

wonderful how nearly its going to sleep and its awakening corresponded to the times in its native forests, where the days and nights are equal.

Dr. Groos comments upon the perception which men have of traversing a certain distance with shut eyes, which he explains as an unmarked valuation of the rhythmical repetition of the paces. This, however, rests upon the perception of space, not of time.

That we have an inborn sense of the lapse of time lies in the nature of the human mind. Men could only have arrived at the belief that the rising and setting of the sun recur at regular intervals from an initial sense of the duration of time which they compared with their perceptions of the motions of the sun. This sense of time is more or less exact in different persons; it is capable of being cultivated by use, and is impaired by the habit of often consulting watches and clocks.

In opposition to Wundt's definition that expectation is a condition in which the active attention is directed not upon a present but upon a coming impression, or a number of such future impressions, Dr. Groos states his view that attention is not the concentration of the mind upon a present impression, but always and exclusively the expectation of a future impression, which will be answered with a more or less lively reaction. He distinguishes three principal forms—motor, theoretical, and æsthetic attention. In motor attention one awaits the occurrence of an instinctive or voluntary motion; in the theoretical form one awaits the coming of a certain association of ideas, and the æsthetic form is associated with the expectation of a burst of feeling which comes into the front ground of consciousness. The first form is especially related to the will; the second to the conceptions, and the third to the feelings.

It seems to me that our natural sentiment of the lapse of time is also shown by the correct anticipation of sounds which are apt to recur at regular intervals. After experiencing a succession of sounds, musical or otherwise, we learn to count upon their recurrence after a certain lapse of time.

THERAPEUTIC RETROSPECT.

By HARRINGTON SAINSBURY, M.D.

The Sedative Effect of Calomel in Large Doses.—In an interesting little book, entitled "Rough Notes on Remedies," Dr. Wm. Murray, of Newcastle, draws attention to the danger of forgetting some of our old friends amid the host of new remedies. Speaking of calomel he instances the great sedative value of this drug in large doses and the good effects which follow the administration of ten grains at the outset of delirium tremens occurring in a robust subject. Such was the practice, he tells us,

of the late Mr. Sep. Rayne. He further gives his own experience of the beneficial action of large doses of calomel in states of maniacal excitement: thus, in one case, an epileptic, suffering from acute mania, having first by a little manœuvring got the patient sufficiently under chloroform, he administered 30 grains of calomel to him. On returning in two hours he found the patient "on the night comode, perfectly subdued, very limp and nauseated. After much profuse purging and vomiting he became as quiet as a child and fell into a sound sleep, to awake in a perfectly calm frame of mind." In another case "the patient was a man of immense strength, and naturally of a ferocious disposition;" he was in a state of acute mania, and though secured hand and foot could scarcely be approached, having bitten his attendants severely. Dr. Wm. Murray contrived to throw a towel saturated with chloroform over the patient's head and to maintain it there until the man was unconscious. He then administered a teaspoonful of calomel, which proved to be about 80 grains. The patient became "nauseated, subdued, and occupied by his own internal sensations, and ere long his fury entirely left him." The patient was then removed to an asylum and made a good recovery. Dr. Murray thinks that the "nausea peculiar to calomel" is most valuable in these cases, also that the action upon the disordered secretions generally present in these cases is most beneficial. These are the remarks of a practical man.

A Case of "*Delirium Tremens Paraldehydicum*," reported by Dr. G. Reinhold. *Therapeutische Monatshefte*, June, 1897.—The writer refers to V. Krafft-Ebing's original case, to which he gave the above title in a paper read at a medical meeting in Steiermark in 1887; also to two other cases discussed by Krafft-Ebing, one a neurasthenic who took daily 35 grammes of paraldehyde, the other a woman who was treated for the chloral hydrate habit by paraldehyde, and eventually substituted this drug for the former. The latter patient was found to be taking at least 40 grammes *pro die*. Jastrowitz's case recorded in the *Deutsche Med. Wochens.* for 1889 is the only other one which Dr. Reinhold has been able to collect; in this case, besides a daily dose of 6 grains of morphine, paraldehyde was taken to the extent even of 30 grammes a day.

