THESIS

upon

The Use of OPIUM in the Treatment of MELANCHOLIA.

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William Hector Mackenzie, M.B.C.M.Ed. 1894.

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. 1. INTRODUCTION.

The use of opium as a nerve sedative, as an anodyne, a hypnotic, and as a reducer of mental excitement in delirium, whether due to alcohol, fevers or brain lesions, has been recognised by all physicians in all ages. Within recent times it has been largely supplanted by newer drugs; but it has never been allowed to drop into desuetude, because it is the most powerful of all hypnotics, and the most reliable of all sedatives and anodynes. In idiopathic mental excitement it has in this country and in other parts of Europe lost favour as an unfailing and reliable remedy, although many eminent physicians on the Continent still believe it to be unsurpassed in its power of alleviating the excitement in certain cases of melancholia. A knowledge of this fact has led me to

enquire into the efficacy of the drug in the treatment of melancholia; and after a lengthy trial of it in over forty cases of that affection, I have come to the conclusion, which I hope to show in the following thesis, that it is a drug of the utmost value, not only in ameliorating the symptoms of melancholia and thereby rendering the patients more manageable and less suicidal, but also in shortening the duration of the disease and promoting the recovery of the patients.

2. MODERN OPINIONS.

As has been already observed, the opinions of physicians regarding the efficacy of the opium treatment in melancholia have been divided, some advocating it in strong terms, bringing forward convincing proof of its beneficial action, while others as strongly condemn and deprecate its administration to melan -

cholic patients.

Going as far back as 1862, we find Dr Ludwig
Meyer, Medical, Director of the Insane Division of the
Hamburg General Hospital, recommending opium as " a

"powerful conservator of vital powers, a restorer of

expended energy and of prostrated nervous vigour."

(Zeitschrift für Psychiatrie, Vol. XVII. p. 453.)

In 1863, Dr Engelken, in addressing a Meeting of the Association of German Naturalists and Physicians at Carlsbad, referred to the use of opium in puerperal insanity, and as a preservative against relapses. He also referred to the use of opium in insanity in France and Holland at a comparatively remote period, and to its being subsequently laid aside; but he claimed for his family the merit of not having shared in this general neglect of the drug, asserting that his grandfather, an inhabitant of Bremen, in 1740 con

opium he pronounced useful in acute mental disorder, in mania and melancholia, especially in Melancholia Agitans.

On the other hand, Eslenmeyer at the same Meeting insisted on an intrinsic difference between mania and melancholia in the matter of therapeutical agents; and whilst recognising the value of opium in the former as a remedy, denied the occurrence of recovery in cases of mania from the use of opium, except in connection with removal from home and regulated diet: and Hoppe affirmed that opium does not act at all, or operates prejudicially upon the nerves, but that itsaction is on the muscles, and especially on the muscular fibres of the blood vessels, which come more vigorously contracted by its use. Roeser, Jacksch and others insisted on puerperal insanity not

being, at least in many cases, a true neurosis, but a result of emboli or thromboses affecting the brain, or of ichorous matter from the uterus, producing phlebitis in other organs, and therefore contended that in mental disorder from such organic causes opium can be of no avail. (Zeitschrift für Psychiatrie, Vol.XIX.)

In 1867 Dr Tigges of the Asylum of Marsberg gives a careful report of 39 cases of melancholia in which opium was administered in greater or less quantity. The disease terminated in recovery in 13 cases, in improvement in 5; the condition was doubted in 5; apparently incurable in 12; and 4 died.

The result of the treatment was reported as having been useful and tranquilising in 14 cases; it was prejudicial in 16 cases, the excitement being increased; in 2 cases digestion was interfered with; and in 7 cases no effect was produced. Owing to the facts

that in some of the cases in which recovery followed the use of the drug the decrease in the intensity of the excitement was very slight, and that in others when the opium was stopped a continued or more decided tranquility ensued, Dr Tigges seemed inclined to believe that the improvement was not entirely due to the opium, but might perhaps have taken place in the natural course of the disease. (Allgemeine Zeitschrift für Psychiatrie, Vols. XXI. XXII.)

