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## Original Communications.

*A Case, under the care of Prof. E. H. Trenholme, of Apoplexy in a woman eight months pregnant. Cæsarian section immediately after death. Reported by DAVID A. HART, Student of Bishop's College, Montreal.*

On the morning of the 25th November, 1873, Mrs. F. sent for Dr. Trenholme, at about nine o'clock, to attend Mrs. M., suddenly taken ill at her house. Mrs. M., a Canadian by birth, is about 40 years of age, stout and plethoric, about 5 feet 6 inches in height, and a little over eight months pregnant with her first child, having been married not a year.

Her history is uncertain, but from all that can be definitely known, she seemed, previous to the above date, to be laboring under some great mental anxiety, due, as she said, to domestic trouble, her husband having deserted her a short time after marriage, taking with him \$500 dollars, amount of all her savings. This, with the neglect of her family and friends, worried her, and caused at times great depression of spirits.

On the morning of the 25th November she rose at her customary hour, seemingly in better spirits than usual, and went down to the kitchen, where in a short time she suddenly complained of "a queer feeling" in her head, and feeling unwell. She was assisted to her room, and in a few minutes was "taken with a fit," and the doctor immediatly summoned. On his arrival he found the patient comatose, face livid, breathing stertorous, pupils somewhat dilated—left pupil more than the right—and the limbs flaccid. Upon examination, per vaginam, found no evidence of uterine contraction; the os undilated and quite unyielding. Dr. T. stated that history of the woman indicated softening of the brain, and that the present condition was in all probability due to rupture of a blood-vessel, with effusion at base of the brain, but more extensive on the right than on the left side; also that the condition of the pupils led him to conclude that the right thalimi optici would be found specially implicated.

At half-past 10 a.m., I was sent with two other final students (Messrs. Rose & Shee) to watch the case. On our arrival we found the woman in a totally unconscious state, lying at length on her back, with head inclined to left side; surface cold, pale, clammy; nervous sensibility entirely gone, as by

pinching and tickling no corresponding movement was made; respiration 38 per minute; face slightly suffused and œdematous; patient evidently dying. Examination per vaginam showed the os uteri, as before stated, unchanged. Auscultation over uterus showed child still living.

At quarter to 12, Dr. Trenholme again called, and report made that no change had occurred from the time that we arrived, save that the patient was gradually sinking and very near her end. The child still showing signs of life, the doctor determined, as soon as life was extinct in the mother, to perform the cæsarian section, in order to save the child if possible, and immediately made preparations for the operation. At twenty minutes past 12 life was declared extinct; and in presence of nine or ten students of his class, the doctor made the section through the Linea Alba into the uterus, and delivery of child effected, but dead, all our efforts to reanimate proving unavailing. The walls of the uterus were unusually thick, being at least  $\frac{3}{4}$  in.—the average thickness being only  $\frac{1}{4}$  in.

Post-mortem, made three hours after death:

Thorax—Lungs healthy; heart surrounded by an unusual amount of fat; cavities empty, and the organs being firmly contracted, appeared smaller in size than natural. Abdomen—Liver presented a granular appearance, from commencing degeneration; gall-bladder contained between fifty and sixty stones, some as large as a pea. The remaining abdominal organs apparently normal. Uterus presented the normal post-partum condition; the incision on its anterior surface, through which the child was extracted, being open, and exhibited the still retained placenta.

Cranium—On removing the calvaria, the membranes were found highly congested, small clots being observed beneath the arachnoid, between the convolutions at different points. On removing the brain, all the structures at the base were found completely imbedded in coagulated blood, which covered nearly the whole surface of the base of the brain. On section—Punctæ vasculosa very large. The lateral ventricles were distended by a large clot, which also filled the third and fourth ventricles. The distension was so great that in the lateral ventricles the parts were displaced, and the septum lucidum completely destroyed. The floor of the third ventricle was ruptured forming a communication with the base. The "iter e tertio ad quartum ventriculum" was distended to the size of the little finger. The valve of Vieussens was ruptured, and the fourth ventricle distorted. The right "Thalimi optici"

was completely broken up, having a large clot of blood in its interior; this clot was continuous with the clots in the ventricles. Careful examination was made of the vessels by the blow-pipe, but no lesions could be discovered in the arteries at the base of the brain; from this condition hemorrhage must have occurred in the thalami optici, escaping into the ventricles, and through the ruptured floor of the third ventricle to the base. A large amount of blood had escaped, and although not measured it must have exceeded seven ounces. No disease of the vessels was noticed, and it was impossible to discover if there had been any softening in the thalami optici, as it was so completely destroyed. No disease nor lesion was observed elsewhere.

Montreal, February, 1874.

*A Case of Pleuro-Pneumonia-Paracentesis.* By JOHN CHANONHOUSE, M.D., Eganville, Ont.

Laurence Curley, *æt.* 20, of a strong habit of body, a smart and active young man, and one who has always enjoyed good health. On the evening of the 20th May, having walked from the village to his home, a distance of three miles, and the weather being very bad, he received a severe wetting, and neglected to change his clothes.

Towards the morning of the 27th he had a chill, which, however, soon passed off. Three days afterwards he suffered from a sharp pain in the left side, also back part of chest and in the shoulder; this was immediately followed by fever, hurried breathing, flushed cheeks, cough accompanied by a rusty, thickish expectoration. The prostration of strength was extreme. The pain was so severe that he had to remain as motionless as possible. The slightest movement made him cry out in agony. On the 28th, 29th and 30th the fever greatly increased; but having just broken my clinical thermometer, I was unable to take the temperature, but it could not have been less than 104 or 105 during the hour of my visits, about eleven o'clock each day. There was now delirium and perspiration, pulse quick and small, tongue covered with a yellowish fur, no appetite at all. It was with the greatest difficulty he could be persuaded to take nourishment. Urine scanty, and of a high colour, and containing abundance of chlorides. In auscultating large gurgling crepitation was heard. At the commencement of the case I put him on large doses of Liq Ammonia acetatis, with a little solution of morphia. A large poultice was also kept applied to his side. The inflammation progressing so rapidly to the last stage made me change

the treatment to one more stimulating. I gave him ammonia and bark, brandy and egg mixture; but notwithstanding this, there was no improvement, and the patient remained in a lingering condition till one night he had a severe tickling cough, which continued all night, and early in the morning vomitted a large quantity of pus and jelly-like substance, which adhered to the sides of the vessel. Shortly before the matter was vomitted, both feet were cedematous. After this the oedema gradually disappeared. Cough, with expectoration of pus, was now more frequent, particularly at night, and hectic symptoms showed themselves. Ten days from this date, a bulging was visible between the sixth and seventh ribs, six and a half inches from middle of sternum posteriorly. This bulging increased, fluctuation became visible, and all the symptoms of pointing appeared. At this stage I thrust a large trocar into the most prominent part of the swelling, and by means of Mattison's No. 1 male tube, drew off three parts of a large basinful of pus. Immediately after this, the cough ceased. The following day I injected one part of carbolic acid to thirty of water, and much to my astonishment, a small portion of the injection came out by the mouth, and continued to do so for the three succeeding days, each time the injection was used. After the tapping, a drainage tube was put in and kept safely in its place by adhesive plaister and bandage.

The patient now began rapidly to improve, hectic symptoms disappeared, and appetite began to return. From this out, kept him on iodinised cod-liver oil, quinine, and as good a diet as could be procured in a newly settled country. The drainage tube was left in till the 21st August, that is, three weeks from date of tapping, and then removed. The wound healed kindly, and the patient on the 30th Sept. came himself to see me, and said he began to feel quite strong. He weighs now 128 pounds, while previous to his illness his weight was 147.

Eganville, Ont., January, 1874.

### Correspondence.

*To the Editor of the Medical Record.*

SIR,—In the last number of the *Record*, please notice a short article on "Post Partem Hemorrhage, treated by acetate of lead, as a *dernier resort*" in the one case, and after having "*tried the usual treatment*" in the other; an expression not very definite.

Now, it requires, according to the writer's statement, a few minutes for the medicine to act; and

since, in such extreme cases as described, a few minutes are of such vital importance, requiring the most prompt and decisive action on the part of the practitioner, would you, Mr. Editor, advise the substitution of this treatment, viz.: three drachms of crystallized acetate of lead (180 grains) in preference to introducing one hand into the womb and turning out the clots and grasping it with the other, at the same time giving ergot; or should this treatment fail, would not the injection of diluted alcohol into the womb be preferable to waiting for 3 iii of the crystals to dissolve in the stomach before entering the circulation?

W. A. C.

Campden, Ont., Jan., 1874.

"Doctors differ," is an old and a true adage, and in the matter of treating post partem hemorrhage—perhaps at this moment they differ more than upon most other points, as the discussions which have lately taken place at the London Obstetrical Society proves. We have, of course, read the paper to which our correspondent refers, and, as he asks a candid question, we give him our opinion. Having used acetate of lead in a good many cases of menorrhagia, with almost negative results, we would not feel inclined to rely upon it, in post partem hemorrhage, where the delay of a very few minutes might prove fatal. We would introduce our hand into the uterus, and if ice were to be had, we would introduce it into the womb and give ergot. We have seen the very best results, from the most alarming hemorrhage, from a piece of ice inserted into the womb. If within a reasonable time these means failed, we would not hesitate for a moment to inject into the cavity of the womb, a solution of the perchloride of iron, with glycerine of the strength of one to ten. The two cases reported by Dr. Channonhouse, were very instructive ones, and illustrated in a remarkable degree the development of an effect from large doses of acetate of lead, which, according to several authorities, it is said to possess. Practitioners in many districts have often to work with limited tools at command, and we confess we are often amazed at the satisfactory results which ensues. In this, we must say, it redounds to the credit of our Canadian medical men.

### Progress of Medical Science.

#### THE TREATMENT OF BILIARY COLIC.

Dr. W. Pichler, physician to the Carlsbad watering place, makes the following communication to the

*Allegeme Wiener Medizinische Zeitung*, Nov. 18, '73.

Gall stones are daily occurrences to the busy practitioner in Carlsbad. It is not remarkable therefore that the Carlsbad physicians possess a rich experience in this field. In every session of the Carlsbad Verein für Natur und Heilkunde are reported cases of cholelithiasis which are of the highest clinical importance. In the last session were abundantly exhibited specimens of the size of a chestnut, which had been discharged, of course, not by natural passages, but abnormally in consequence of chronic inflammatory adhesion of the gall bladder to the intestine, ulceration, perforation and escape of the voluminous concretions. If those cases are remarkable for size, others are equally remarkable for number. In one case some 30 stones of the size of a pea escaped in one act of defecation. In another especially remarkable case nearly 300 stones from the size of a barley corn to a pea escaped. I could cite a whole series of cases of biliary colic of real clinical interest from their long duration, their intensity, their complicated course or their implication of the nervous centres. I withheld a communication upon these cases as well as a discussion of the mechanism of the incarceration of biliary concretions for another occasion to mention in few words, upon this occasion, the treatment.

The pain of biliary colic, as is well known, is extremely severe, and women often declare that they are worse than labor pains. The painfulness of the disease, the reflex manifestations associate, vomiting, chills, epileptiform and other convulsions, etc., call for narcotics in the chief role along with heat in the form of cataplasms and baths. Opiates, morphia internally and hypodermically, chloral are used alternately.

In the selection of narcotics, the physician has, of course, a wide field, and he can never be at loss to relieve pain. In my experience, derived from treatment of a great number of cases of extreme severity, I have convinced myself by repeated experiment that the best result is obtained by the use of chloral hydrat preceded by a dose of morphia, internally or hypodermically.

Very frequently the pains are so intense as not to be allayed by morphia internally or even hypodermically. Large doses are dangerous. If in such cases the morphia be followed by chloral, surprising relief is obtained and also permanent relief without subsequent danger of hypnosis. This occurs, as is easily demonstrable in any case, when either of these agents alone is insufficient.

After I had made this discovery I found in various French and German papers a record of analogous results as attained after attention had been directed to this combination by physiological experimentation, Nussbaum, for instance, observed that a patient, who had accidentally received a subcutaneous dose of acetate of morphia before an operation and was chloroformed just previous thereto, did not awake as usual after the narcosis, but slept on twelve full hours, and remained insensible to every kind of pain during all this period.

Claude Bernard long ago observed that chloroform narcosis continues a long time in animals who previously received a dose of opium. Goujon and Labbé have had repeated opportunity of making similar experiments, and they published the interesting fact that the combination of small doses of morphia and chloroform secured a complete insensibility for several hours without sleep. Another French observer, Rabuteau of Paris, performed the following experiment. He gave a dog 5<sup>c</sup>ctg. narcein, and then subjected him to chloroform narcosis. On awakening, the animal was totally devoid of sensation. He went about the room, recognised the voice of his master, but was void of any trace of sensation. He was stuck, pinched, his feet trodden on, but he expressed not the least manifestation of pain. This condition lasted many hours. It was only on the next day that sensation returned.

The union of morphia and chloral thus is of the the greatest benefit in practice, and we call especial attention to its efficacy in the treatment of biliary and renal colic and the various neuralgias.

OBSERVATIONS ON THE CAUSES AND TREATMENT OF CERTAIN FORMS OF SLEEPLESSNESS  
BY DYCE DUCKWORTH, M.D., F.R.C.P.

ASSISTANT PHYSICIAN TO ST. BARTHOLOMEW'S HOSPITAL, AND  
DEMONSTRATOR OF SKIN-DISEASES.

In this communication I am desirous to direct attention to some causes of sleeplessness, which, I think, are hardly sufficiently recognised or adequately met by the resources of practical medicine. The remarks I have to make have reference more especially to causes of insomnia acting in persons who are either in apparently good health, or who, at any rate, are not decidedly ill. Some of the conditions which I shall mention as leading to loss of sleep will, however, be shown to occur in persons who cannot be said to be in good health. Systematic writers on the practice of physic only incidentally allude to the subject of insomnia and more especially when they treat of certain cerebral affections, of delirium tremens, early phases of insanity, and stages of acute inflammations and fevers.