Dr. R. proceeds to describe his own case admitted under the care of Prof. Emminghaus at Freiburg.

The patient, a gentleman, *æt.* 41, whose father had not been quite normal mentally, but who gave no other history of psychosis, had acquired the habit of taking paraldehyde for sleeplessness caused by business worries. Before admission he had latterly taken as much as 60 grammes daily.

On admission the patient showed marked physical weakness, but he was very conscious of his state and anxious to be cured: his speech was somewhat syllabic and stumbling. There was

general malnutrition with pale earthy complexion. The hands and tongue were very tremulous; pulse about 90, somewhat irregular. Sensation was intact; the patellar reflexes somewhat weakened; Romberg's symptom present to a slight degree.

Within the first four days after admission and cessation of the paraldehyde the patient developed an increasing confusion of thought up to a delirium on the 3rd and 4th days, and in addition to delusions of persecution and visual hallucinations (cats on the edge of the bed and sofa) there was marked insomnia. These symptoms arose in spite of a full alimentation with beer or beer and wine and a nightly dose of bromide and of trional. From the 5th day on there was improvement and gradual recovery and the patient was allowed to leave on the 16th or 17th day.

Dr. Reinhold's case justifies completely Krafft-Ebing's nomenclature, and it is to be recorded that the patient had not been the victim of any other narcotic drug before succumbing to paraldehyde, so that the effects are quite uncomplicated. That paraldehyde should be able to cause a delirious state resembling alcoholic poisoning is not to be wondered at seeing the close chemical relationship of the two drugs.

Though paraldehyde is thus shown to be occasionally poisonous by its prolonged and excessive use, the very largeness of the doses required to act thus and the rare occurrence of toxic symptoms prove its comparative safety; this is further borne out by the readiness with which the poisoning is recovered from. Moreover cases of poisoning by massive doses are rarely fatal. Lewin, it seems, reports only one fatal case, and that a typhoid case who received by mistake a large quantity of paraldehyde. There is also in proof of its slight toxic action the case which Thomas Mackenzie records of 105 grammes taken at once with recovery after 34 hours of narcosis.

A Case of Successful Removal of a large Sarcoma of the Brain. Glasgow Med. Journal, April, 1897.—Dr. Eben Duncan and Mr. Ernest Maylard report this case.

The patient was operated on in November, 1893; his symptoms had commenced rather more than 3½ years previously, and they consisted of convulsive seizures on the left side followed by numb sensations and paresis; for the most part the attacks were not accompanied by loss of consciousness. There was at times a dull aching pain over the right parietal eminence. An incomplete specific history was present. Antisyphilitic treatment was pushed for six months without avail.

On operation a pulpy tumour was found, which it was found possible to enucleate with gentle pressure by the finger. The tumour weighed 3oz.; was oval in form, measuring 3in. by 2½in.; it was flattened. The microscope showed the tumour to be a sarcoma.

In March, 1897, *i.e.*, 3½ years from the time of the operation, the

patient was in good general health and able to attend to his business perfectly, but the left forearm and hand were rigid and paralysed, the left facial muscles paretic, the left foot paralysed, though the patient could walk "perfectly well." The fits, which ceased for a whole year, had then recurred, and in all during the 2½ years had been about twenty; they had not shown any tendency to become more frequent of late.

Mr. Maylard, commenting on the operation, states that in localising the tumour they were guided chiefly by the convulsive twitchings of the left arm, but that, as it proved, the site of pain and of tenderness complained of by the patient in the right parietal region would have been the better indication. He thinks that a more immediate closure of the wound without any attempt at controlling the slight hæmorrhage by plugging, would have been the wisest plan, and that this might not have been followed by the considerable protrusion of brain substance which actually occurred and to the loss of which the paralytic symptoms which obtained were due. He further thinks that the slight recurring fits were probably due to the cerebral cicatrix formed and not to any recurrence of the tumour, inasmuch as the fits had shown no tendency latterly to increase in frequency.