In 1869 MM. Dumesnil and Lailler strongly recommended the combination of digitalis with opium, especially in the treatment of mental excitement, contending that they had long observed that the latter tincture by itself did not give very satisfactory results, as also all opiates prescribed alone under whatever form. (Annales Medico-Psychologiques, 1867-68.)

In 1886 Dr Heinrich Schüle in his handbook of

Psychiatry says, "The object of treatment is ever the " greatest possible cerebral rest, temporary diminution " or removal of the depressed feelings, toning down the " thoughts, so that the supremacy of the one idea be comes relaxed, and the normal state of the perceptions " is restored. But this must be continuously, if the " wounded nerves are to be healed. The skilful opium -" rest is the Plaster of Paris band of the disordered " nerves. According to our experience, in the methodi-" cal application of the opium treatment lies at once " its secret and utility." (Schüle's Handbook of Clinical Psychiatry, p. 42.)

In 1891, in the "Psychiatrische Bladen", Deel VIII. Afl. 4, Dr Tellegen discusses the value of opium in melancholia, and reviews the opinions of some of the most prominent alienists of the day on this subject. Ball sums up his experience in these words:

" Except in cases of insomnia, in which the liquid ex-" tract of opium may prove beneficial, opium prepara -" tions and salts of morphine are to be excluded in the " treatment of melancholia; they seem, instead of quieting " the mental perturbation, rather to induce an opposite "effect." Voisin, on the other hand, remarks: "Treat-" ment with morphine generally cures melancholia, whether " this is accompanied by delusional states or not, and " especially when the condition of dejection is associat-" ed with anaemia; the symptomatic phenomena of mental " depression, stupor, ecstasy, inclination towards sui-" cide, religious or mystic delusions, disappear altoge-" ther with morphine, and usually within a comparatively " short time. The melancholic terror, too, fades with " equal rapidity." Clouston puts no faith in opium; in his observations, he found loss of appetite and diminution in body weight to follow its use, and he only

records one case in which it did good service. Mickle! is of the same opinion. Blandford, however, to take an opposite view, has found the preparations of opium serviceable in subacute melancholia, whether given by the mouth or subcutaneously; in acute melancholia he advocates its use, not only as a soporific, but also as a brain stimulant and nourisher; in melancholia with stupor he also recommends it. Brosius declares against it, while Schüle as warmly defends its use. Kovalevsky considers that there are many hypnotics for use in melancholia less deleterious in their action on the organism than opium; his experience is that more harm than good is done by it, and that patients recover more speedily without it. Guislain, who at first found no advantage from its use, has now come to the conclusion that imselected cases of melancholia and with proper dosage it may be beneficial; he prefers

morphine to other opium preparations. With Engelken, he thinks that it is extremely serviceable, in recent cases of melancholia, though it does not always bring about a cure, and its application must frequently be temporarily suspended if the condition of the patient is not to be aggravated; opiates act beneficially also in those mental disorders, which are accompanied by an extreme mental sensitiveness, and in which the patient is always harping on his own miserable condition, as well as in those in which the emotional disturbances are prominent without marked intellectual declination. Others who employ opium mainly as a symptomatic remedy, and who do not regard it as having a direct influence on the course of melancholia, speak highly of it as a serviceable agent in the coincident symptoms of the psychosis, e.g., the inclination to suicide, insomnia, and the conditions of mental anguish. Tigges is of