There are naturally idiosyncracies with regard to sleep; but I have nothing to say about these, further than they must be so far considered in every case of insomnia that comes under observation. It should be remembered that many persons, apparently healthy, declare that they have hardly slept during a night, and believe what they aver, when they have really only lost two or three hours of a long night's rest; not that such a loss is unimportant by any means. So-called bad nights exert a very harmful influence upon the sufferers; and much subsequent bodily and mental enervation, much nervous irritability, and even, I believe, misdirected appetite, are due to this partial loss of rest.

Much light has been thrown upon the physiology of sleep during the last fifteen years; and the teaching of those who have best investigated the subject requires us to believe that the cerebral condition is

essentially one accompanied by a feebler and diminished circulation of blood in its vascular system. It is also within the reach of capable observers to assure themselves that the most constant (physiological) cause, and certainly the most frequent accompaniment, of sleeplessness is an opposite condition, or one of active and increased circulation of blood in the brain. These views are the reverse of those that were formerly taught upon the subject. The statement that Boerhaave, published in 1708 (*Institutiones Med.*), "Motus arteriarum, venarumque et cordis, fit fortior, lentior, æquabilior, plenior, idque per gradus diversos augendo, prout augetur somnus," and again—"In somno augetur motus cordis," were corrected, as were also many doctrines of the same illustrious physician, by the acumen of Cullen, who taught that "an increased impetus of the blood in the vessels of the brain was the principal cause whereby the waking state of it was supported" (*Institutiones of Medicine*, 1770.) The more recent researches of Durham and Hammond have clearly shown that the brain is in a comparatively anæmic condition during sleep, and that the blood thus removed from the head is more freely supplied to the viscera and integuments. We have in this latter statement an explanation of the commonly observed fact, that perspiration is present in inordinate amount during sleep as compared with the state of wakefulness.

I believe that one of the most common causes of sleeplessness in persons otherwise not in bad health, is dyspepsia in some of its forms; and, although most observers would be prepared to agree to this view, I think the subject has not received sufficient attention. As Sir Henry Holland has remarked (*Medical Notes and Reflections*, page 218), "no rules are more important than such as apply to the relation between digestion and sleep," and he proceeds to show that all such rules are exceedingly scanty and incomplete, "notwithstanding the perpetual experiment which life affords upon the subject." I aver then, that dyspepsia is not only one of the commonest, but also one of the least recognised of the causes of the loss of sleep; and amongst reasons for this statement are the facts that the symptoms of digestive disturbance are sometimes, indeed frequently, not appreciable, or not at all prominent, at the time of retiring to rest: and also, that the diurnal digestion may be in a comparatively vigorous state. Most persons are familiar with acute dyspepsia as occurring in the night, and supervening upon errors of diet; and in such cases a disturbed sleep is rudely broken by an attack of cardialgia or acid vomiting. The dyspeptic symptoms to which I specially allude as interfering with sleep, are less severe than those just enumerated. The patient retires to rest and sleeps; it may be calmly, for a short period, but he then awakes, and forthwith secures no more sleep for several hours. To such a form of dyspepsia Cullen alludes, and he was the victim of it himself. He writes, "Persons who labour under a weakness of the stomach, as I have done for a great number of years past, know that certain foods, without their being conscious of it, prevent their sleeping." Sol

have been awaked a hundred times at two o'clock in the morning, when I did not feel any particular impression; but I knew that I had been awakened by an irregular operation in that organ, and I have then recollected what I took at dinner, which was the cause of it. Dr. Haller is liable to the same complaint; and, in his larger work especially, he gives the particulars of his own case, and to the same purpose that I have done, as he learned it from his own experience." So far as I know, nocturnal dyspepsia of this character is not described in treatises on digestive disorders. The sources of it, however, may, I believe, be various. There may be no actual suffering experienced, and, beyond dryness of mouth, burning soles of the feet, and heat and throbbing in the head, there is little to complain of.\* The symptoms may supervene several hours after the last meal, but they never occur unless some error of diet have been committed; and it may not always be possible, as in Cullen's own case, to attach blame to the particular article of food, or to the unwholesome combination of aliments which has led to the result. And naturally, the question of idiosyncrasy must be considered in all such cases.

It seems most probable that the symptoms are due to a too acid condition of the contents of the stomach and upper part of the small intestine, and it is certain that excess in fatty and highly seasoned food, in fruit, and in wines of various kinds, is the chief exciting cause of the dyspepsia. Hence there is no more fertile source of this trouble than the fashionable dinner-party, especially if their be indulgence in the sweet courses and in fruit, and if the fatal dietetic error, peculiar to Englishmen, of mixing various wines be committed. The misery of insomnia is rendered more certain subsequently, if both strong coffee and strong tea be taken after such a dinner, as is not unfrequently the case. The dyspepsia is thus aggravated by special cerebral excitants.

The form of indigestion known as "dyspepsie deliquides," described by Chomel (*Des Dyspepsies* Paris, 1857, p. 99), and by Dr. Thorowgood in this country, may also prove excitative of sleeplessness. But this affection, together with such symptoms as I have just described, are best referred clinically to the type of atonic dyspepsia, and, when the immediate discomforts are relieved, a more prolonged therapeutic course is needed to promote recovery.

It is needless for me to do more than allude to the almost intolerable insomnia, delirium it may be called, induced by excess of tea or of coffee taken late in the evening. All persons are not affected by these, and some people can even sleep soundly after taking one or other, provided they retire to rest immediately, and do not begin to do brainwork. It is less well-known, however, that smoking strong tobacco late at night is a source of sleeplessness to some people, and if practised after dietetic errors only tends to aggravate the subsequent wakefulness.

I pass on now to speak of sleeplessness due to overexhaustion, both bodily and mental. It is well

known, and within the experience of most persons, that a certain point of fatigue may be reached when sleep is impossible. This condition is the result of increased flow of blood to the brain, consequent on vaso-motor paresis. After a day of incessant activity, when body and mind have been unduly taxed, this state may be reached. If, in addition, there be anxiety of mind or a persistent source of worry, the insomnia is aggravated. To "take off one's cares with one's clothes" as has been said, is indeed an excellent rule, but one, at times, very difficult of accomplishment.

Literary men suffer from insomnia oftentimes as the result of brainwork, executed at the small hours of morning, and sometimes because of bodily exhaustion superadded from sheer want of nourishment. Brain-work, in addition to the tax upon the ordinary powers by the pursuit of a profession, is, I believe, highly exhausting to the majority of those who practise it, especially amidst the calls, turmoil, and high pressure of life in a metropolis. The state of bodily fatigue to which I allude, is sometimes experienced by travellers who, after a hard day of locomotion, with perhaps irregular, and not very nourishing meals, endeavour to procure a night's rest without taking a sufficient or suitable meal in the first instance. And it is precisely at this meal that the grossest dietetic mistakes may be committed. The digestive powers are at a minimum, and yet there is a large demand for nutrition. The difficulty is not always to be met, but attention to the rules of physiology will in most instances, I believe, secure the wished-for result for stomach and brain. And so, for the throbbing head and busy brain of the literary man or student, there are rules to follow, of which I shall speak presently.

The treatment of cases of insomnia due to nocturnal dyspepsia is to be met by remedies affording relief temporarily, and by measures calculated to improve the digestion generally. Naturally, if due discretion were exercised at the last meal taken, no disturbance would occur, but I have already shown that it is not always possible to discover the offending article or articles of diet. A large meal taken late after exhaustive work, and when solid food has not been eaten in the middle of the day, is liable to be digested with difficulty. Hence long intervals between meals should be avoided. There is no harm in varied diet at a late repast, provided too much be not taken, and the food be skilfully cooked. As adults are the sufferers from this complaint, so in most cases have they the requisite knowledge of the particular articles of food that best agree with them.\*

\* In the case of a nourishing meal being required late at night, after a hard day's travel, I know nothing more suitable than good beef-tea, if it can be had; and, by the aid of prepared extracts of meat, this is now quite within the reach of travellers in the most outlandish quarters. Chicken, and simply prepared salad of lettuce, is likewise easily digestible late at night, by even delicate and exhausted persons. Good draught beer is advisable, if it agree generally, or dry champagne; the latter, indeed, is often an excellent remedy. In cold weather, mulled claret is very valuable; and something is perhaps due to the nutmeg in its composition, for this spice, as Cullen showed, is, in full doses, an important hypnotic. (*Materia Medica*, vol ii, p. 204). Lettuce has likewise similar properties.

\* The cerebral circulation is this, as in most forms of insomnia, increased in activity.

The question as to stimulants, however, is less readily answered. No one can doubt that much of the dyspepsia of the affluent classes in this country is due to indiscreet mixing of liquors, a practice which is singularly in discord with the science and skill now imported into culinary matters.

It is at all events sufficiently well-known that to drink one wine is most wholesome for dyspeptics; and whether it shall be claret, dry sherry, or alcohol in some form, properly diluted, must be decided in each case. In some instances of acid dyspepsia, port wine is of use, and appears to call forth less acid than sherry, perhaps, as Dr. Budd has suggested on account of its stringency. For the immediate relief of the insomnia and dyspepsia, full doses of alkalies should be given. The calcined magnesia or solution of carbonate of magnesia in excess of carbonic acid, and the compound rhubarb or Gregory's powder, are amongst the best remedies. A large draught of cold water will also prove effectual at times. The success of the therapeutical measures throws light upon the existing cause of the sleeplessness, even when this is hardly suspected. Cullen does not state what remedies he employed in his own case, but we may rest assured that he treated himself.

The dyspepsia of liquids, as a cause of insomnia, is naturally best treated by the adoption of a diet in which less fluid is taken. The underlying atonic condition of the stomach and intestines requires the remedies proper to such a state; and here may be mentioned, as of especial value, the mineral acids, strychnia, and quinine.

For the sleeplessness ensuing upon tea or coffee taken late at night, there is hardly any remedy that I know. To give alcohol in any form, with a view to induce sleep, after an excess of tea, is of no use. I believe it is better to read an easy and not too entertaining book when in this condition, for sleep is thus more quickly induced than when the sufferer lies conscious of each cardiac and vascular pulsation, and agonised by floods of rushing thoughts.

For the relief of the insomnia following exhaustion, either mental or bodily, there is happily a good deal to be done. No greater mistake can be made than to retire to sleep at the time of completed digestion.

It is almost proverbially known to be bad to go to bed fasting. Insomnia, from this cause, is, of course, easily met by taking some simple food. People, whose duties occupy them far into the night, and who have exercised their minds with any effort, should take a full evening meal, or, failing this, nourishment must be had later on. And where there is, from any cause, undue pressure of work, mental strain, or anxious watching, I know no nutriment so suitable as well-made beef-tea or extract of meat. The latter is of especial value, being always on hand and, if taken in the form of Mr. Darby's extract, the best, I believe, of all such preparations, and spread upon bread or biscuits, is eminently calculated to relieve the craving felt, and to supply a readily digestible little meal. Such measures, I think, are more to be commended than was the

practice of literary men fifty years ago, which consisted in the imbibition of whiskey punch, made with infusion of green tea.

I should recommend all bad sleepers who cannot trace their insomnia to indigestion, and who may have passed an unduly long interval since their last meal, to employ extract of meat in the manner I have just described. I can, at all events, bear testimony to its value from personal experience, and I have known benefit to be largely derived from its use in several other instances.

The sleeplessness due to cold feet in winter time, resulting from alterations of arterial blood-pressure in the body, is best met by the use of pediluvia at bedtime; and the addition of mustard or tincture of iodine is valuable, especially where the sufferer is a victim to chilblains.

Experience shows that a prolonged nap after a late dinner interferes with proper sleep at the usual time. I believe that a short sleep of a few minutes ("forty winks") is really valuable after dinner to those who have to work late at night. If the sleep be of an hour's duration, digestion is disturbed, and, in some cases, nightmare occurs immediately on going to bed.

Sleeplessness may sometimes be the result of mere bad habit. There may be no error of diet as the cause, and no dyspepsia; but there is simply a morbid apprehension as the head is laid upon the pillow that sleep is impossible, and forthwith the brain begins to be busy. This state is most apt to supervene upon a long course of broken rest. Persons who have kept watch by the sick, especially where there has been mental anxiety or distress, suffer from this form of insomnia. The acuteness of their trouble has more or less passed away, but night brings dispeace and apprehension with it. This form is engendered, then, as a bad habit from an interruption, more or less prolonged, of one of the periodical functions of the brain. It is not possible to detach entirely, in these cases, the peculiar mental element—the active conjuring up of past scenes, or the busy memory; but, in other instances, no cause is readily to be found, and we are compelled to believe that the bad habit results from a low condition of nervous energy.

The benefit to be derived in this form of insomnia from change of scene and change of air is very remarkable, and it is, indeed, seldom advisable to employ medication. There can be no doubt of the value of the change of air in many forms of sleeplessness; but, in awarding the true therapeutic value to climatic influence, we must not altogether lose sight of the effects of the *medicina mentis*. To pass from the noise and sullen heat of dwellings bordering upon the streets of London on a summer night, to a cool and well aired apartment, in any peaceful country district, is in itself a strong incentive to slumber; but, beyond this, there are special aerial conditions and influences due to proximity of sea.\*

\* Townspeople resorting to the seaside very commonly experience marked sleepiness during the earlier part of their stay; and the same is sometimes the case in the pure air of the country. Long continued exposure to air, as Dr. Hand-

nature of soil, and immediate surroundings, which unquestionably require due consideration in each case. Indeed, attention to such points is almost as necessary, in some instances of sleeplessness, as it is in the cases of sufferers from spasmodic asthma.

The best drug to employ in such cases, if they must be employed, are the bromide of potassium or chloral hydrate. Henbane, in full doses, is also of service.

Persistent odours will prevent sleep. Thus flowers in a sleeping apartment,—where, by the way, they never should be placed—giving off aroma, will affect certain people powerfully, causing headache and cerebral irritability (*vide* Moore on *Going to Sleep*, page 37. London, 1868). I have known the effluvia of certain embrocations to act in preventing sleep for a time in some patients; belladonna, tar, and citronella, in particular, are to be blamed.

