *Canada Medical and Surgical Journal*, Montreal, who was quite unwell recently, is, we are glad to say, once more able to return to active work.

Dr. J. Brodie, formerly Demonstrator of Anatomy in Bishop's College, who has been practising in Honolulu since his removal from Montreal, about five years ago, has lately taken unto himself a wife from among the fair daughters of California. Dr. Brodie has a large and remunerative practice in his Pacific home. We wish the doctor and his wife success and happiness in all their undertakings.

Dr. A. A. Browne, Professor of Midwifery in McGill University, has resumed his lectures, having recovered from the illness which confined him to the house for a short time.

Dr. Godfroi Dubuc (C.M., M.D., Bishop's, 1872), of Sutton Flats, Que., has removed to Chicopee Falls, Mass.

Dr. Osler, of Philadelphia, late of Montreal, visited his friends here during his Christmas vacation. We dropped in upon him at his new home in Philadelphia, while in that city for a day, the middle of this month, and received a cordial welcome.

Dr. Gerald Howard, son of Dr. R. P. Howard, Montreal, has successfully passed the examination for the Fellowship of the Royal College of Physicians, London.

Dr. Colin Sewell, of Quebec, who has been seriously ill, is, we are pleased to learn, now quite convalescent.

REVIEWS.

A Practical Treatise on Diseases in Children. By EUSTACE SMITH, M.D. New York: Wm. Wood & Co.

Dr. Smith has written this book in a careful and concise manner, discussing the whole subject of disease in children. From his large experience he has been able to dwell upon the clinical features to be observed, and thereby has produced a work valuable on the diagnosis and treatment of infantile disorders. Prominence has been given to the diet and hygiene required. The physician will find a perusal of the contents valuable and instructive.

A Manual of Obstetrics. By E. L. PARTRIDGE, M.D., with sixty illustrations. New York: Wm. Wood & Co.

The author in attempting to outline the knowledge of obstetrics in this very small manual has certainly accomplished his aim. It is very concise, yet not at all obscure. Such manuals can only refresh the memory, for which purpose they are intended, and from this point of view we can recommend it as a book to be slipped into the pocket of the practitioner whose time does not permit a careful study of more extensive text-books.