opinion that so long as melancholics are treated with opium, suicidal cravings are less marked, and that no drug acts so beneficially in the insomnia of melancholia as morphine; while, in the conditions of mental anguish, Kraepelin advocates the use of opium in gradually increasing doses. Most alienists are of opinion that in so-called symptomatic melancholia, e.g., the melancholia preceding maniacal attacks, the melancholia of insanity of persecution, as well as in that of general paralysis of the insane and circular insanity, no favourable result is to be anticipated from its use. The following considerations are the result of the author's own experience, coupled withma careful review of the literature of the subject: - 1. Many cases of melancholia, in fact the larger number, re cover without the use of any therapeutical measures, by restorative nutritional treatment, change of surroundings, and mental and bodily rest. 2. It is neither probable nor possible that opium can always be of use in cases of melancholia; we must carefully watch its effect and at the first signs of unfavourable influence cease its administration. There are many individuals who show a certain idiosyncrasy towards opium, and on whom it acts as an excitant and sleep destroyer. 3. It is not to be denied that, owing to the recent introduction of other soporifics, opium need less frequently be employed as a hypnotic, though it must still be considered of great value as such in melancholia. 4. It is in private practice that opium will be found most useful and reliable in treating melancholic conditions. There is no class of the in sane who are more acutely sensitive to their environment, and who, after their recovery, look back with more dread and distress on their asylum experiences

than melancholics, and when treatment at home or in some other private surroundings is possible, medical men shrink from consigning their patients to such institutions; it is only when continued insomnia, wearying both to the patient and his friends, the leaning towards suicide, and refusal of food complicate the case that asylum treatment is, as a rule, advocated. Now it is just in these three conditions that opium will be found of inestimable value; it will induce sleep, create a blunting to the suicidal inclination, and diminish the mental tension, so that the patient is less disposed to oppose the administration of suitable food. 5. With Schüle and Guislain, he believes that opium can, in some cases, shorten the duration of the affection, exercising a specific influence such as is also possessed by the bromides. Its administra tion must, in preference, only be resorted to when the malady has lost its power, and has, as it were, expended itself; this can only be judged of by trial doses with the drug. Long-continued employment of opiates he deprecates as injurious (Ziehen, on the contrary, puts his patients for months, in some cases a whole year, under an opium course). 6. Experience teaches that opium acts better in anaemic than in hyperaemic conditions, and he agrees with Savage that it is less favourable in its action in young persons than in elderly ones and those in whom the climacteric change is exerting a morbid influence. 7. As to its influence on melancholia with stupor, authorities are not agreed. Krafft-Ebing considers it to be contraindicated, whereas Blandford and Ziehen advocate its employment.

In conclusion, he advises that the earlier administrations should be by subcutaneous injection

of morphia, commencing with small doses. Later, when given by the mouth, the dosage is to be slowly or rapidly increased, according to the effects on the patient, and it is best given twice or three times a day, the first dose early in the morning, the second and third two hours before and at bedtime. By this means the digestive functions will not be disturbed, and food may be regularly administered during the day, a matter which is, undoubtedly, of the first importance in melancholia. (Journal of Mental Science, 1891)

clouston, in his Text book on Mental Diseases, says, "Opium I utterly disbelieve in. I performed a series of elaborate experiments with it in melancholia, and it always caused a loss of appetite and loss of weight in every case, and Dr Mickle has confirmed these results." (Mental Diseases, Third Edition, p. 127)

In 1896 Kraepelin, in his Text Book for stu-

students and physicians, observes, "From, the earliest " times opium has been used in the treatment of mental " maladies. It acts by paralysing certain functions of " the cerebrum, and also, it would appear, by diminish-" ing the blood nutrition of the same. A more complete " knowledge of its influence on the various psychical " processes is unfortunately, up to the present time, " awanting. Experience teaches that conditions of ex-" citement and of mental distress, or such as are pro-" duced and maintained by painful irritations, (e.g., " neuralgias, morbid sensations, praecordial distress) " are most amenable to its influence; by it rest and " much needed sleep are obtained (by not too small " doses). Also in very prolonged and exhausting excite-" ment the remedy appears to be of great service. On " the other hand, in marked brain disturbance (continued " high fever), in great bodily weakness, and in cases