While laying stress upon securing pure air for sleeping apartments, as far as possible, attention must also be paid to the amount of moisture present in the air. In many instances, the air is deficient in moisture, and the dry air inspired, often laden with dust, is a source of discomfort to the nasal and bronchial membranes; not only so, the influence of a too dry atmosphere is perceived by the whole cutaneous surface, and thus a source of irritation exists which is not unfrequently the last to be suspected.

In the case of bedridden persons, or during long illness, this point is to be attended to, and the absence of moisture is to be met by keeping water in the room, and, if need be by sprinkling water on the floor. I am sure that many persons have additional cause for their sleeplessness in the dry air they inspire in the bedrooms of hotels, after doing a hot season on the continent of Europe. They are committed, perhaps late at night, to a room that has been shut up and baked by a fierce sun all day, and that has not had an ounce of water in it for days. To open the windows may entail a plague of mosquitos, or give entrance to a still more deadly malaria. In such a case, I recommend a very free distribution of water to various parts of the floor. I have known quarts of water to evaporate in a single night when used in this manner, showing the urgent necessity for the employment of it.\* The same condition of dryness is met with in winter in all apartments warmed by artificial heat. This is not felt where there are open fireplaces; but if stoves be employed, then all the unfavorable conditions for insomnia are present, unless the amount of heat and moisture be duly regulated. According to Dr. Cornelius Fox, air, containing a healthful amount of moisture, exhibits a difference of about five degrees

field Jones has remarked, is a powerful inducer of sleep; but it is to be observed that the air must be pure, and, if possible, of bracing character. Long continued exposure to the air and ochlotic miasms of large towns is by no means so effectual an hypnotic.

\* It is highly probable that ozone is generated by such a procedure as I recommend. Dr. Cornelius Fox's observation on the "Purification of Air by the Vaporisation of Water", in his book on *Ozone and Antiozone*, and his paper on "Coke as a Fuel in relation to Hygiene", should be read by all interested in sanitary matters.

between the wet and dry bulbs of a hygrometer. If the difference be greater, moisture should be added.

As to the best posture to assume on going to sleep, I think little need be said. Dr. Radcliffe has lately recommended natural decubitus to ensure sleep, but, lest this seem paradoxical, it should be added, that this advice is for bedridden persons, the subjects of chronic nervous disorders, and the plan suggested is in opposition to a sitting posture to be maintained during the day by a suitable bed support. In the case of otherwise healthy people who suffer from heat and throbbing in the head as part of their insomnia, a posture with the head somewhat high is desirable in order to promote sleep upon physiological principles. A hard pillow should also be employed in such cases.

In conclusion I should remark that the best knowledge we now possess, as to the action of the drugs commonly used to secure sleep, shows us that both bromide of potassium and chloral hydrate cause diminished amount of blood to circulate through the brain; and hence, as in many similar cases, the advance of the science of therapeutics has shed light upon the mysteries of pathology.—*British Medical Journal*.

#### POST-PARTUM HEMORRHAGE.

In the *British Medical Journal* for January 11, 1873, Dr. Robert Barnes says: "In discussing the action of powerful styptic injections in arresting flooding after labor, the conditions under which the practice I have recommended is indicated have not always been accurately appreciated. The great agent, of course, in stopping hemorrhage, is the constriction of the uterine vessels by the muscular wall in which these vessels run. All the ordinary means of arresting hemorrhage are aimed at producing muscular contraction. But muscular contraction depends on nervous power. Thus cold, grasping the uterus, introducing the hand, galvanism, all depend for their efficacy upon the spinal cord being able to respond to the peripheral call. When, therefore, these means prove sufficient, the inference is generally warranted that the case, although serious, is not desperate. The condition is very different when the excitomotor function is suspended; when neither by peripheral excitation, nor by centric stimulus, the nerve-force can be drawn or sent from the spinal cord to the uterus in sufficient intensity to cause contraction. At this point, unless the bleeding is arrested by syncope, or by temporary enfeeblement of the circulation, the patient is in most imminent danger of death. The slightest shock or disturbance will extinguish the flickering spark of life. Under such circumstances I have known death to follow, to all appearance immediately caused, by the injection of cold water or passing the hand into the uterus. If instead of cold water we inject a solution of perchloride of iron, the same catastrophe may ensue. Is it more likely to ensue? Very careful observations are required before this question can be answered in the affirmative. People are apt to think that cold water is so simple a thing



that it cannot do any harm. But if it cannot do any harm, is it not probable that it is, under the conditions discussed, equally powerless to do any good? Harmless remedies, as a rule, fail in great emergencies. Now, cold water fails not because it is harmless, for the shock and depression which it causes are extremely dangerous; but it fails because nervous power being exhausted, it cannot excite uterine contraction, and it has no other virtue in arresting hemorrhage.

"Here, then, it is that styptics come to the rescue. The emergency is extreme, and would be desperate, but for the new power invoked. If blood be still running, it is instantly seized at the mouths of the vessels, which become sealed by coagula. It also constricts the inner surface of the uterus, and thus further closes the vessels. The system then has time and opportunity to rally, and by and by the contractile power returns. In estimating the relative value, then, of cold water and perchloride of iron, we must reflect that iron acts and saves life when water is inert or injurious. If occasionally death follows, and is apparently accelerated by the iron injection, we have, on the other hand, to remember that it was used as a last resource, when the patient was likely to die even if nothing were done, and that even under these unpromising conditions *many lives, to all appearance doomed, have been saved.*

"The great lesson to learn is to take courage to use the styptic in time, that is, before the vital power has sunk too low. It was not to be expected that a remedy powerful enough to save under the last extremity should be altogether free from danger. But I have seen so many women bleed to death, and have seen so many saved by the timely use of the iron injection, that I am much more afraid of the bleeding than of the remedy.

"In some cases there is reason to believe that the iron enters the uterine vessels. I have known intense pain in the uterus follow immediately on the injection. How is this explained? If blood were present in the vessels it is a chemical necessity that contact with the iron should cause coagulation. I infer, then, that in some cases the vessels are for a time nearly empty, and that there is a certain amount of suction-action induced by the relaxed state of the uterus and by the lateral or semi-prone position of the patient. I would therefore urge that the patient be placed on her back, and that the uterus be grasped firmly between the two hands of an assistant during the injection.

"In some cases it is easy to carry a swab of sponge soaked in the iron solution into the uterus. In this way probably some of the risk attaching to injection is avoided. The persulphate of iron, which is preferred by our American brethren, may have its advantages. Its styptic force is probably greater. It may be used in the form of one part of the liquor ferri persulphatis of the *British Pharmacopœia* to six or eight of water. The proper strength of the perchloride solution is one in ten."

In the *Obstetrical Journal of Great Britain and Ireland* for May, 1873, Dr. W. S. Playfair says: "The discussion on the treatment of post-partum

hemorrhage by the injection of a solution of perchloride of iron, which recently took place at the Obstetrical Society, has probably been studied by all who are interested in obstetrics.

"It was the first occasion on which the merits and demerits of this most important improvement in midwifery had been formally brought under its consideration, and it is to be regretted that the value of the debate was somewhat marred by exaggerated statements and undue warmth of argument. It is certain that so active a method of treatment should be carefully studied. Like every other active treatment it is advisable that its indications and contraindications should be thoroughly investigated by the light of experience; and there can be no doubt that we have still a good deal to learn about it. In common with many other speakers on that occasion, I stated that I had frequently injected the perchloride and had never seen any ill effects follow its use. At the same time I was willing to admit, as I do not doubt that Dr. Barnes and all others who use it would willingly do, that an agent so potent should not be carelessly and indiscriminately used, and that certain inconveniences or even risks, not yet fully made out, might attend its employment.

"By a somewhat curious coincidence a few days after the debate I had a case under my care in which I used it, and, as I firmly believe, saved by it the life of my patient. Yet very grave and even alarming symptoms followed—due, it can be hardly doubted, to its employment; and I think that the case is sufficiently instructive to be worthy of record. It shows one class of dangers which may arise from it, and possibly the history will teach us how, under similar circumstances, these are to be avoided.

"Two and a half years ago I saw, with Mr. Aikin, of Clifton Place, Sussex Square, a lady who was apparently at the point of death from post-partum hemorrhage. She had been confined of her fifth child rather more than two hours before I saw her, after a somewhat tedious labor, the breech presenting. All her other labors had been natural. She was a stout woman, thirty years of age. After delivery the uterus had contracted firmly, with no more discharge than usual. Mr. Aikin had stayed with her more than an hour, and had left her seemingly well and comfortable. Half an hour afterwards she had a tremendous gush of hemorrhage. Mr. Aikin was immediately summoned, and speedily arrived, accompanied by Mr. Rushforth, of Oxford Terrace. The patient was then collapsed and insensible, and to all appearance dead. Some brandy was introduced into the mouth through an aperture formed by the absence of one or two teeth, and a solution of perchloride of iron, which Mr. Aikin fortunately had with him, was at once injected into the uterus, and all further loss was checked. When I saw her shortly afterwards she was still collapsed and pulseless, and I immediately sent for the necessary apparatus for transfusion, which seemed to afford the only hope of saving her life. Before the instruments arrived, however, she had rallied; and eventually made a good recovery, though she long remained blanched and anæmic. Such was the for-

midable history of the patient previous to her present confinement.

"On this occasion Mr. Aikin was unable to take charge of her, being confined to his home by illness, and I was asked to attend her in company with Mr. Rushforth. In no case is 'forewarned, forearmed' a truer proverb than in relation to post-partum hemorrhage, and as we adopted every possible precaution to prevent it, we were in hopes that no repetition of the former flooding would occur. The head presented, and the labor was natural and easy. As the head descended a drachm of the liquid extract of ergot was administered. Firm pressure on the uterus was kept up as the child was expelled, and continued without intermission afterwards. A second dose of ergot was given shortly after delivery, immediately after the expulsion of the placenta. One or the other of us kept kneading the uterus for three-quarters of an hour after the birth of the child. It contracted fairly, but not tightly, and showed a tendency to relax. Two or three times small pieces of ice were introduced into the uterus to promote contraction. All this time there was no unusual loss, and we considered any danger of hemorrhage to be over. Suddenly, and while the uterus was still grasped by the hand, an appalling flow of blood occurred. I immediately emptied the vagina of a mass of clots, and, as all means of promoting contraction had been already vigorously employed, I at once proceeded to inject a solution of the perchloride of iron of the usual strength; and not a moment too soon, as the patient was already tossing about, sighing deeply, and showing the well-known formidable signs of collapse. As I injected I felt the uterus contracting around my hand, and not a drop more of blood was lost. Nothing could be more rapid and satisfactory than the action of the remedy, and I honestly believe nothing else would have checked the flooding or enabled us to save the patient's life. For two days all went well. On the third day the pulse was 100, and the temperature 102°. The day following the pulse was 120, small and thready, the temperature 104° in the morning, and 105° in the evening, the tongue dry and black, and the general condition very alarming. There was no abdominal tenderness whatever. The uterus was somewhat large, reaching nearly to the level of the umbilicus. There was little or no discharge, and what there was was highly offensive. Eight ounces of brandy per diem were administered, and 30 minims of turpentine every sixth hour, and a teaspoonful of Brande's beef jelly every hour. On internal examination the whole vagina was found to be filled with small, hard, black clots, formed by the corrugating effects of the iron, and believing that the symptoms were probably due to the retention in utero, and decomposition of similar clots, giving rise to septic absorption, the cavity of the uterus was freely washed out with Condé's fluid and water by which several portions of broken-down coagula were removed. Next day things were worse rather than better, the temperature being 105½, pulse 130. There was some cough with sibilant rales over the right chest. Still there was no local tenderness or

other symptoms. We then had the advantage of meeting Sir William Jenner in consultation. The general treatment was continued; the quantity of brandy being increased. With the view of reducing the hyperpyrexia, gr. v. of sulphate of quinine in pill were administered every third hour. The intra-uterine injections of Condé were continued three times a day, and in the evening a large and highly offensive clot was ejected. Next morning the temperature had sunk to 102½, and the pulse to 100. Treatment as before. Quinine was now given every fifth hour. In the evening the temperature had again risen to 104°. Another large coagulum was expelled after injection. Next morning the temperature had fallen to 101½, the pulse to 86, and all fetor had disappeared from the discharge. No more coagula were passed. It is needless to continue a record of the case, as the improvement from this date continued to be steady, and in a few days the patient was convalescent.

"There can, I think, be little doubt as to the sequence of events which gave rise to these alarming symptoms. When the iron was injected, although the hand was in the uterus, and the clots within it had been as much as possible removed, blood was still pouring out abundantly. The powerful astringent at once corrugated all the blood and coagula it came in contact with, and these hardened clots filled up the uterus and the canal of the vagina. In due course these began to decompose, and septic absorption took place. By the finger and the intra-uterine injection they were gradually broken down and removed. The improvement unquestionably dated from the expulsion of the two large and decomposing coagula on the sixth and seventh days after delivery. Immediately after this happened the temperature and pulse fell remarkably, and recovery commenced and continued uninterruptedly.

"What, then, is the lesson to be learned from this case? Is it that the risk is too great, and that the injection of the perchloride of iron should be banished from practice? I think most unquestionably not. I have little doubt, knowing what I did of the patient's former labor, and having already tried in vain all the anti-hemorrhagic treatment at our command, that without the perchloride the flooding would have proved fatal. It is indeed precisely in these inveterate cases, where every means of inducing uterine contraction proves unavailing, that it forms so invaluable a resource. Rather, I think, it should teach us to limit its use to these only—as, I believe, Dr. Barnes has all along taught. It shows, also, that the retention in utero of hardened coagula, liable to decomposition, may prove a source of danger hitherto unsuspected. With a knowledge of this fact it would be our duty to secure the expulsion of the coagula as soon as possible after all risk of hemorrhage had ceased, and make sure that there was a free exit for the discharge. This would best be done by satisfying ourselves on the second or third day after delivery that the vagina is not filled with clots, and removing them if present, and by using antiseptic intra-uterine injections freely, as in the above case, should suspicious symptoms arise. With a know-

ledge of this source of danger, it might probably be avoided in most cases. Whether any other astringent fluid, such as the tincture of matico, the use of which was suggested at the Obstetrical Society, would answer equally well in constricting the vessels from which the blood flows, and be less apt to produce hardened coagula, is well worthy of consideration. I question very much, however, if anything less than the most powerful and direct astringent is to be depended on.