Epilepsy: Its Surgical Treatment; with Report of a Case. Dr. F. A. McGrew. *Medicine*, May, 1897. Detroit, Michigan.—The surgical treatment of epilepsy is very much exercising the minds of medical men at the present moment, and in particular the indications for interference. Many hold that where the disease is of long standing—we are speaking of the traumatic or reflex form of epilepsy—it is quite useless to operate, for the long habit will have so to speak polarised the brain, and the removal of the primary focus will fail to meet the requirements of the case, since a much wider area will have taken on the morbid condition. This appears certainly to be sound doctrine, and its deduction all will allow, viz., that interference should step in at the earliest possible period. Dr. McGrew, however, pleads for interference at all and every stage provided there be no other contra-indications, or, to quote him, he says: "But I am convinced by my own experience and the recorded experience of others that the element of *time* should, in by far the majority of cases, be entirely disregarded."

Another fundamental of present teaching is that before operating we should have precise localising, *i.e.*, focal symptoms. Concerning this Dr. McGrew says: "And moreover, heretical though it may be, the demonstration of focal symptoms should no longer be considered the *sine qua non* of operative measures. If present and interpreted properly they offer a reliable guide to the site of the cortical disturbance; but if not present there may be other and sufficient indications for attempting our patient's relief."

In a few words the writer may be said to urge that the time limit is not to be an absolute indication or contra-indication, nor are we

to hold our hands because the finger-posts do not point as clearly as they might.

We are here in a dilemma, for unless strict rules are laid down there is danger of careless operating and a discrediting of this branch of surgery. On the other hand a too narrow observance of the rules which should help will thwart the very purpose we have in view, viz., the relief of disease.

The case which Dr. McGrew quotes certainly bears him out. The disease, traumatic in origin, was of *thirteen* years' standing, and it was of a severe type, the convulsions being at least one daily, and often many times in the day. Then again the localising symptoms were very indistinct, not to say confusing.

The operation, undertaken at the earnest solicitation of the patient, was undertaken at the site of the original trauma, and without entering into the details of the procedure we may state that it was entirely successful, and at the time of writing 15 months had elapsed without the occurrence of any fits. The writer goes on to say that "experience has shown that a lapse of three years will scarcely justify us in claiming that the restoration of cortical stability is complete. But the interposition of even a fifteen months' oasis in the monotonous and hopeless desert of these unfortunate lives is worthy of the conscientious efforts of the surgeon."

The Nervous and Mental Phenomena following Surgical Operations. By Harold N. Moyer, M.D.—*Medicine*, Detroit, June, 1897.—In this paper Dr. Moyer makes some suggestive remarks upon the effects of operative procedures and of anæsthesia. He maintains that while in matters of technique, and in particular of asepsis, we have made immense advances, "our knowledge of *shock* is about the same as it was fifty years ago." Perhaps this is true as to the intimate nature of shock, but surely great advance has been made in the recognition of its etiology and of the means of avoiding it. For all that the writer is probably correct in saying that too little attention is paid to "the nervous states which predispose to shock." He asserts that "a confident feeling on the part of the patient in the operator, and the result of the operation is one of the most important factors in lessening shock and preventing the unpleasant nervous sequelæ which follow." Hence he urges the value of suggestion and the hypnotising of the patients before operation; he also thinks that the bromides may with advantage be given in a few full doses before operating, or in their stead alcoholic drinks and opiates. Dr. Moyer will be agreed with by all practical men when he insists upon the importance of the mode of giving the anæsthetic; he throws out a useful hint when he points to the absence of any data as to the relative influence of ether and chloroform in the production of shock. •

He holds that the nervous phenomena which follow operations "often have their foundation in the pre-operative period." In the treatment of the neurasthenic state which supervenes on the

operation he lays great stress on the obtaining of sleep, and again he advocates the temporary use of bromides in large doses of thirty to eighty grains. The neurasthenia must be dealt with at once. Among the mental sequelæ of operations he enumerates hysteria, uncommon; mental disorders, such as delirium, mild or severe, the "delirium traumaticum"; certain forms of insanity of the confusional type; melancholia, hypochondriasis; "simple mania and sometimes paranoia."

Dr. Moyer opens out a wide field for the patient observer.