" with weak heart, opium should not be used. Certain un-" pleasant results, however, such as disorders of diges-" tion, loss of appetite, and obstinate constipation may sometimes be observed, although as a general rule, opi-" um is wonderfully well tolerated by the insane. Un-" doubtedly there are cases in which very large doses " cause increased excitement. Under all circumstances " precaution should be exercised. The most useful pre-" paration is Tinctura Opii Simplex given by the mouth, "(Lornl in 20 aqueous solution of Extr. Opii subcutane-" ously, which should be freshly prepared to avoid abscesses). The method of administration is in doses of " 10 - 20 mins. two or three times a day, to be increased to three or four times that amount if the desired calm does not appear sooner; later the dose should be gradually diminished. (Psychiatrie, pp. 262,263.)

3. OBJECTIONS TO ITS USE.

The strongest objections to the use of opium in melancholia by such eminent authorities as Clouston, Mickle and Ball, (quoted above), are its injurious effects on nutrition, by causing derangement of the alimentary tract, due to the diminution of the natural secretions and of the normal peristaltic action of the intestines, thus producing gastric and hepatic dis turbances, and setting up a condition of obstinate constipation - a symptom which has to be guarded against in all melancholic cases; but these injurious effects are, in my opinion, entirely due to the im proper administration of the drug.

It must of course be admitted that there are undoubtedly cases in which there is an idiosyncrasy, which renders exhibition of the drug absolutely impossible; but this fact can be easily discovered with-

within a few days after commencement of its use. As is well known, examples of this idiosyncrasy are to be met with among the mentally sound; but both in the same and in the insame the percentage of cases in which opium disagrees is very small. It is needless to add that where an idiosyncrasy exists the opium treatment must be entirely abandoned. Experience has led me to conclude that opium is most efficacious in climacteric, senile and puerperal cases.

4. PHYSIOLOGICAL ACTION OF OPIUM.

My reasons for the advocacy of the use of opium in melancholia are based upon its physiological action, which will be best described as follows in the words of T. Lauder Brunton.

" Opium has little action on muscular contractility. The action of opium on the motor nerves is doubtful. According to some observers, it first increases and then diminishes their excitability, the

- " action commencing at the centres and proceeding to-
- " wards the periphery. Others, however, have found that
- " opium has little or no action on them, except towards
- " the end of poisoning, when all the functions are pa-
- " ralysed.

"The sensory nerves are first excited and then

- " paralysed. Opium applied Locally is said by some ob-
- " servers to have, no action on the sensory nerves, but
- " it has been found to have a paralysing action by Baxt.
- " The results of his experiments are confirmed by cli-
- " nical experience, for when the drug is injected sub-
- " cutaneously it lessens sensibility, diminishes the
- " power of distinguishing tactile impressions, and re-
- " lieves pain when present.
 - " When applied externally to the eye, or to the
- " skin denuded of its epidermis, opium also relieves
- " pain.

- " Opium lessens first the conducting power of

 " the spinal cord, then the reflex functions, producing

 " first inco-ordination of the movements of the hind

 " limbs and then paralysis of reflex action.
- "Opium acts on the centres of the brain in the

 "order of their importance; thus in the frog, there is,

 "first, loss of voluntary motion, such as may be pro
 "duced by extirpation of the cerebral hemispheres; next,

 "loss of co-ordination, such as is produced by extirpa
 "tion of the optic lobes; and lastly, effects like those

 "produced by destruction of the medulla.
- "The pupil is markedly contracted by opium,

 "the action of the drug being probably central and not

 "peripheral; but the exact mode of action has not been

 definitely made out. Stimulation of sensory nerves

 causes reflex dilatation of the pupil, and it, is not

 improbable that the contraction which opium produces

- " is due to its paralysing this reflex action more or less completely.
- "The pupil sometimes dilates just before death.