"Important as are the lessons this case has taught me, it has left me not a whit less a believer, but rather a firmer one, in this most invaluable remedy."

#### TREATMENT OF CEREBRO-SPINAL FEVER.

By J. LEWIS SMITH, M.D., Consulting Physician to New York Infant Asylum, etc.

(*American Journal of the Medical Sciences*, October, 1873.)

At the termination of an exhaustive paper on cerebro-spinal fever, Dr. Smith, in speaking of the treatment, says: "Although we do not fully understand the conditions in which cerebro-spinal fever originates, it is certain, from facts observed in epidemics, that we are able to do something to diminish its severity and prevalence, and to protect the community. Measures to this end must be of a twofold character—namely, such, in the first place, as are calculated to improve the surroundings of the individual, so as to conduce to a better state of health; and, secondly, the regulation of his mode of life. Cleanliness and dryness of streets and domiciles, perfect drainage and sewerage, prompt removal of all refuse matter, avoidance of overcrowding, so as to procure the utmost salubrity in the atmosphere, the use of plain and wholesome food—in a word, the strict observance of sanitary requirements in all the surroundings—cannot fail to reduce the number and diminish the severity of cases; for this disease assumes its worst form and numbers the most victims where anti-hygienic conditions most abound. Of scarcely less importance is a strict surveillance of the mode of life, especially of children and young people, during the time of an epidemic. We have seen that this disease not unfrequently follows irregularities in the mode of life, excesses of whatever kind, and fatigue, mental or bodily. These should therefore be avoided. A quiet mode of life and moderate exercise, plain and wholesome and regular meals, and the full amount of sleep afford some, but not complete, security in the midst of an epidemic.

"*Curative.*—It will aid in determining the proper mode of treatment to bear in mind the anatomical characters as ascertained by post-mortem examinations. As the chief danger in the first days is from the intense inflammatory congestion of the cerebro-spinal axis, the prompt employment of measures calculated to relieve this is of the utmost importance. To this end bladders or bags of ice should be immediately applied over the head and nucha, and constantly retained there during the first week. Bran mixed with pounded ice produces a more uniform coldness, and is more comfortable to

the patient, than ice alone. Cold produces a prompt and powerful effect in diminishing the turgescence of the cerebral and meningeal vessels. A hot mustard foot-bath or general warm bath with mustard, should also be employed as early as possible, since it acts so powerfully as a derivative from the hyperæmic nerve centres, tends to calm the nervous excitement and prevent convulsions. An enema to open the bowels is also proper.

"Should bloodletting be employed, especially in the more sthenic cases? Even in the commencement of the present century, when it was customary to bleed generally or locally in the treatment of inflammatory and febrile diseases, a majority of the American practitioners whose writings are extant discountenanced the use of such measures in the treatment of this disease. Drs. Strong, Foot, and Miner, though under the influence of the Broussaisian doctrine, were good observers, and they soon abandoned the use of the lancet and leeches in the treatment of these patients for more sustaining measures. Strong, who published a paper on spotted fever in the *Medical and Philosophical Register*, in 1811, states that certain physicians employed venesection as a means of relieving the internal congestions, but finding that the pulse became more frequent after a moderate loss of blood, they soon laid aside the lancet. Some experienced physicians of that period, however, continued to recommend and practice depletion, general as well as local, as, for example, Dr. Gallop, who treated many cases in Vermont in the epidemic of 1811.

"No physician at the present time recommends venesection, but some of the best authorities, as Sanderson and Niemeyer, approve of local bleeding in certain cases. It may be stated as a safe rule that leeches or other modes of local depletion should not be prescribed in a large majority of cases, and if prescribed in any case it should be on the first day, for on the first day the maximum of inflammatory congestion is attained, and in no case should more than a very moderate quantity of blood be abstracted. Blood should only, in my opinion, be abstracted, and in small quantity, from the temples or behind the ears, in the more sthenic cases, in which, after the prompt employment of the other measures recommended, the stupor becomes more and more profound, and the patient appears already in incipient coma. But in allowing a moderate depletion it must not be forgotten that the disease is in its nature asthenic, and in its subsequent course will require sustaining measures. It is apparent, however, that the abstraction of blood if once allowed is likely to be recommended too frequently in the treatment of this disease by those who have had but little experience with it, for the state of most patients in the commencement seems so critical, and the stupor so great, that the most energetic measures seem to be required. But if the blood of patients is spared, and they are promptly and properly treated otherwise, it is surprising to see how many emerge from the stupor and finally recover. For example, in a case related to me by Dr. Griswold, the patient seemed to be comatose for three days, being apparently unconscious and the

pupils scarcely responding to light, but he recovered without losing blood. In only one case have I recommended the abstraction of blood, and this was so instructive that I will briefly relate it:—

"M., a female, four years old, was seized at 2 A.M., March 7th, 1873, with vomiting, chilliness, and trembling, followed by severe general clonic convulsions lasting about fifteen minutes. On visiting her early in the morning, I found her semi-comatose, with a pulse of 132, which in a few hours rose to 156; temperature  $101\frac{1}{4}^{\circ}$ , respiration 44; eyes closed; pupils moderately dilated and responding feebly to light; surface presenting a dusky mottling; constant tremulousness, and frequent twitching of limbs. Four grains of bromide of potassium were ordered to be given every hour to two hours, with the usual local measures—namely, ice to the head and nucha, and a hot mustard foot-bath, followed by sinapisms to the extremities.

"8th. Pulse 136; is partly conscious when aroused, but, immediately relapses into sleep; head considerably retracted; bowels constipated; vomits occasionally; temperature  $102^{\circ}$ . Treatment, a leech to each temple, on account of the extreme stupor; other treatment to be continued.

"9th. The leech-bites bled, though slowly, nearly five hours; pulse 180, and so feeble as to be counted with difficulty; temperature  $101\frac{1}{2}^{\circ}$ . The patient is evidently sinking. Treatment, a teaspoonful of Bourbon whiskey in milk every two hours, beef-tea and other nutritious drinks frequently, also the bromide at intervals. Evening, pulse 172, still feeble.

"10th. Pulse 180, barely perceptible; great hyperæsthesia; temperature of axilla  $100^{\circ}$ , of fingers and hand below  $90^{\circ}$ ; axes of eyes directed downwards.

"11th. Pulse still very feeble, varying from 160 to 189; temperature  $102\frac{1}{4}^{\circ}$ . There has been no intermission in the use of the stimulants or nutriment night or day; pupils moderately dilated and somewhat more sensitive to light.

"After this the patient gradually rallied for a time, so that the pulse became stronger and less frequent, but death finally occurred after nine weeks in a state of emaciation and extreme exhaustion. Slight convulsions occurred in the last hours.

"It is seen that after the loss of blood from two leech bites, this patient passed into a state of extreme exhaustion so that for three days I did not believe that she would live from one hour to another, and death finally occurred. Although the loss of blood may have been useful in relieving the stupor, yet a worse danger resulted. Experience like this, which I believe corresponds with that of other observers, shows how seldom and with what caution the blood of the patient should be abstracted.

"The internal remedy most in favor with the profession of this city, and justly, in the first stage of this disease, is the bromide of potassium, especially in the treatment of children. Evidently a remedy is required which will diminish the calibre of the arterioles, and consequently the hyperæmia of the cerebro-spinal axis and its meningeal covering. Ergot

has been employed for this purpose, and in some instances with a satisfactory result; but bromide of potassium, while it contracts the arterioles of the encephalon, is at the same time a powerful sedative to the nervous system. More than any other safe internal remedy, it prevents convulsions in children, which, occurring in this disease, add a passive to the already intense active congestion of the cerebro-spinal axis. This agent in medicinal doses produces no ill effect, except when given frequently for a lengthened period, when it may accumulate in the system. A child of five years may take five or six grains every two, three, or four hours, according to the urgency of the case. After the first week it should be given less frequently, and finally omitted. The practice of some physicians, of continuing the use of the bromide in frequent large doses after the first or at least second week, is to be deprecated, for after a time it is apt to produce symptoms which can with difficulty be discriminated from those of cerebro-spinal fever. These are stated as follows by Mr. Wood: 'Great muscular debility, dimness of sight with dilated pupils, irregular gait, the patient reeling as though intoxicated, whilst nausea, vomiting, or purgation, with abdominal pain of a dull aching character may, also be present.' (*British Medical Journal*, Oct. 14th, 1872.) It is obviously better after the first week, if the symptoms are no longer urgent, to discontinue the bromide entirely than to continue its use in such doses and for such a period that there may be danger of producing its physiological effects. Nevertheless, it is proper to resume its use during periods of recrudescence, which are so apt to occur at any stage of the disease.

"The bromide cannot be depended on to allay the pain which often, on account of its severity, requires immediate treatment, and sometimes it does not allay the excessive agitation. For these symptoms an opiate is indicated, which in my practice has produced a much more satisfactory result than hydrate of chloral. Quite moderate doses are sufficient to produce the effect desired. A patient of six years was quieted by  $\frac{1}{4}$  part of a grain of sulphate of morphia. So useful are opiates in allaying pain in this disease, that some observers, as Niemeyer and Ziemssen, consider them the most valuable of the internal remedial agents which we possess, and the benefit from their use in these cases has certainly had considerable effect in disabusing the minds of physicians of the dread which they have entertained of their employment in acute affections of the brain. Mankoff and others have employed subcutaneous injections of morphia.

"Quinia is suggested as a remedy by the paroxysmal character of the pains and the fever, but I believe that I am sustained by the general experience of physicians in this city in stating that it has very little effect upon either of these symptoms, or upon the course of the disease. I have employed it in small and large doses, as many as fifteen grains per day to a child of thirteen years, but am not aware that it has been of any service except as a tonic. There is perhaps no better remedy for the nausea than bismuth in large doses.

"Frequent counter-irritation along the spine by dry cups or an irritating liniment is useful from the first, and vesication of the nucha by cantharidal colodion or otherwise when the ice-bag is discontinued. Sustaining measures should also be commenced early. Tonics, vegetable and ferruginous, should be administered after the disease has continued a few days, alternating with and finally superseding the bromide. I have in some cases employed the citrate of iron and ammonia. The diet must be nutritious, consisting of the meat broths, milk, etc., during the entire course of the disease. Most patients require alcoholic stimulants sooner or later. In cases presenting a feeble pulse and other evidences of prostration, their early and continued employment is advisable, as in the case which I have related, in which whiskey was administered every two hours after the second day. The constipation is ordinarily best relieved by enemata. The room should be dark, of comfortable temperature, and quiet."

#### METHODS OF SURGICAL DIAGNOSIS.

The eminent Mr. Erichsen, in a recent lecture reported in the London *Medical Times and Gazette*, says:—

There are three methods that you may employ. The first and simplest method, and happily in surgery we have very simple methods of diagnosis, is by finding one pathognomonic sign. By "pathognomonic" is meant a thing which of itself indicates the nature of a condition. For instance, a person complains of dimness of vision. You look into his eye, and you see an opacity of the lens. That of itself determines at once the nature of his disease, cataract. You need not ask him a single question or go a step further. Again, a person complains of trouble about the bladder. You introduce a sound, and you feel a calculus and hear it struck. Thus at once a single sign, and that sign a pathognomonic one, is determinative in itself and by itself, not only of the existence of a malady, but of the very nature of that malady. You determine by that single sign, not only the existence, but the very nature of the malady that exists. Well, in surgery always seek for the pathognomonic sign, and endeavor to determine, if you possibly can, at once and by a single sign, what the patient's lesion may be.

Now the second method in surgery consists in getting what may be termed a "pathognomonic group" of signs; that is to say, a set of signs which singly and individually are not indicative of any one given disease or injury, but which, taken collectively as a group, indicate incontestably the nature of some given injury or disease. Take, for instance, the case to which I have already alluded, of an elderly person being tripped up upon the floor and being unable to rise. You look at the limb and find that it is somewhat shortened, that it is everted, that the patient is unable to raise it off the ground, that he complains of considerable pain, and that you feel crepitus about the region of the hip. Now any one of these signs, shortening of the limb, eversion of it, inability to move it, and crepitus, any one of these

signs is common to a variety of different injuries and diseases of the lower extremity; but the group, taking them collectively, is indicative of only one single condition, and that condition is fracture of the neck of the femur. Hence, although the individual signs may be untrue in themselves, so far as the determination of any given injury is concerned, they are absolutely true, and incontestably so, when grouped together, in determining the nature of a particular injury. That is the second method, then, of effecting a surgical diagnosis, by getting a pathognomonic group of signs or symptoms, for it will do for either.

The third method is a very important one, and it is the method that was greatly employed in the French school of surgery, and the employment of which undoubtedly led to the high position that it occupied, and does occupy, as a diagnostic school. It is what may be termed the negative method, or what is termed by French surgeons the "method by exclusion." By this method you first of all ascertain what a thing is not, and then by excluding everything that is not, you arrive at last at what it is. It seems a roundabout way of arriving at the truth, but in point of practice it is an exceedingly simple way. Let me give you an illustration. A patient comes to you with a tumor in the scrotum. You are in doubt as to what it is. You examine it first of all by transmitted light. You find that it is not translucent; therefore it is not a hydrocele. You examine the upper part; you find there is no impulse on coughing, and that the cord is not covered; therefore it is not a hernia. You find that the cord itself is not enlarged, is not tortuous, and vermiform in its feel; therefore it is not a varicocele. Having removed hydrocele, hernia, varicocele from any possible tumor of the scrotum, what have you left? Why two conditions, hæmatocele and sarcocele. You find that it has not followed a blow, that it is not globular and uniform, that the scrotum is not discolored; therefore it is not a hæmatocele, ergo, it must be the last of these conditions, and that is a tumor of the testicle; a sarcocele. In that way by determining what a thing is not, you speedily arrive at what it is; and this determination, in the hand and in the mind of a practised surgeon is so rapid as to be almost instantaneous. The whole process is going through in his mind with such rapidity that as he lays his hand upon the part he feels for everything, and he finds that four out of five conditions are absent; and his diagnosis is made instantaneously, although it is made by that process of negation or exclusion, and though the steps that lead to it are apparently complicated.