True Extension of the Spinal Cord in Tabes.—In the *Progrès Medical* of May 1st, 1897, there is a report of a communication by MM. Gilles de la Tourette and A. Chipault on a new method of spinal cord extension. These authors point out that the older method of extension by suspending the patient produces only an insignificant lengthening of the cord, whereas *flexion* of the spine, the patient being in the sitting posture with the legs extended, will lengthen the cord by as much as 1 centimetre, and almost the whole of the traction will take effect on the posterior portion of the cord at the level of origin of the first lumbar pairs of nerves. This statement is based on an experimental and anatomical study.

The authors then proceed to describe the apparatus of which they have made use in their clinical observations (for this we must refer to the *Progrès Medical*), and by means of which they maintain that the lower limbs and pelvis are so fixed that no slipping or giving can take place when the application of the extending force compels the patient to bend the spinal column. This extending force is on an average about 70 kilos (154 lbs.), but is not attained at the first sitting, indeed the patient in his forced attitude experiences in the dorso-lumbar region a stress which would speedily become painful if the force employed were too great. During the first five or six sittings the tolerance increases up to a certain point, when it becomes stationary. Another guiding sensation controlling the extent of traction is a sense of tension in the two sciatic nerves; this itself is the best proof according to the authors that there is a real extension of the cord and the great nerve trunks of the lower limbs. No danger is to be apprehended, it is stated, if the position ordered is accurately attended to; the respiration being unimpeded and the circulation free. The increase in the tension at the commencement of the sitting is to be gradual and in *like manner the relaxing at the end of the same*. The duration of the sitting will range between 8 and 12 minutes (the last is the maximum duration).

The clinical investigations were upon 47 ataxics, 39 men and 8 women. Selection of the cases is desirable, with exclusion of certain cases of tabes of very slow progress, also tabes in the third stage and cases running an acute course.

The authors maintain that of all methods of treatment of ataxia

flexion of spine is by far the best. Thus in 22 cases, nearly half, therefore, of the whole number, the patients were benefited as to all their symptoms. Most notably the pains were relieved; next in order the urinary troubles, in particular retention; thirdly, impotence was almost always relieved. Of the 22 cases, 12 showed a fairly marked inco-ordination, and of these 10 showed considerable improvement. The ocular and bulbar symptoms were but very slightly influenced.

In 16 cases benefit was experienced, but in a more limited degree and extent, the number of symptoms influenced being fewer. The remaining 10 cases received no benefit at all. This compares well with the *proportion of unsuccessful cases* by the suspension method, which in the practice of Charcot at the Salpêtrière averaged 35-40 per cent.

The authors advise a sitting every other day—if given every day the sittings must not exceed 5-8 minutes. They are of opinion that it is useless to continue the treatment for longer than 3-4 months (40-50 sittings). The treatment should then be interrupted and replaced by other therapeutic methods.

The Treatment of Perforating Ulcer by stretching of the Plantar Nerves. *Gazette des Hopitaux*, April 8, 1897.—In this brief reference Dr. A. Chipault, of the Salpêtrière, reports the treatment, radical as he says, of perforating ulcer by nerve stretching. He considers that this form of ulceration is symptomatic, purely, of a large number of nervous affections, and that to treat it by a mere dressing on the one hand or to suppress it by amputation on the other is in either case to treat it inadequately and unphilosophically. By stretching the nerves presiding over the nutrition of the part at fault he considers that one goes to the root of the matter, and he claims for this treatment that it will cure permanently the most obstinate perforating ulcers. Of seven cases which he records, only one was a failure. Dr. Chipault insists upon a complete removal of the whole of the diseased surface at the site of the perforation, by a free curetting, etc., at the same time that the nerve stretching is performed. Only in this way can a direct union by first intention be obtained. This topical treatment by itself is insufficient to effect a cure.

A Note on the Phenomena of Mescal Intoxication.—In the *Lancet* of June 5th, 1897, Havelock Ellis, editor of the *Contemporary Science* series, contributes a very interesting experiment with mescal upon himself. Mescal buttons are the fruit of the *Anhalonium Lewinii*, *anhalonium* being a genus of South American cactaceæ. The fruit, we are told, is eaten by the "Kiowa and other Indians of New Mexico, and their use is connected with religious ceremony," and its properties have been recently investigated by Prentiss and Morgan in America and more recently by Weir Mitchell.