 "This dilatation is probably due to the excessively ve
 "nous condition of the blood, as in the later stages of

 "chloroform-poisoning.
- "The first effect which opium has on the cir
 "culation is to cause a dilatation of the vessels of the

 "skin, sometimes giving rise to a cutaneous eruption of

 "a roseolous character accompanied by itching, and com
 "ing on either before or after sleep.
- " The vaso-motor centre in the medulla is slight
 " ly, if at all, affected by small doses of opium. Large
 " doses paralyse it.
- "The drug appears to have a peculiar, action
 on the peripheral vaso-motor apparatus. It is well
 known that stimulation of the chorda tympani causes

- " dilatation of the vessels of the submaxillary gland;
- " but I found that after the exhibition of opium the ves-
- " sels of the gland no longer dilated, but on the con-
- " trary contracted, on stimulation of the chorda tym-
- " pani, so, that the blood which issued from the gland
- " was not of a bright arterial hue, but was very dark,
- " and flowed drop by drop. This observation requires
- " confirmation; but if it be confirmed, this result
- " might serve to explain the effect of opium in cutting
- " short inflammations, e.g. of the peritoneum.
- " In peritonitis as in other inflammations the
- " blood vessels are greatly dilated. Opium by its ac-
- " tion on the vaso-motor centre, and (if these experi-
- " ments be correct) by its action also on the periphe-
- " ral terminations of vaso-motor nerves, will prevent or
- " diminish the reflex dilatation of the vessels which the
- " local irritation would otherwise produce. Congestion

" will thus be diminished and inflammation be relieved. " The action of opium in peritonitis is therefore pro-" bably twofold. First, it lessens peristaltic move-" ments of the intestines, and thus diminishes local ir-" ritation. Secondly, it lessens the reflex activity of " the centres through which local irritation causes di-" latation of the vessels, and thus diminishes perito-" neal congestion. The late Sir Robert Christison used " to say that not only coryza, but probably all inflam-" mations, could be nipped in the bud by opium if it " were only given sufficiently early and sufficiently " freely.

"The blood pressure appears to be but little

affected by opium. It varies after the injection of

the drug, but this variation is probably due to an al
teration in the general functions of the body, for

example, great quiet, &c.

"Opium has little direct action on

"the heart, which continues to beat after the nervous

"centres have been experimentally destroyed in animals.

(Text-Book of Pharmacology, Therapeutics and Materia

Medica, Third Edition, pp. 854, 855.)

5. THEORY OF ACTION IN MELANCHOLIA.

Melancholia is a disturbance in the equilibrium of the cerebral centres, caused by the diminution of the activity of the motor centres, and a corresponding excitation and neurotension in the sensory centres. The chief mental symptoms in melancholia are mental pain and depression of spirits, weakening of will-power, loss of initiative, in xxxx acute cases hallucinations of hearing, illusions and delusions of a painful nature, and generally marked sleeplessness.

A morbid affection of the feelings which ex-

expresses itself in mental pain must depend upon a profound alteration in the cerebral processes, which are generally either subconscious or pleasurable. The nervous energy being more or less restricted to certain centres instead of being distributed over the brain as in health, produces high neural tension. All neural tension is associated with nervous distress, and, as Schopenhauer long ago discovered and taught, it is the rebound from this condition of distress to that of the normal equilibrium that constitutes the essence of pleasure. Owing to the constant presence of the neural tension in melancholia, this capacity for pleasure is suspended, and the mental distress will continue so long as the neural tension persists.

Clinically we see the effects of neural tension in the conduct of the patient, e.g. the great motor restlessness which is so prominent a feature in

certain types of melancholia, (Motor Melancholia of Clouston, or Melancholia Agitans). In, other cases the patients are more resigned to their fate, and suffer their distress in more or less quietness; yet these are liable to impulsive acts, generally suicidal, occasionally homicidal. These motor acts and impulses are manifestations of the increased neural tension, and the purposelessness and futiltiy of these acts clearly show the overflowing of nervous energy through unusual channels. Thus neural tension may be said to be the great factor in the production of melancholic depression.