#### HOSPITAL NOTES AND GLEANINGS.

*Operation for Removal of the Female Breast by means of India-rubber Ligatures.*—At University College Hospital, on Nov. 21, Sir Henry Thompson performed an operation upon the female breast, which, so far as we are aware, is perfectly new to surgical practice in England. Previous to the entrance of the patient to the theatre, Sir Henry

stated that the plan he was about to adopt had been brought recently under his notice during a visit to Vienna by Professor Dittel. An accident, as it were, suggested the treatment to Prof. Dittel, who now for some time has employed it in over 200 cases, such as of tumours of the breast, in removing the testes and even limbs, and in the cure of fistula in ano. Having been called upon to see a young girl dying from meningitis, the following account of the case was given him: The patient, who had been constantly reproved by her stepmother on account of the untidy state of her hair, was advised, some weeks before her death, to get a tightly-fitting net for her head, and to wear it night and day. This she did till the last, when it was found that the elastic band of the net had cut its way through the scalp and cranium, and was resting on the meninges of the brain, fatal inflammation of which it had set up.

The immense power for effecting the solution not only of the soft tissues of the body, but even of bone, having, by the constantly contracting pressure of an elastic band, been thus so remarkably proved, Professor Dittel resolved to attempt in certain cases to substitute this power for the knife in surgical operations.

The applications of the treatment to the mammary gland by Sir Henry Thompson we will now describe: The patient, a woman of about fifty-three years of age, had for ten years been conscious of a tumour in the right mamma. When first noticed it was seated near the nipple, below and to its outer side, and was of the size of a walnut. As it was discovered about the time of her confinement with her last child, which died soon after its birth, she was led to regard the tumour as a "distended milk-duct." It has gone on increasing, however, though very slowly, and about eight weeks ago the skin covering the tumour commenced to ulcerate. At the time of the operation the histological characters of the tumour were doubtful. It was of the size of a large orange, ulcerated on the surface, somewhat pendulous, and freely moveable upon the adjacent tissue. The patient was a robust and healthy-looking woman. Chloroform having been administered, Sir Henry drew the mamma forward from off the pectoral muscle, and then, with a very long, strong, and slightly curved Liston's needle transfixed the submammary tissue. Through the eye, near the point of the needle, a long piece of very elastic India-rubber tubing, about the thickness of stout whipcord, together with a long silk ligature, was passed. The elastic ligature was then divided, and the needle withdrawn. Each half of the elastic ligature was tied very tightly, so as to embrace one-half the mamma, inclusive of the skin. In fastening the elastic ligature a piece of silk ligature was placed at right angles to the elastic between the skin and the knot, and while the single knot was tightly drawn, the silk was tied around it by an assistant to prevent it slipping. A double knot was then made, and this was secured by again tying the silk around the elastic.

The long silk ligature which had been passed with the elastic tubing through the submammary tissue

was then removed. The purpose of passing this was precautionary, in order that another piece of elastic might be drawn along the same track in the event of either half of that which was first passed breaking. Another precaution very necessary to take is to hold the elastic firmly at the time of dividing it and while withdrawing the needle, otherwise the contractility of the tubing will cause its disappearance through the track made by the needle.

The time likely to ensue before the entire separation of the breast is eight or nine days. The pain excited during any portion of this time is remarkably slight. Sometimes a little pain is suffered for a day or two. In the case of the patient now referred to, there was no pain after the first twenty minutes from the time of recovery from the chloroform, and the suffering during this brief period was not at all severe.—*Med. Times and Gaz.*

#### A FEW WORDS ON THE MEANS NECESSARY TO BE TAKEN FOR PREVENTING THE SPREAD OF ZYMOTIC DISEASE.

By Dr. F. Page Atkinson, late Surgeon St. Bartholomew's Hospital, Chatham, and Royal South London Dispensary.

We all, no doubt, believe in the truth of the saying, that "prevention is better than cure," but how to prevent disease we are often at a loss to understand. Epidemics are not unfrequently looked upon as direct visitations of Providence, and as such to be quite incapable of being warded off; but to this it may be replied, that Providence has laid down certain laws for the preservation of health, and that if we transgress these, we must expect to suffer sooner or later. Half the illness which takes place may be shown to arise from ignorance of, or a want of respect for, the laws which nature wishes us to follow, and to be, truly speaking, as preventable as colds and burns. It may be asserted, therefore, without fear of contradiction, that by a proper and careful study of nature's laws, we may escape from several of the numerous ills that flesh is now considered heir to. Whenever infectious disease of any kind makes its appearance, we should take a careful survey of the premises where it exists, inquire as to the ventilation, drainage, and water supply, and see that the latter is not contaminated by infiltrations from water closets, dust-bins, manure-heaps, &c. We should then take into consideration the number of persons occupying each room, and the means taken for separating the healthy from the sick. If there is insufficient accommodation for the sick, they should be removed to a hospital in one of the public conveyances which are kept especially for the purpose. Where death occurs, the corpse should be removed to a public mortuary, and the house and all things in it, in either of the above-mentioned cases, should undergo a thorough cleansing and disinfecting. The Sanitary Act of 1866 providing very wisely, among other things, for the prosecution of those who—1st, Use public conveyances while offering under contagious or infectious disorders 2nd, Knowingly convey such people in any public

conveyance; 3rd, Wilfully expose themselves in any street, &c.; 4th, Knowingly let a house or part in which any person has been suffering from any contagious or infectious disorder, without having had it and all the articles in it previously infected.

In order to prevent the spread of zymotic disease from house to house, it is necessary in all cases to provide for—1st, Complete separation of the sick and those in attendance from those who are in health; 2nd, Disinfection of the sick room and all articles in it, both during its occupation and after the removal of the patient; 3rd, Disinfection of the sick room and all articles in it, both during its occupation and after the removal of the patient; 3rd, secretions; 4th, Thorough ventilation.

In the first place, then, the patient should be moved into a separate apartment near the top of the house, with the nurse who is to be in attendance. All curtains, bed furniture, carpets, &c., should be removed prior to its occupation, and no persons should be allowed to enter the room except the medical attendant. Outside the door a sheet should be hung, thoroughly soaked with a solution of carbolic acid, and the nurse should never pass this under any circumstances whatever. All articles of food should be placed under the sheet, and not taken in by the nurse till the servant has gone away. Inside the apartment, disinfection should be carried out by means of sprinkling sulphur on a live coal two or three times a day, and wafting the fumes all around, till sneezing and a feeling of suffocation are produced. By the bedside a basin should be placed for the patient to spit into, containing a solution of carbolic acid. Rags should be used for wiping the nose, &c., and should be burnt immediately afterwards. All soiled bed-linen should be placed in a solution of the acid as it is removed. Discharges from the bowels and kidneys should be disinfected by the same means; and all plates, dishes, glasses, &c., should be washed in boiling water, and thoroughly cleansed with Condy's fluid or chloralium before leaving the room. As soon as the patient is perfectly recovered, he should wash the body thoroughly over with carbolic acid soap. He should then pass out at the door quite naked, and wrap himself in a fresh blanket, which has been left on the outside. In this way he may pass into another room and dress, and then he may safely mix with the other members of the household. The nurse should act in the same way; but before leaving the room she should see that all the linen articles are placed in a solution of carbolic acid, and that the other things are hung upon lines, in order that they may undergo a thorough fumigation. She should next place an old saucepan, containing some hot coals and sulphur, in the middle of the room, and then make her exit, taking care to close the door after her. At the expiration of twenty-four or forty-eight hours, the windows should be thrown open, and disinfection may be then said to be complete.

These rules should be carried out in the case of all infectious diseases; but certain other precautions are necessary to be adopted peculiar to the particular disease we are called upon to treat. For instance,

in the case of *scarlet fever*, as soon as the eruption begins to fade, or as soon as there is the slightest appearance of peeling, the patient should be thoroughly oiled all over, night and morning, for three days. He should then have a warm bath *on going to bed*, and the same process should be repeated at the same interval of time till all signs of peeling have disappeared. When the skin is perfectly clear, he may, after taking a bath, pass, in the manner directed, into another room and dress, and then mix with the other members of the household.

The chief thing to fear in these cases is the thin skin which peels off from the various parts of the body, and floats about imperceptibly in the air. The oiling process and disinfection, if strictly attended to, entirely prevent the spread of the disease.

In order to prevent the spread of *small pox*, it is necessary, on its very first appearance, to vaccinate all in the same house, and, if other cases occur, all in the neighbourhood. The patient should not be allowed to leave his room till all appearance of supuration has passed away. All articles of bed furniture and clothes that have been worn, should be burnt as soon as the case is well. Keeping the apartment dark is of great use in lessening the formation of matter, and so the spread of the disease.

In *enteric fever*, the chief thing one has to do is to see that the secretions are thoroughly disinfected, for it is by this means chiefly that the disease propagates itself. Care must be also taken whenever there is the slightest tendency to a relapse.

To prevent the spread of *typhus fever*, it is absolutely essential that there should be strict isolation and thorough fumigation, as the power of infection in these cases is exceedingly great.

In *cholera*, it is the breath, vomit and stools, that are so particularly infectious; but the disease spreads mostly by the drinking of contaminated water. The stools, therefore, should be thoroughly disinfected and care should be taken that they are not thrown into any place where they are likely to come in contact with the drinking water. In India, the chief thing to do is to try and prevent the natives from depositing their fœces in the soil all around the villages, and those who have the disease in an incipient stage from bathing in the tanks.

*Diphtheria*, *erysipelas*, and *puerperal fever*, are highly infectious and contagious, and it is highly important to see that the hands are thoroughly washed in disinfecting fluid after each examination. It is also as well to avoid going from a case of *erysipelas* direct to examine a healthy wound. When in attendance upon a case of *puerperal fever*, midwifery practice should be given up for a time altogether. The nurse also in charge should be warned not to engage herself for another case until a month or two has elapsed after leaving the house. The same advice also should be given in the case of *scarlatina*.

As regards the nature of the poison or poisons which cause the outbreak of fever, a good deal has already been written, and will still continue to be written. Some say that germs are the originators of disease; others (as Dr. Elliott of Hull), that

these are only the carriers of the poison, since we cannot distinguish between healthy and unhealthy pus, the skin that comes from a healthy body and one affected with scarlatina, &c. Béchamps considers the body to be made up of minute creatures called microzymes, and that when these act harmoniously, the body is in health, and the fermentative processes are deranged, and ill health is the consequence. The microzymes, he says, are not ferments in themselves, but they produce very small creatures called bacteria, and these produce cells. The cells and the bacteria are capable of returning to the microzymic state. After death, all organic matter returns to its original elements, and the microzymes are there to carry on the work of putrefaction. According to this idea the living animal contains within itself the essential elements of life, disease, death, and total destruction; and in order to accomplish these last-mentioned ends, it is unnecessary to suppose the presence of living germs floating in the air.

As to whether germs are or are not the cause of disease, it is still uncertain; but, nevertheless we all admit the benefits that arise from the use of antiseptics and disinfectants, and proper sanitary supervision.—*Edinburgh Medical Journal.*

#### ON GUARANA AS A REMEDY FOR SICK-HEAD-ACHE.

By Dr. W. Mackdowall, Assistant Medical Officer and Pathologist, West Riding Asylum.

The cases of sick-headache treated with guarana are as follows:—

*Case.*—M.N., aged 34. This lady has suffered from sick-headache for a great number of years, indeed from childhood. Her attacks were very severe until about eight years ago, when she removed from an inland country town to a residence near the sea. She states that until she was about twenty years of age she was in somewhat delicate health; not suffering from any disease in particular, so far as she knows, excepting her headache, but was languid, weakly, and unfit for active exertion or occupation. After that date her health improved, and has continued excellent up to the present time. She attributes this establishment of her strength to a prolonged residence in the country.

Since early childhood she has suffered from sick-headache, and her tortures have continued with increased severity since she fell downstairs and injured her head. This accident occurred when she was about nine years of age. She was unconscious for some hours after the fall, and was confined to bed for some days.

The following is her account of the sick-headaches as they occurred before they decreased in severity eight years ago:—They occurred, as a rule, every three weeks; and she never escaped for longer than a month. She experienced no previous derangement of digestion; but when attack was imminent she frequently had uneasy sensations at the pit of the stomach. These would gradually increase in

intensity during a few hours, and generally ended in vomiting. As a rule, however, these preliminary stomacic symptoms were absent. Her first head-symptom was a slight throbbing pain, passing, as it were, between the temples or between the forehead and occiput. At the same time a feeling of great depression, with sickness, always appeared. The characteristic symptoms then gradually increased in intensity, and in from three to six hours the attack usually reached its height. Before this stage, however, had been attained, she became quite prostrate, and was obliged to go to bed. These attacks were always, sooner or later, accompanied by vomiting; the act of emptying the stomach increased the pain in the head to an almost unendurable degree; but when it was completely emptied of its contents—usually highly bilious matter—some relief to all the symptoms followed. On an average the headache continued at its maximum during six or seven hours; an hour or two after vomiting the patient generally fell asleep, and then awoke in the morning free from all her previous miseries, but feeling extremely weak and languid.

Shortly, it may be stated that the attacks of sick-headache during the past eight years have been, in their leading features, similar to those already described, but somewhat less intense.