Mr. Ellis's experiments were made with an infusion of three

buttons (a full dose, he says), which was taken in three portions at intervals of an hour. The symptoms which followed were a passing drowsiness, succeeded by a consciousness of unusual energy, also temporary and quickly disappearing. Some heightening of the muscular irritability, a fall in the pulse-rate, and a feeling of faintness causing a desire to lie down were then experienced, but not till an hour and a half after the taking of the third portion of the dose did any visual phenomena (the most marked among the symptoms described by other observers) make their appearance. The coloured shadows seen with open eyes, and the yet brighter kaleidoscopic appearances which now became prominent are described in detail. The other senses seem to have shared, with the visual, the mesal effects, and Mr. Ellis speaks of the air as seeming to be filled with a vague perfume and of the sense of hearing being hyperæsthetic, so that he was "uncomfortably receptive to sounds of every kind;" he was inclined to think that at times he was the subject of faint auditory hallucinations. Returning to the visual phenomena, he seems to have been specially impressed by the coloured shadows seen with open eyes, in particular he refers to the violet shadows which gave a picture-like effect to the room. He says: "The violet shadows especially reminded me of Monet's paintings, and as I gazed at them it occurred to me that mesal doubtless reproduces the same conditions of visual hyperæsthesia, or rather exhaustion, which is certainly produced in the artist by prolonged visual attention."

Throughout the intellectual judgment seemed to the experimenter to be unimpaired, though the attention was certainly less controlled. Mr. Havelock Ellis remarks upon this that one realises under the influence of mesal how largely attention is a matter of co-ordination.

Motor inco-ordination seems to have been present to an unusual degree, and also a sense of thoracic oppression—these, he says, were the only unpleasant sensations. In summing up he remarks that the phenomena of mesal intoxication are mainly "a saturnalia of the specific senses and chiefly an orgy of vision."

The psychological interest which attaches to the whole class of "vision-breeding drugs" is evident, though the therapeutic possibilities of this agent may have to wait for their full development.

Pellotin as a Hypnotic. *Fortschritte der Medicin*, May 15, 1897. —From the *Anhalonium Williamsii* an alkaloid, pellotin, has been separated by Heffter, which he considers to be the active agent of the narcotism produced by several preparations in use in Mexico, and obtained from certain varieties of cactus plants. Experiments with pellotin were made on 40 patients with doses of 2.5 centigrammes ($\frac{1}{3}$ - $\frac{5}{8}$ grain), either injected beneath the skin or given by the mouth. In several cases the injection of $\frac{3}{4}$ grain beneath the skin caused deep sleep within a short period of time. In

some cases of severe pain pelletin was able to diminish the pain without, however, causing sleep, but in general there was no decided anæsthetic action. A pronounced retardation of the pulse was frequently observed after the exhibition of pelletin.

Desiderius Nagy on the other hand records failure with pelletin in ten cases of mental excitement. His dosage was from 2-4 centigrammes ($\frac{1}{3}$ - $\frac{2}{3}$ grain). In one case only did he obtain any sedative action, and in this case it is probable that suggestion may have played a part.

Langstein, working with the same remedy, obtained in one case the severest collapse from the hypodermic injection of 1 centigramme. There followed cyanosis, a thready, almost uncountable pulse and cold sweating; the energetic use of stimulants was needed to bring the patient back to safety.

Accordingly Langstein considers the remedy as by no means free from danger even when well within the dosage recommended by Jolly, who as a rule gave doses of 4 and sometimes 6 centigrammes hypodermically (*Centralblatt f. Nervenheilkunde u. Psychiatrie*, Aug. 1, 1897).

Phenacetin Poisoning. *Verhandl. des Congresses für innere Medicin*, 1896, *Krönig*.—A note of this case, which proved fatal, is given in the *Fortschritte der Medicin*, July 1, 1897. The blood state is specially referred to, and of this it is observed that the red cells were largely disintegrated and reduced in many cases to mere droplets of hæmoglobin, which either floated freely in the serum or were enclosed in leucocytes. These latter were for the most part swollen.