The cerebro-motor centres and also the peripheral end organs must be regarded as being endowed with potential nervous energy. The connecting fibres between centre and centre, and between centre and peripheral end organs are charged with nerve energy. Under

ordinary circumstances a condition of equilibrium is maintained between these centres, so that any disturbance ance of the one produces a corresponding disturbance in the other. In mental depression we have increased neural tension in the centres, whereby the condition of equilibrium is disturbed, and we have produced feelings of discomfort abd distress. This excitation in the sensory centres has a reflex disturbing influence on the circulation; and this tends to perpetuate the condition.

Opium, by lessening the reflex excitability of the sensory cells, restores the equilibrium of the cranial circulation, and permits the restoration of the normal cerebral condition.

6. FORM OF ADMINISTRATION.

Of the many preparations of opium, those most

Morphia Sulph. given hypodermically, and Tinct. Opii given by the mouth. Of these two, I have found Tinct. Opii the more suitable and efficacious, morphia being more exciting in its action and often causing sickness. This sickness is probably caused by the excretion into the stomach of some of the products of decomposition of morphine, the product most likely to be produced being apomorphine, which is the most powerful of all emetics.

My experience has led me to conclude that

Tinct. Opii is the most suitable of all the preparations of opium for use in the treatment of melancholia.

It combines all the properties of the drug; in no case have I found it to increase excitement; and in no case have I found it to cause sickness.

It is best to begin with small doses, say 5

mins. three times daily after food, gradually increasing the amount until the patient reacts to the drug. In some cases I have found it necessary to give as much as 40 mins. three times daily. By beginning with small doses, and by the gradual increase of the amount, a tolerance for the drug is produced, thus avoiding the untoward symptoms which are commonly produced by the sudden administration of the larger doses. other hand, by beginning with the large dose, the system has not had time to become habituated to the action of the drug, and thereupon derangement of the alimentary tract, consequent loss of appetite, constipation, and rapid diminution in weight are produced. These evil effects give rise in many instances to the complete abandonment of this valuable anodyne, whereas I contend that had these cases been treated by a graduated dosage, in the greater proportion the drug

would have been found to agree.

In all my cases, I have combined the opium with Tinctura Nucis Vomicae, on account of the tonic action, and the vaso-motor tone it establishes. Also, as is stated by Dr Mitchell Bruce in his "Materia Medica and Therapeutics", strychnine is a physiological antagonist of morphine, so that they may be used in conjunction to counteract each other in their evil effects. I have invariably administered the nux vomica in minute doses, 5 to 10 mins. three times daily, given simultaneously with the opium. The smallness of the dose prevents those unpleasant symptoms which might arise from a prolonged course of strychnine.

In the cases in which the physical condition was very much reduced, and great motor restlessness was present, I have, in the early stages of the treatment, confined the patients entirely to bed. In many

sented by the patients, so that it is often necessary to have a Nurse constantly beside them to prevent them from getting out of bed; but after a few days they usually settle down, and are quite willing to stay in bed of their own accord. This rest I consider to be of great curative value, and, in combination with the opium treatment, to be of great assistance in allaying the excitement, and in restoring both body and brain to a healthier condition.

7. CASES.

The following is a short history of the melancholic cases I have treated with opium.

CASE I.

T. D., aged 38, admitted 2nd February, 1895. Reserved and quiet disposition; his habits were temperate, but he was given to masturbation. For a few weeks previous to admission, he was very suspicious. On admission his physical health was fair; tongue furred; pupils were dilated but equal. Mentally he was very depressed, and had strong suicidal impulse. He was constantly wringing his hands, groaning and knocking his head against the wall. When questioned he said that he had "sinned". His whole appearance and behaviour indicated very acute mental pain. For the first week his condition remained unchanged. During the day he was most restless and occasionally complained of pain in his head. He slept about 4 hours every night after getting 30 grs. sulfonal at

Case I. continued.

bedtime.

8th Feby. Patient was put to bed and got opium in small doses, gradually increasing up to 30 mins. There was no marked improvement for about a week.