The following have been the results of treatment with guarana:—

Feb. 1. Slight symptoms appeared shortly after rising in the morning, and continued to get worse until 7 o'clock p.m. At this time she presented all the indications of an intense attack, and retired to her room, quite unable to bear up longer against her suffering. She now took 3 ss of guarana, with the, to her, very unexpected and satisfactory result, that in about twenty minutes, all sickness and headache had disappeared; and she felt, as she expressed it, like another woman. The drug appeared to her to act like a charm; and so much pleased was she with the result, that she presented herself for inspection to some who had but shortly before witnessed her distressed condition. The improvement in her state was most marked and surprising, for, from being almost quite prostrate, she was at once able to resume her somewhat arduous duties. She also escaped without the occurrence of vomiting.

Feb. 22. During the morning, the usual premonitory symptoms appeared. At once she took 3 ss guarana, the result being that instead of the attack running through all its stages; it disappeared entirely in less than half an hour.

April 8. She awoke in a state of considerable depression; during the day a typical sick-headache became developed; but from circumstances she did not take any medicine until 5 p.m., at which time the symptoms were very severe. No benefit resulted from the half-drahm of guarana which she then took. At 9 p.m., still feeling extremely ill, she took another 3 ss, and in an hour all the symptoms had disappeared. During the whole day she had been unable to take any food, yet at ten p.m., all nausea had so entirely disappeared, that she was able to take a hearty supper.



Up to the present time (May) she has had no return of sick-ache.

*Case 2.*—R. D., aged 30; nurse. She states that she had suffered from sick-headache from childhood. The attacks, however, have not been quite so severe during the past four years. This change in their character she associates with her change of residence, for four years ago she left her native county, Leicester, and has since that date resided in Yorkshire. During childhood the attacks were not frequent—perhaps every two or three months; but after reaching puberty, they occurred regularly every month for a number of years. They invariably preceded the appearance as the menstrual flow. As she advanced in age, the attacks occurred at other times beside the menstrual one, so that on an average they come on once a fortnight. None of her brothers or sisters were affected like herself, but her mother suffered severely from sick-headache as long as she lived.

The usual course of attack is as follows:—After slight headache has existed about half an hour, she generally becomes slightly sick. The pain is always confined to the forehead, and is described by her as being of a burning, throbbing character. As the attack proceeds, the pain in the head becomes almost intolerable, and she is in the habit of going to bed, that she may obtain some slight relief through rest and quiet. The sickness rarely terminates in vomiting, but there is intense loathing of food, her appetite having entirely disappeared. On rare occasions the headache has remained at its maximum of severity for from twelve to twenty-four hours; but the average duration of this period may be stated at about six or eight hours. When an attack is disappearing, the sickness always disappears first; the pain in the head then lessens, becoming of a dull and depressing character; then, in about two hours, all disagreeable symptoms disappear, and the patient regains her usual health, being quite free from any depression or exhaustion.

Since her residence in Yorkshire, her headaches have not, as a rule, been so frequent, occurring not oftener than every six weeks; and it has even happened that she has been free from them for three-months.

On four occasions she has been treated with guarana, and always with the happiest results.

March 31. After travelling, the pronomitory symptoms of an attack appeared. On reaching home she at once took half a drachm of guarana, and in less than an hour was quite free from all inconvenience.

April 27. Awoke with headache, but being inclined to try if it would pass off without treatment, she delayed taking her usual dose of guarana. Feeling no better, however, she lay down in bed about 2 p.m. for a short time, but without relief. She then took half a drachm, relieving the sickness immediately, and the headache very soon afterwards.

May 10. About midnight she began to suffer severely from sick-headache and continued ill all night. In the morning she took a little tea, which

made her sick, but with no relief to headache. At 8 a.m. she took the usual dose of guarana, but with no result; at 10.30 a.m. it was repeated with like result, at 2 p.m. another half drachm was taken, which gave relief very soon afterwards.

*Case 3.*—M. M., aged 25, single, has suffered from sick-headaches from childhood; indeed, she does not remember a period of her life when she did not suffer from them. When she was a child, they occurred about once a fortnight; but when she reached puberty, they became less frequent, the intervals increasing to four or five weeks. There has never been any connection between the occurrence of menstruation and the date of appearance of a sick headache. For a number of years this young woman has been in delicate health. She labours under phthisis of a very chronic description, though the disease has occasionally assumed a more active form for brief periods, and there have been several rather smart attacks of hæmoptysis. Of late, however, with proper attention to their health, she has continued in moderately fair general condition, and quite able for her work as a nurse, but at the same time very much troubled with headaches.

Since her general health became delicate, her attacks of sick headache have been much more frequent, and indiscretion in diet brings on one at once. As a rule they begin during the night. The first symptom is a dull throbbing pain in the temples; it gradually increases; then sickness comes on; so that in a few hours she is frequently necessitated to lie down in bed. Should the attack prove a mild one, it may pass off in six or seven hours; but it is more common for it to continue during a whole day. On rare occasions, when particularly severe, it has continued for two days. After a sick headache has continued at its maximum for about an hour, the patient invariably vomits a small quantity of bilious fluid, sometimes with some slight relief to the pain in the head.

April 16. Patient awoke in the morning with sick-headache, which continued intense during the day, until 6.30 p.m., when she took half a drachm of guarana, and in half an hour she felt quite relieved.

May 10. Awoke this morning: sick headache in first stage. Shortly after taking the usual dose of guarana, the symptoms began to abate; and by 9 a.m. she was quite free from all discomfort.

Several other cases are related of the same description.—*Practitioner, Sept., 1873.*

## THE DIAGNOSIS OF OVARIAN TUMOURS.

NOTES BY DR. C. R. DRYSDALE.

SENIOR PHYSICIAN TO THE METROPOLITAN FREE HOSPITAL.

A patient comes before us with increased circumference of the abdomen and abnormal resistance, and who is believed to be suffering from ovarian disease. Our first task is to see that there truly is a tumour present. It is easy to make up our mind on the point if a clearly circumscribed tumour is felt in the abdomen, but quite different when the borders of the

tumour are undistinguishable and there is great tension of the abdominal walls. This may arise either from tympanites or from ascites without any cyst being present.

It would at first sight appear unpardonable to take tympanites for tumour; but the records of medicine show that the mistake has been made by even the most experienced practitioners. Simpson (*Works*, 1872, vol. iii., p. 426) mentions six cases of abdominal section, in which tympanites was found, no abdominal tumour. It is well known, too, that tympanitic women are frequently supposed to be pregnant by careless medical practitioners; and every experienced man must remember hosts of cases of hysterical tympanites when the tension of the abdominal wall, and the spasm of the recti muscles have at first sight tempted him to make a diagnosis as to the presence of ascites, hydatids of the liver, or ovarian dropsy. Percussion gives, of course, in tympanites, direct evidence of the absence of fluid and the presence of gas; and if the patient be put under the influence of ether, the phantom tumour often at once subsides and the abdomen can easily be explored by the hand. Even without the previous administration of anæsthetics, examination of the abdomen may be made if the patient lie on the back with the thighs flexed and the practitioner keep up constant pressure on the abdominal wall by the hand directed towards the vertebræ of the abdomen. The resistance of the abdominal walls soon gives way and the cavities of the abdomen and pelvis can be examined. But there are cases where masses of fat in the abdominal walls or internal organs are with great difficulty diagnosed from tumours of the abdomen.

Whith respect to those cases in which there is fluid present, and when we have to make out whether we are in presence of ascites or cystic ovarian tumour, the diagnosis is easily made when we can grasp the ovarian cyst and push it backwards and forwards in the abdomen beneath the abdominal walls, or, on the other hand, when every change of position of the patient makes the fluid flow to the dependent part of the abdomen. But when there is great accumulation of fluid our difficulties commence, since a large cyst with thin walls has no clear definite form, and the fluctuation is so general as to make us uncertain as to the presence of a cyst.

Some general rules may assist; for instance, in ascites the abdomen is generally equally enlarged at both sides, the lumbar regions are full, the navel region is flat and the navel prominent. When there is a cyst the form of the abdomen is generally more pointed or barrel-shaped, the navel does not protrude, the expansion of the abdomen is unequal, and one side is more prominent than the other. As to the enlargement of the veins, this may occur in both cases, and there is nothing diagnostic in their appearance. Edema of the extremities is certainly more common in ascites; but this is not a symptom of much value, since the pressure of cysts on the pelvic veins may produce œdema of the ankles. The chief means of acquiring certainty in diagnosis are those of palpation and percussion.

With regard to percussion, in ascites the fluid gravitates in all positions of the patient to the lowest side, and thus the percussion note varies whether the patient lies on the back or on the side; whilst in encysted fluid the territory of absolute percussion, dulness remains constant, whatever be the position of the patient. Thus usually, when ascites is present, the loins sound dull on percussion when the patient is in the prone position, and the navel region sounds tympanitic; whilst, in cysts, the opposite takes place, since the tumour arising from the pelvis shoves the intestines upwards and behind it. Yet some circumstances may deceive in this matter. In the first place the right iliac and lumbar region may be tympanitic in ascites from tympanites of the cæcum. Then, with regard to fluctuation, that is certainly usually more marked in ascites; but it may be as well marked in some cysts. In fact persons ascites may give but ill-marked fluctuation. In cystic disease the fluctuation is absent where the percussion note shows the intestine, as in the loins and the epigastrium; but, in ascites, fluctuation is perceptible even in places where there is intestinal percussion note.

In very large effusions of fluid, again, the bowel may not reach the abdominal wall, on account of shortness of the mesentery, and there are large cysts, which press into the lumbar regions so as to cause dulness on percussion. It has occurred that a cyst of the ovary may contain gas, from its communicating with the intestine, or having been previously punctured; and, in this case, there will be tympanitic percussion note.

In such doubtful cases puncture alone will give satisfactory elements for diagnosis; although it is by no means quite free from danger. Emptying the abdomen gives great information, since, after this is accomplished, it becomes first of all possible to palpate and percuss the abdominal organs; but it occurs sometimes that even this plan fails to be of great service on account of too little fluid being removed, or because there exist adhesions, whether parietal or visceral. The examination of the fluid drawn off is of great importance; and this examination should be both microscopical and chemical.

Dr. Otto Spiegelberg (*Samlung-der Klinischer Vortrage*, No. 55), who has paid great attention to this point, notes that the contents of ovarian cysts vary from a watery, clear, yellow fluid up to a tough, calloid, dirty-brown or yellowish-green mass; whereas ascitic fluid is always thin and comparatively clear. In cysts we find mucin, albumen, and especially paralbumin,\* which last substance we never find in ascitic fluid. Ascitic fluid is poor in solid material, but on exposure to the air it deposits a fibrine like sediment, which is not the case with the contents of cysts. The microscopic appearances are dissimilar, since in ascites we find the endothelium of the serous membrane and corpuscles of the lymph sacs; whilst in ovarian cysts, cylindrical epithelium is found, with portions of cells, large fat cells, and often cylindrical cells. In addition to these are

\* See note on next page.

occasionally seen masses of detritus, crystals of cholesterine, and products of dermoid formation. With here and there altered blood-discs and pigment cells. In a word, in ascites we meet with the elements of a lymph cavity; in cysts, with epithelial formations. When ascites and cysts are both present both elements will be met with.

It must, however, be noticed that the examination of the fluid is sometimes tedious, and it requires some considerable time before the diagnostic points can be clearly recognised. Some days are required occasionally for the chemical investigation to give a clear result.

Should this method of research still leave us in difficulties, examination may be made by the rectum, in order to assure ourselves that a tumour in the pelvis is ovarian, and that it does not belong to the uterus itself. Many errors are committed in this matter. If we succeed by examination *per vaginam* to isolate the tumour from the uterus, we have gained much; as, in this case, we have most likely ovarian disease present. As a general rule, the uterus lies in front of the hard and enlarged ovary, as it does before the organ when not enlarged, and may be prolapsed and greatly anteverted or flexed, but the uterus may also be felt retroverted behind the tumour.

It is not every ovarian tumour that can be reached from the vagina, either on account of the long pedicle or because there are adhesions between it and the uterus or intestines. Here the most important characteristics of an ovarian tumour, its rising out of the pelvis and being free from the uterus, are wanting. In such cases it may be quite impossible to form any accurate diagnosis, even after the most careful examination. It must be remembered that, in rare cases, we may have to do with cysts of the kidneys as well as with tumours of the uterus, and even in pregnancy in some cases.

The great difficulty in diagnosis between fibrous tumour of the uterus and ovarian disease is well known, and although fibroid degeneration of the ovaries is very rare it yet does occasionally occur, and fibrous tumours also sometimes fluctuate a little and thus resemble ovarian cysts. When these doubtful cases occur, examination may be made by the rectum, introducing the whole hand or the half of it into the intestine. (See Simon's article in the *Deutsche Klinik* for 1872, No. 46, on the method.) The patient should have some anæsthetic such as ether during the examination, which is made with

the patient lying on the back. The patient must be warned that defecation may present some difficulty for a week or two, or even that there may be difficulty in retaining the fæces.

Those who have practised this method of investigation assure us that it is wonderful how well we are able to explore the pelvic organs by its means, and to recognise alterations in shape or position of the organs. In many cases the origin of the tumour can be felt, and an absolute diagnosis can be made; as for instance, the separation of a fibroid of the uterus from an ovarian cyst can often be made. But there are cases in which an exploration even by the rectum fails to enable the practitioner to make up his mind; and these are precisely the cases in which there is a doubt as to whether an ovarian tumour or a fibroid tumour of the uterus is present.

Preliminary incisions for the sake of clearing up the diagnosis are very dangerous, and should only be undertaken when the patient and the practitioner have fully made up their minds to the operation of excision in case of necessity. The incision must be large enough to admit four fingers or the whole hand into the cavity of the abdomen, and if carefully conducted, is not so dangerous as might be supposed, since of twenty-four cases, Spencer Wells ("Tumours of the Ovaries," p. 464) says that seventeen recovered from the incision without any harm.