Analgen.—This anti-neuralgic and anti-pyretic is recently mentioned in the *Lancet* of May 1st, 1897. In the brief notice given its chemical affinity to phenacetin is referred to, and also the theory that it is less toxic than phenacetin because it contains in its molecule quinoline in place of phenol. Its anti-pyretic powers are said to be more controllable because slower or more gradual in development. Its effect upon the urine is further noted, viz., the blood-red coloration which is liable to appear; the administration of bicarbonate of soda along with the analgen is said to prevent this discoloration.

With regard to the latter statement, it depends perhaps upon the power of an alkali to change the red colour to yellow when added to the stained urine (see Helbing, *Modern Materia Medica*, p. 13); but we would ask whether it is advisable to prevent this staining, whether indeed this staining may not be an indication of saturation of the system, and to this extent a warning signal. In any case what we want to know is whether the alkali administered controls not a harmless colour change, but an undesirable effect.

Analgen does not seem to make great headway—it is referred to in Merck's report for 1892, issued in January, 1893, but there is no further reference to it in subsequent reports. Its dosage in

powder (enclosed in cachets) or in alcoholic solution is 8 grains some five or six times daily.

The Action of Chlorhydrins. *Journal of Physiology*, Vol. xxii., by C. R. Marshall and H. L. Heath.—This paper is an interesting contribution towards the solution of the problem of the relation between chemical constitution and physiological action. The problem concerns us all, for it would be an immense gain if from the chemical formula of a given compound we were able to give an approximate forecast as to its action upon the body, or rather, to be not quite so general, if, given the action of one compound, we were able to foretell the action of another compound allied to the first named—we all know what an immense significance attaches to the word *allied*, particularly at this juncture.

Drs. Marshall and Heath set themselves to determine the value of the element chlorine in a series of compounds, the chlorhydrins, which having the same molecular structure, differ only by the substitution of one or more monovalent groupings by one or more atoms of chlorine. The conclusions they come to are that—

1. "The introduction of chlorine atoms into a compound of the fatty series increases its narcotic power."

2. That "it increases also its toxic powers, unless the compound is greatly changed as regards its physical characters and especially its solubility."

3. That "the influence on muscular tissue rapidly increases with each increment of chlorine, and, as far as the chlorhydrins are concerned, this action runs parallel with their power of producing narcosis."

4. That "as a result of their influence on muscular tissue the circulation is distinctly affected. By the higher chlorinated compounds the heart is more quickly paralysed, and the blood vessels more markedly dilated than with those in the lower series."

Now, it is well known that we derive a large proportion of our anæsthetics and sedatives and hypnotics from the fatty series, and that one of the drawbacks or dangers attending the administration of these drugs is this very depressant effect upon the circulation. If now we are able to attach the toxic and depressant action to a given element in the molecular structure and can, so to speak, proportion the danger according to the quantitative proportion of this element, a great step in scientific therapeutics will have been taken. As Drs. Marshall and Heath point out, it is no new idea that chlorine is the element which specially exerts a narcotic and at the same time a depressant influence. The names of Richardson, Binz, Mayer, Ringer, and others are associated with this theory, and the numerous attempts at modification of the chlorine containing molecule, or at the elimination of the chlorine atom testify to the belief in the same theory. Hence have arisen the ammonia and the the amido-modifications of the chlorine contain-

ing soporifics, the ammonia and amido groupings being introduced to counteract the chlorine atoms. In spite, however, of the much work done, the chlorine theory cannot be said to be established, and there are some notable exceptions to the theory which are ill explained—*e.g.*, the weaker narcotic action of sodium tri-chlor butyrate as compared with sodium butyrate itself—to this exception the authors themselves allude.