17th Feby. Patient very much improved, and taking his food well. He got 20 grs. sulfonal at bedtime, and he slept well afterwards.

10th March. Patient vastly improved; the opium was continued and the sulfonal at bedtime.

15th March. Sulfonal discontinued. Patient after this date slept well without the aid of sulfonal.

The improvement slowly continued.

21st March. Patient had gained 7 lbs. in weight since admission.

23rd March. Patient was allowed to get up. Two days after this he began to do a little work and he felt much brighter.

Case I. continued.

28th March. He had gained another 3 lbs. in weight.

By the end of March the dulness had greatly passed off;
he was sleeping well and taking his food well, and was
now able to go for a walk round the grounds. He was
still taking the opium, and it agreed with him well.

The opium was continued till the middle of April.

The improvement steadily continued, and on the

22nd June. He was discharged RECOVERED.

In four.
months had
gained
10 lbs.

CASE II.

E. N. aged 47, admitted 3rd July, 1897.

Widow, quiet disposition, habits regular. She hadone previous attack of melancholia several years ago. The exciting cause of present attack seems to have been family worry. This attack has lasted for about a month. She was very depressed, and had inclinations

Case II. contd.

towards suicide.

On admission, her physical condition was fair. Mentally patient was dull and taciturn; she imagined she was the greatest sinner on earth, and would never be forgiven.

For several weeks after admission patient was sleepless and unable to take her food. There was little change in her condition during July; she was very depressed and constantly worrying about her children and her business.

20th August. She became much more depressed, and accused herself of being the cause of so many patients being brought into the asylum.

lst Sept. Began to take a mixture of opium and nux
vomica, 10 mins. tinct. of opium and 5 mins. nux vomica, three times daily. During September there was

Case II. contd.

little improvement in patient's condition. She was subject to frequent outbursts of weeping. She slept a little better, but otherwise there was no marked change.

27th Sept. The dose of opium was increased to 15 ms. of the tincture three times daily.

8th Oct. Patient had an attack of very acute depression, and took very little food.

11th Oct. Patient was much brighter; she began to do a little work, and was very anxious to get home.

1st. Novr. The dose of opium was increased to 20 ms. of the tincture three times daily. She improved slowly, slept better, and took her food well. During November the improvement continued, though very slowly.
She was occasionally troubled with severe headache.

28th Decr. Patient had considerably improved.

Case II. contd.

She still remained somewhat depressed, but not nearly so acute as formerly.

13th Jany. 1898. Patient was fairly well; she still continued taking the opium, and her physical health did not seem to be in any way injured by it.

3rd Feby. The opium was discontinued, the dose having been slowly diminished. Improved physically, and the mental depression now very slight.

5th March. The patient was discharged RECOVERED.

CASE III.

E. B. female, aged 28, admitted 26th Aug.1897.

Disposition quiet, habits industrious and regular.

Exciting cause, domestic worries. Patient first showed symptoms of mental derangement about two months

previous to admission. She felt very depressed, and

In 6 months
lost 21
lbs.

Case III. contd.

her mind was constantly occupied with thoughts of self destruction. She had also attempted suicide by drinking carbolic acid.

On admission her physical condition was fair. Mentally she was very much depressed, and had a strong desire to commit suicide. Very sleepless and appetite very poor. She complained of her brain refusing to act; she could not remember anything; and was quite unable to proceed with her work.

25th Oct. Patient was put to bed, and was put under a course of thyroid treatment.

15th Novr. The thyroid was discontinued. Her pulse at this date was very weak, though regular. She was still considerably depressed, and complained much of loss of memory.

23rd Novr. Patient was allowed to get up. By the

Case III. contd.

end of November there was no marked mental change and her physical condition was improving.

3rd Decr. Patient had a relapse. She was very much depressed.

5th Decr. Patient refused her food, and had to be fed with the stomach tube.

each time she was fed. Refused to speak, and would not move from her chair the whole day.