Small ovarian cysts have been taken for melibova kidneys, and it is known that movable kidney is most commonly met with among women. Enlargement of the kidneys and hydatid cysts of these organs have been mistaken for ovarian disease on more than one occasion. Incisions in the abdomen have even been made before the character of the tumour was recognised. A cyst of the kidney, it appears, may lie in the middle line, have adhesions with the pelvic organs and be movable, and, moreover, may be large enough to descend into the pelvis. In many cases puncture will give information from the sediments and salts of the urine being present, or hydatids appearing, since these have not been noticed in ovarian cysts; but urine is not always contained in cysts of the kidney. In such cases rectal examination is of the greatest use, since this shows whether the tumour does or does not proceed from the pelvic cavity.

Tumours of the mesentery may give rise to difficulty, when large enough to descend into the pelvis, especially when peritoneal fluid becomes involved in the mass, as takes place in cancerous tumours. The character of the fluid will separate these from ovarian tumours. Such punctures as are made for diagnosis should be made when the bladder is empty. Tumours caused by fecal accumulations in the colon must be thought of, and tumours of the spleen, liver, must be borne in mind.

The multilocular character of an ovarian cyst is easily made out when well-marked, through the irregular, uneven feeling of the superficies of the tumour, the uncertain fluctuation, and feeling of hard masses in company with large cystic spaces. Unilocular cysts are comparatively rare, and not so

\* The fluid of an enlarged Graefian follicle may externally resemble that of ascites; it is clear, pure, without many morphological conditions, and contains paralbumin, besides epithelium not well-marked.

The important marks of paralbumin are as follows:—

A part of the fluid, after the sediment has been allowed to deposit in a cold place, is treated with plenty of water, and then a stream of carbonic acid gas is conducted through it; a flocculent precipitate shows the existence of paralbumin.

Another part of the fluid is treated with absolute alcohol. The precipitate which then falls is kept under alcohol for several days (three days), then filtered, and then the precipitate warmed with distilled water for some hours. By this means the paralbumin part is again dissolved.

easily made out, since three or four large cysts may be very like a single one, which is of importance in the question of drainage and injection. Indeed, the uncertainty of this diagnosis makes the latter experiment have many opponents. The diagnosis as to which ovary is affected is very difficult; as also the ascertaining where and what kind of adhesions are present. This is now admitted on all hands.—*Dublin Medical Press and Circular.*

**IODIDE OF POTASSIUM AND CARBONATE OF AMMONIA IN THE TREATMENT OF SYPHILIS, INTERNAL ANEURISM, AND CHRONIC RHEUMATISM.**

Sir James Paget was the first to call the attention of the medical profession to the following interesting fact; viz., that carbonate of ammonia greatly increases the therapeutic action of iodide of potassium. I have had extensive experience in the treatment of syphilis, and have tried it with the best results, and find that five grains of iodide of potassium, combined with three grains of carbonate of ammonia, are equal to 8 grains of the potassium salt administered in the ordinary way. The following case is a good example.

John —, aged 50, consulted me about a sore situated on his left arm. There was a profuse discharge from it, and the smell was intolerable. On asking him a few questions, I got the following history. He had been a married man, his wife having died a short time ago; he had no children. Some years ago he contracted syphilis, and was treated by mercury, pushed to excessive salivation. The secondary symptoms had been well marked, and the sore about which he consulted me was of eight months' standing. He consulted several surgeons, and could get no relief. I ordered him five-grain doses of iodide of potassium, combined with three grains of carbonate of ammonia. After taking a few tablespoonfuls of the bottle, the bad smell altogether disappeared, as a man told me who was sleeping in the same room; at first he could not bear the smell, but after taking a few tablespoonfuls of the bottle he could detect no smell. This man remained under my care for about a month, and in that short time was perfectly cured, and in very good health and spirits. I have also found it of the greatest service in the treatment of internal aneurism, by relieving the pain and helping to consolidate the tumour. Dr. Frerichs has recommended iodide of potassium in the treatment of waxy liver occurring in syphilitic patients. I think that the preceding facts are well worth the notice of the profession; but I would caution medical men how they increase the dose of the iodide of potassium, for, if the carbonate of ammonia be good, it will greatly increase the therapeutic action of the iodide. JOSEPH P. M'SWEENEY, L.R.C.S.I., Carlow, Ireland.—*British Medical Journal*, Jan. 10, 1874.

**BELIEVERS WANTED.**

Dr. Sayre, of Burlington, Kentucky, reports in the *Cincinnati Clinic* a case in which—a month

after impaction—he removed through an opening in the abdomen a stick of firewood, *sixteen inches long and two and a half in diameter*, which had been forcibly driven in *per vaginam*. That miracle is not enough. He recounts how the woman was at the time seven months pregnant, that she gave birth in due time to a healthy boy, and three days afterwards was delivered of another stick a foot long and two inches thick. The case, though gravely and circumstantially related, must, we presume, be intended as a satire on Medical literature, for the author concludes with the remark:—"If any one doubts the truth of the story, I could prove it to their satisfaction had not my witnesses all been killed during the late war."

**PHOSPHORUS IN NEURALGIA.**

In October of last year I wrote a letter to the *British Medical Journal*, calling attention to the value of phosphorus in the treatment of neuralgia. Since this date I have given it a somewhat extensive trial, the general result of which is to confirm the favorable report I made of it in my first letter. I have prescribed it in various neuroses, in melancholia, in impotence, in mercurial tremor, in locomotor ataxy, &c., but have come to the conclusion that its value is most conspicuously and constantly seen in cases of nerve-pain, accompanied or caused by asthenia: indeed, while it has appeared to me quite inert in most of the separate diseases I have mentioned above, it has rarely disappointed me, when properly administered, in true cases of æmic or asthenic neuralgia, amongst the remedies for which disorders I believe it will ever hold a high and secure place. Its mode of administration is, however, of importance; and while in many respects agreeing with Mr. S. Ashburton Thompson in his remarks upon this remedy, which appear in the *Practitioner* for July, I cannot indorse his statement as to the wisdom, or even the safety, of beginning with a dose of one-twelfth of a grain every four hours. M. Gubler, in a recent number of the *Bulletin Général Thérapeutique*, is more correct, I think, in urging great caution in the administration of this powerful remedy: indeed, in the seventeen cases treated by Mr. Thompson, one suffered from serious and alarming symptoms, we may fairly presume, of the phosphorus, which was administered in the dose of one-twelfth of a grain. My custom is to commence with one-hundredth of a grain, and gradually increase this by one-fiftieth of a grain at a time, until, if necessary, one-tenth of a grain is taken with each dose. Beyond this quantity I do not go; as I think that, if the remedy be of use, relief will be attained by this dose equally with a larger. After trying several preparations, I now use a formula which Mr. Potts, dispenser to the Manchester Royal Infirmary, hit upon, and which seems to answer every purpose, in being tasteless, transparent, and readily prepared. He dissolves ten grains of phosphorus in two ounces of ether, agitating the solution from time to time; and of this solution, one minim (containing one-hundredth of a grain) is administered in an ounce of

water with half a drachm of glycerine. The glycerine suspends the phosphorus so perfectly that a transparent mixture is the result. The addition of a little bitter infusion entirely removes any *souppçon* of lucifer-matches which may hover about the medicine.—*Bradley*.—*Brit. Med. Journ.*, Oct. 18, '73.

OBSTINATE VOMITING OF PREGNANCY, CURED BY ENEMATA OF BROMIDE OF POTASSIUM.

Dr. GIRABETTI has successfully treated the obstinate vomiting of pregnancy by enemata of bromide of potassium given in increasing doses; commencing with 6 grammes (about 92 grains) the first day, 8 grammes the second, and 10 grammes the third; after which the dose is lessened in proportion to the effect produced. In one case the vomitings were arrested by this treatment in three days.—*La Tribune Médical*, 23 Nov. 1873, from *Rev. Méd.*

TO DISGUISE CASTOR OIL.

A writer in the Canadian Pharmaceutical Journal recommends for this purpose the following formula:

R. Ol. ricini.	ʒj.
Ol. anisi,	gtt x.
Chloroform,	gtt x.
Shake well together, then add	
Mucil. acaciæ,	ʒss.

Shake well and make up to two ounces of water.

Mr. Gregory, in the *Amer. Jour. of Pharmacy*, says:—

For some twelve or fourteen years past I have used the following formula for a Castor Oil draught, which has proved very acceptable to adults who could not get down the pure oil. For children it does not answer so well, the dose of necessity being double that of the oil.

R. Ol. ricini,	ʒj.
Mucil. acaciæ,	ʒij.
Shake well together, then add	
Syr. simp.	ʒij.

THE EMPLOYMENT OF MINT FOR THE SUPPRESSION OF THE MILK.

Dr. Dasara observes that the knowledge of the antilactiferous properties of mint appears to have been possessed in very ancient times, since Dioscorides mentions the fact in his works, and subsequent writers have only confirmed his statement. Linnæus observed that cows that ate mint in their pastures yielded a serous milk, and Laewis affirmed that the coagulation of milk in which some leaves of mint were placed was retarded. More recently, M. Desbois de Rochefort, experimenting on mint, found that fomentations of mint applied to the breast, and the infusion taken internally, were capable of suppressing the lacteal secretion, and of preventing the usual accidents attending milk fever in puerperal women. Trousseau expressed some doubt respecting this action of mint in his treatise on *Materia Medica*. But Dr. Pasquale Pepre, in a note on Trousseau's observation, remarks that the fresh leaves of mint

placed in the axilla are commonly used in Naples to suppress the milk. Dr. Dasara determined to experiment for himself, and gives the application of mint poultices made from the young sprigs at various periods of lactation, and the following are the conclusions at which he has arrived:—1. It is an established fact that mint has the power of suppressing the lacteal secretion. 2. The suppression of the secretion takes place at whatever period of lactation the mint is employed. 3. The effect takes place in a very short space of time, according to his experiments in from three to five days. 4. The suppressive action of mint can be localized to one breast. 5. No danger, nor even any inconvenience arises, either to the mother or child, either from the use of the mint or from the suppression of the secretion. Signor Dasara nowhere states in his paper the species of mint he employed; the omission is to be regretted.—*Rivista Teorico Practica. Fase.* vi., 1873. *Giugno*.—*The Practitioner*, Nov., '73.

RINGWORM IN CHILDREN.

Dr. Fox, in the *Lancet*, recommends that whenever a child is brought to the practitioner for his advice on account of the presence of what seem to be scurfy-looking places on the head, if these are small, and the general surface of the scalp is healthy, they are to be inspected for ringworm. A careful search should be made for broken-off hairs, and these or the scales, and any attached hairs, should be submitted to microscopic examination for fungus elements in them. In cases of chronic ringworm, all merely scurfy patches should be carefully examined, for a solitary piece of dead hair lodged in the follicle may explain the mischief, as it is generally loaded with fungus elements, which are rapidly sown broadcast to re-light up the old mischief if parasiticide treatment is abandoned. Such ill-developed cases of ringworm, as before observed, may be the source of infection to many a child in public institutions and schools.

The treatment of these cases consists in very carefully getting away every particle of scalliness, and fully epilating the scurfy area, and applying any simple parasiticide until the hair grows healthily again; epilation being repeated to get rid of all short, dull, and opaque-looking hairs.

Dr. Duckworth has recently called attention to the effect of chloroform in rendering diseased hairs in ringworm opaque; but it will be evident that this effect will not be marked where only two or three short hairs are present, whilst the test will be of no value where there are only diseased pieces of hair filling up the follicles and not projecting above the level of the latter.

CHLOROFORMIZATION DURING SLEEP.

Dr. W. M. Whitmarsh states (*Lancet*): "Having occasion to perform circumcision on a very nervous child, aged six years, and the evening being selected by the parents for the operation, I found on my

arrival the little patient fast asleep. Not wishing to lose so good an opportunity, I, with my friend Mr. Gandy, thought it advisable to administer chloroform at once. This was done by pouring ten drops on a piece of lint, and repeating it until one drachm had been given, when the patient was thoroughly under its influence. The operation was then performed, and the patient dressed, not waking till half an hour after. The pulse did not appear to differ from that ordinarily observed during the administration of chloroform. It would be interesting to know if this mode of giving chloroform has been noticed by the profession, and whether in nervous patients and young children it would not be preferable to the shock to the system occasioned by fright and fear of suffocation."—*The Clinic*.

#### A CASE OF IMPREGNATION WITHOUT INTROMISSION.

BY THOMAS HAY, M.D.,  
Philadelphia.

The following case is interesting as illustrating the fact that impregnation can take place without intromission. It shows, too, that a persistent hymen is no evidence in case of rape.

In this case the semen was expended on the external parts, and the spermatozoa, by their peculiar motions, through affinity or attraction, found their way into the uterus, and came in contact with, and fecundated, the ovum.

I was visited by Mr. and Mrs. G., from New Jersey, in consequence of enlargement of the lady's abdomen. A belief was induced that a tumor from disease had made its appearance, and that it was growing inside.

This belief was strengthened and almost confirmed by the fact that the existence of pregnancy was not thought possible, and such opinion was not entertained in her case. She had been married more than four months there never was intromission, and the courses appeared regularly as usual.

The husband was aware of the presence of an unyielding obstacle, and the severe pain at coition made penetration impossible. Modesty and other reasons caused delay in seeking medical advice till the already enlarged abdomen was increased in size, and the pain during intercourse had become so great that it was no longer attempted.

Examination showed a strong, unyielding hymen, attached all round the vagina near its entrance, having a hole above the middle large enough only to admit the tip of the little finger; a vascular tumor of the urethra, and extensive erythema of the vulva; the parts were irritable, and the touch of the finger caused the patient to cry out from pain.

I made a crucial incision into the hymen, cut off the four angular flaps, excised the vascular tumor, and applied caustic.

The opening made was maintained by cylinders of lint. The pelvic cavity was normal, and the parts soon healed.

The lady had been three months pregnant, and as the signs of pregnancy increased, she, as well as

the husband, became better satisfied with my diagnosis; and when, after about six months, she was delivered of a healthy, well-developed boy, both were convinced of its correctness, and, as indulgence in the connubial privilege was no longer a cause of pain, they were quite happy.—*Philadelphia Medical Times*.