The chlorhydrins with which Drs. Marshall and Heath experimented are bodies which “ may be regarded as glycerine in which the hydroxyl is gradually replaced by chlorine ” with formation of mono-, di-, and tri-chlorhydrin, and these certainly seem to show an increasing narcotic action with the rise in chlorine holding, but the toxic action did not quite follow this order, for the di-chlor compound was more powerful than tri-chlorhydrin. This the experimenters set down to the greater solubility of the di-chlorhydrin. To a certain extent then these experiments bear out the chlorine theory of narcotic and toxic action, but proof is still wanting, and if one might venture to criticise it would be to say that the experiments recorded are too few.

Morphine Habit of Long-standing Cured by Bromide Poisoning. Dr. Neil Macleod, *Brit. Med. Journ.*, July 10th, 1897.—Two very interesting cases of treatment, to say the least heroic, are here recorded. The first case, a lady aged 32, had been the victim of the morphine habit for seven years. The extent to which she had taken this drug is not given, but when she came under treatment with symptoms of great nervous irritability she had reduced her morphine to the, for her, very small dose of 10 minims of Majendie's solution (gr. $\frac{1}{3}$ rd) every four hours. She was ordered bromide of sodium in 30-grain doses every four hours, but must have trebled this dosage, for in two days 18 drachms had been consumed. She was removed to hospital, and for four days received hypodermically $1\frac{1}{2}$ grains of morphine per diem. On the three following days she had four 30-grain doses of sodium bromide, and on the second day from this 30 grains of chloralamide, thence on she received no drugs. For the four days following removal into hospital the patient was quite prostrate, passing urine and stools in bed and making no “ intellectual, emotional, or volitional effort ”; upon this ensued a period of “ restlessness and intellectual and emotional confusion,” with delusions, hallucinations, and inco-ordinate speech lasting another six days. On the 11th day of hospital treatment she could stand without help; on the 20th day she left hospital feeling quite well. From that time forwards she has felt no desire for morphine, and has been quite free from the habit.

The second case was that of a pilot aged 36, who for three or four years had acquired the morphine habit, and in the summer of 1896 “ injected 40, 50, and 60 grains a day ” (!) The bromide treatment (poisoning) was here more systematic, and at the outset

was accompanied by a moderate morphine dosage for some 13 days. The sodium bromide dose varied between 30-60 grains every three, four, or six hours, it was then continued for another five days without the morphine; from that time on no drug of any kind was given. The patient passed through a longer period of prostration, delirium, hallucinations, confusion, etc. On April 17th of this year, just over six weeks from the time of admission, he left the hospital, and 10 days later he left Shanghai feeling quite well and delivered of his habit.

Dr. Macleod claims for this treatment that it does away with the suffering of enforced abstinence; that the patient's cunning, a formidable bar to treatment, is circumvented; that it requires careful nursing, but no special institution or specially trained attendants; that no violence or excitement is likely to result.

ITALIAN RETROSPECT.

By W. Ford Robertson, M.D.

The Advisability and Efficacy of Chirurgico-Gynæcological Treatment in Hysteria and Insanity.—G. Angelucci and A. Pierracini (*Rivista Sperimentale di Freniatria*, 1897, p. 290) have reported "the results of an international enquiry" into this question. The observation of some cases, in which removal of the uterus and appendages for hysteria had been followed by violent insanity, and the want of agreement which they found among the authorities who had written about the subject, led the authors to undertake their task. They appealed to alienists, surgeons and gynæcologists throughout Europe and America for exact accounts of their experiences, and received in reply a large number of valuable contributions, for which they desire publicly to express their thanks. They enquired of each person, to whom their circular was sent, if during the last ten years he had had any cases in which ablation of the uterus and its appendages had been practised, with a view to curing hysterical neuroses; whether in the event of this having been so, the uterus and appendages had been found healthy or diseased; if they had performed this operation in any case of insanity without manifestations of hysteria; and, lastly, they asked for a personal opinion as to the advisability and efficacy of such surgical interference in hysteria.

The authors give a long and interesting analysis of the reports submitted to them. They have collected accounts of 109 cases in which ablation of the internal organs of generation was undertaken for the cure of hysteria or insanity. The result was beneficial in only 17 cases. The remaining 92 were either uninfluenced or affected injuriously. Insanity afterwards developed in 44 of these women, 20 of whom had suffered from hysteria before the opera-