#### CANCER OF THE BREAST.

Prof. Willard Parker, New York—*Medical Record*, Sept. 1, 1873—gives an interesting resumé of his experience with cancer of the breast. This extends over forty years, and includes 295 cases. He concludes that—

1. The disease is not hereditary, or if so, only in a very limited degree.
2. The disease begins as a local disease, positively and purely. It becomes constitutional just as syphilis begins as a local disease and becomes constitutional.
3. The disease occurs in those of vigorous health, instead of being connected with those conditions in which consumption occurs.
4. Cancerous parents may beget tuberculous offspring.
5. The moral constitution has a powerful influence on the development or the prevention of the development of cancer.
6. There is a great parallelism and analogy existing between cancer and syphilis. Both begin by local irritation. Syphilis is inoculable, but cancer is not. We have both secondary syphilis and secondary cancer.

#### A DISCRIMINATING PHYSICIAN.

The following characteristic story is going the round of the Parisian Press at the expense of Dr. Bouvart, a close observer of human nature:—"One morning, on entering the chamber of a French marquis, whom he had attended through a very dangerous illness, the doctor was thus accosted, 'Good day to you, Dr. Bouvart; I feel quite in spirits, and think my fever has left me.'—'I am sure it has,' replied Bouvart dryly. The very first expression you used convinced me of it.'—'Pray explain yourself.'—'Nothing is easier. In the first day of your illness, when your life was in danger, I was your dearest friend; as you began to get better, I was your good Bouvart; and now I am Dr. Bouvart; depend upon it you are quite recovered.'—*Med. Press and Circular*, Jan. 15, 1874.

#### A STRANGE SUGGESTION.

The *St. Louis New Era* makes the following strange suggestion. We hardly think it will be carried into effect. It would be a fatal advertisement for some M. D.'s:—"In marriage notices it is usual to give the name of the clergyman who performed the ceremony, and with usual propriety, in obituary notices, the name of the attending physician should be given."—*The Doctor*, November 1, 1873.

## ON THE TREATMENT OF TYPHOID FEVER BY INTERNAL DISINFECTION.

BY STEPHEN SKINNER, M.D.

*(The Practitioner, September.)*

Mr. Stephen Skinner contributes a short paper on the treatment of enteric fever by the use of sulpho-carbolate of sodium. He administers the drug in twenty-grain doses, ever fourth hour, and gradually increases the quantity during the next few days to thirty grains. He appends twenty cases, in which this mode of treatment was carried out, one case only terminating fatally. He believes that, in cases in which the drug was administered during the period of incubation, the disease either ran more quickly, or it did not become developed. The opinion which he entertains regarding the effect of the remedy is, however, he admits, only conjectural; but he advocates a further trial of the salt to settle its real use or uselessness.

## SWALLOWING A BELL.

It has often been a moot question as to what sized foreign body would be capable of passing through the alimentary canal, and being discharged *per rectum*. In the last *Indian Medical Gazette* an interesting case bearing upon the question is reported by Mr. Higginson. He reports that a child of four years of age put a "ghungree" (a little brass bell such as is commonly attached to ankle ornaments) into her mouth and accidentally swallowed it; the child at once ran to her father and told him what had happened: as she felt as if the thing had stuck halfway, the father made her eat a piece of bread to force it into the stomach. Application was then made to him for a purgative. He directed the parents not to give any medicine whatsoever, to keep the child quiet, and give her a hearty meal of her ordinary food, in order that the foreign body might haply get surrounded by feculent matter, and so pass through safely. Next day the child complained of pain in the belly, and soon after had a motion, in which the "ghungree" was found imbedded.

The bell is three quarters of an inch long, and an inch and a half in circumference round its middle; it tapers towards each end, to one of which is soldered a little ring, the other being cleft to admit of a small stone.

## THUMB-SUCKING.

I have observed that a particular and rather common deformity of the chest is caused by the habit of sucking the thumb in infancy and early childhood. The weight of the arm on the thorax of the child during sleep produces depression of the ribs in the line occupied by the arm when the thumb is placed in the mouth. As this is a very important effect of "thumb-sucking" never hitherto pointed out, I think it desirable to place this note on record for the benefit of other observers.—*Dobell—Brit. Med. Journ., Nov. 8, '73.*

## MEANS OF ARRESTING VOMITING CAUSED BY THE COUGH OF PHTHISIS.

The anæsthetic action of bromide of potassium to the pharynx has been utilized by the surgeons in delicate operations in this region, as staphylorrhaphy. One of our Lyonese confrères, Dr. A. Bonnet, advised this agent to combat the cough in phthisis and more especially the vomiting provoked by cough.

The simple means advised by Dr. Woillez consists in painting the pharynx with a pencil dipped in a concentrated solution of the bromide of potassium. We can approve of this method, and of the happy results obtained by the physician at the Laraboisière.

A morsel of charpie saturated in a solution composed of one-third pure bromide of potassium and two-thirds water is passed rapidly over the pharynx before break-fast in the morning, and at evening; and the patient is directed to refrain from coughing as long as possible.

This application checked vomiting immediately on the first application in four patients. In other cases, its action was less immediate, but still favorable. This remarkable result follows from all cases; in nine patients who vomited habitually after meals, fifty-two applications were made and seven times only did vomiting ensue after treatment was commenced, if the operation had been repeated immediately after taking food.

It is probable that the employment of these pharyngeal applications with the bromide of potassium may render service in other cases, as in the emesis of inanition, pregnancy, etc. In all cases it has the advantage of simplicity, facility of application and freedom from any inconvenience.—*Lyon Medicale, Nov. 23, 1873.*

## QUININE PILL MASS.

M. Berquier, of Provins, in the *Repertoire de Pharmacie*, suggests the following formula for a quinine pill mass:—

℞. Sulphate of quinine,	30 grains.
Powdered gum,	5 "
Glycerine,	10 "

Mix the gum with the glycerine and then incorporate the quinine, beating it well in a mortar.

This is said to give a mass of good pilular consistence, which retains its softness, and can be easily rolled into pills. It can readily be worked up with other ingredients, and is not bulky. Three grains of this mass are equal to two grains of sulphate of quinine.

## REMEDY FOR CHRONIC HOARSENESS.

In chronic hoarseness arising from thickening of the vocal cords and adjacent membrane, the ammoniated tincture of guaiacum is often a very efficacious remedy. It may be approximately mixed with equal parts of the syrup of senega, and a teaspoonful of the mixture given two or three times a day.—*American Practitioner.*

# THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITOR:

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## CITRATE OF MAGNESIA UNDER DIFFICULTIES.

English druggists have been thrown into a state of great excitement and consternation by the recent prosecution of one of their number for selling, as citrate of magnesia, the ordinary granular effervescent salt of commerce, which, on analysis, was found to be altogether devoid of the base indicated. The circumstances are, briefly, as follows:—The Sanitary Inspector of Bermondsey called at the shop of a druggist, residing in that district, and presented an order, or prescription, for "Magnes. Cit. Effervescens,  $\frac{3}{4}$  iv." The druggist, being out of the article, procured a supply from a neighbor. From this the Inspector's prescription was filled, and that functionary went on his way rejoicing to hand over the medicine to the district analyst, in order that its chemical shortcomings might be revealed. It is needless to say that analysis failed to show a trace of magnesia. The druggist was therefore summoned, under the Adulteration Act, and, after the hearing of evidence, was required to pay a penalty of ten pounds sterling, together with the costs of the analysis.

It may well be conceived that this decision has aroused British pharmacists, and also given rise to a general feeling of uncertainty and alarm throughout the drug trade. This arises not only in regard to the decision as specially applied to citrate of magnesia, but to the principle involved, that a chemist ought to be thoroughly acquainted with the character and quality of the articles in which he deals; that ignorance of the composition of any article cannot, perhaps, be urged as a plea, nor can the responsibility be placed upon the manufacturer or wholesale dealer.

At a meeting of the Pharmaceutical Society, held Nov. 5th, this case was discussed at great length in all its bearings. At that time, it did not seem probable that the Society would take action against the decision. It was thought that such a course would compromise the dignity of the organization, and bring it to the level of a Trade Protection Society.

One impression seemed general—that the name of the granular effervescent citrate of magnesia must be changed to something more nearly approximating to truth and correct nomenclature. Many names were suggested, but none finally decided on. The pharmacopœial designation, *Sodæ Citro-tartras Effervescens*, appeared to be regarded with most favor. It was very properly urged that the public would not recognize this name, and, to meet this, a note explaining the change would have to be appended to each label.

Mr. Bishop, the originator of the granular salt, was present at this meeting. He made a very satisfactory statement that though the compound sold by the defendant in the case referred to was not of his (Mr. Bishop's) manufacture, yet as he had been the originator of the preparation, he would stand by his offspring, and would see that the defendant in the suit was at no pecuniary loss. Mr. Bishop had resolved to change the name of his preparation, in all probability calling it, "Citro-tartrate of Soda with Magnesia," some salt of the latter base being present.

Such is the state of the case as it at present stands. So far as our experience extends in the use of this preparation, we must candidly say that we have seen but little good from its employment. In eight cases out of every twelve when we have prescribed it, it has proved all but inert. We have not lately looked upon it with much favor. The public, who so often look for elegance in a preparation, instead of purity, will, perhaps, still swallow it *ad libitum*, although it is now known in truth to have been a fraud, not only on the public, but on the profession. This is another of the many illustrations that, even in trade, honesty is the best policy.

## MONTREAL MATERNITY HOSPITAL.

The success which has attended the establishment of this Hospital has been very great, showing the absolute necessity which existed for such an Institution. On the 1st of May it will be removed to very excellent quarters on St. Antoine Street, where the accommodation will be very greatly increased.

## THE OLDEST TEACHER OF MEDICINE.

We notice by the Philadelphia *Medical Reporter*, that Dr. James McNaughton, President of the Albany Medical College, and its Professor of Practice of Medicine, is now the oldest medical lecturer in active service. He is at present engaged in delivering his fifty-third annual course of lectures,



and during this more than half a century, he has not missed a dozen lectures or been confined to the house a week by sickness. He was born on the Grampian hills in Perthshire, Scotland, and graduated at the University of Edinburgh in 1816. The following year he came to Quebec in charge of an emigrant ship, and went to Albany to visit some relatives. He was induced to settle there, and very soon gained an extensive practice. He is now seventy-seven years old, and is hale, and active for his age; all his early contemporaries are gone. In the lecture field Professor Christison of Edinburgh, is the next oldest Professor in harness, having commenced work in 1838.

#### SURGICAL ITEMS.

Dr. Hingston removed, during last month at the Hotel Dieu, Montreal, the whole of the superior maxilla, one half the bones of the nose back to the ethmoid. The operation was performed for the removal of an enormous malignant tumor. The deformity resulting was less than that for which the operation was undertaken. The patient returned to his home in Upper Canada in ten days after the operation.

#### TO OUR SUBSCRIBERS.

In the present number we enclose accounts to all subscribers, and we respectfully request a prompt remittance. We have placed the Record at the lowest possible rate—the subscription only amounting to one dollar and eighty-eight cents per year—when the postage, which we have to prepay, is deducted. The necessity of our friends not procrastinating must, therefore, be obvious to them all. Upon our list we have the names of quite a number who have taken the *Record* since its first issue—without having as yet made us any payment. In every case we are willing to ascribe this simply to neglect, for we cannot conceive any person who has been educated as a Physician, willingly receiving a periodical, and not paying for it. Those of our subscribers who occupy this position will find their accounts written in RED INK, and we have to say to them that if, after waiting a reasonable time, we do not receive the amount due us—their names will be removed from our books.

#### PERSONAL.

Dr. Fenwick, of Montreal, was on the 6th February presented with an address from his fellow practitioners—sympathising with him in his present illness, and wishing him a speedy recovery, in which

wish we are sure all his friends throughout the country will join. Accompanying the address was a purse of over a thousand dollars.

Dr. McNeice of Bury, (M.D. McGill College, 1866) was on New Year's Eve presented by the residents of the Township of Bury with an address and a testimonial valued at \$200. We congratulate Dr. McNeice on this substantial appreciation of his arduous labours.

Dr. Nelson Loverin (McGill College, 1854) is practising in Montreal.

We regret to hear that Dr. G. P. Girdwood, Professor of Practical Chemistry, McGill College, fell on Friday evening, February 20th, fracturing the tibia and fibula of his right leg. He is progressing favorably.

#### OBITUARY.

Dr. George E. Keator of St. John, New Brunswick, died early in January, after a short illness, from Acute Laryngites. Dr. Keator, if we mistake not, was a graduate of Harvard University, Cambridge, and was an earnest student of his profession. He visited Montreal in 1869, during the meeting of the Canadian Medical Association, and made many friends by his genial humor and warm open-hearted manner. Dr. Keator occupied a prominent position among his *confreres* in St. John, held several appointments, and was one of the Medical Examiners of the New York Life Insurance Company.

Dr. DeWolf, formerly of St. John, New Brunswick, but latterly of St. Stephen, died the end of January at the advanced age of 86 years. For many years he was one of the leading practitioners of St. John, taking an active part in all that was beneficial to the profession.

#### BIRTHS.

In Montreal, on the 7th February, the wife of Dr. R. A. Alloway of a daughter.

#### MARRIED.

On Tuesday, the 17th instant, at Christ Church Cathedral, by the Rector and the Revd. Canon Bancroft, D.D., Reid Taylor, Esq., Advocate, to Mattie, youngest daughter of the late Charles Smallwood, Esq., M.D., LL.D., D.U.L.

#### DEATHS.

In Montreal, on the 15th February, Alice B. Symmers, aged 34 years, wife of Dr. Robert Craik.

At his residence, St. Pascal of Kamouraska, Q., on the 11th February, at the advanced age of 82, James O'Leary, Esq., M.D., after practising his profession for about sixty years. He emigrated to Canada in the year 1818 as Surgeon to one of His British Majesty's regiments. Deceased was father to Dr. P. O'Leary of Montreal; to Dr. James O'Leary, jr., of St. Pascal; and father-in-law to Dr. Rottot of Montreal.