9th Decr. The dose of opium was increased to 10 ms.

15th Decr. No marked change in patient's condition.

Still being fed.

30th Decr. Now taking her food pretty well, but still depressed and seldom spoke to any one.

10th Jany. 1898. The dose of opium was increased to 15 mins. three times daily. No mental change.

Case III. contd.

28th Jany. The dose of opium was increased to 20 ms. three times daily.

TELEPHONE THE

29th Jany. Patient had a visit from her friends.

She talked to them cheerfully, and told them that she did not speak to any one in the Asylum, because, if she spoke to one, she would require to speak to all.

Slept and took her food well.

8th Feby. Patient very much brighter. Began to talk to the Nurses and patients, and did a little sewing.

Took her food well.

9th Feby. Opium was reduced to 10 mins. of the tinct.

14th Feby. Continued mental improvement; patient worked daily in the sewing room. Slept well and took her food well.

19th Feby. The opium was discontinued.

21st Feby. Patient was discharged RECOVERED.

In three months she gained 2 lbs.

CASE IV.

C, H. female, aged 49, admitted 22nd April, 1896. Quiet disposition, habits temperate. Had been sleepless for weeks; was frequently excited and violent; had a delusion that she and her household were under a curse.

On admission, she was physically weak, and somewhat anaemic. Mentally, she was labouring under excited melancholia; was constantly moaning and wringing her hands. She refused all food, and had to be fed forcibly by the Nurse. Patient was put to bed, and got mixture containing opium and nux vomica. (5 mins. of Tinct. Opii with 5 mins. of Tinct. Nux Vomica). dose of opium was slowly increased to 20 mins. three times daily. During the first fortnight there was little improvement. She still remained very restless, and it was with difficulty that she could be kept in

Case IV. contd.

bed. She refused all food, and had to be fed by the Nurse.

22nd May. The nervousness and motor restlessness greatly diminished, and patient slept most of the night.

18th June. Patient took some interest in her surround+ ings, and occupied herself with knitting. Her tongue was clean and her bowels were quite regular.

22nd June. Patient was allowed to get up. The mental improvement steadily continued, patient only feeling a little dull in the morning, but as the day wore on felt much brighter. She had no relapse, and the im-In four provement steadily continued. She took the opium up to the date of her discharge.

22nd August. Patient was discharged RECOVERED.

months she gained 3 lbs.

CASE V.

J. H. female, aged 33, admitted 25th Novr. 1896. Exciting cause, child birth. She had threatened suicide. She was very depressed and thought some evil was impending over her children. She was much tormented by voices which urged her to commit crime. On admission, her physical condition was fair. Mentally she was very depressed and nervous. This dulness began after the birth of her last child, four months before. Since then she had been annoyed by hallucinations of hearing; was very sleepless and had no inclination for food.

20th Decr. Very little change in her condition; she was still very depressed and felt most miserable; she seldom spoke to any one, and she did not sleep well.

21st Decr. Patient got a mixture of opium and nux vomica (10 mins. Tinct. Opii and 5 mins. Tinct. Nucis

Case V. contd.

Vom.) three times daily. On this date she was very depressed.

24th Decr. She was a little brighter and assisted the Nurses in the ward. At this time she was sleeping somewhat better, and was taking her food well.

25th & 26th Decr. Patient slept very little. She was a little better on the 27th, but she was very quiet and would scarcely talk to any one. She was always worst in the morning.

2nd Jany. 1897. Patient had been much brighter for a few days and worked well; also sleeping better.

14th Jany. Patient was very dull, and stated that she was afraid that she would me ver manage to cheer up. She did not like to go into the wards with the other patients, as she imagined that they were always talking about her. She stated that she was just in

Case V. contd.

the way here.

10th Feby. Patient stated that she felt a little better; was still depressed and kept very much by herself.

During the last month she gained 4 lbs. in weight. After this, the patient steadily improved and by the end
of March she was very anxious to get home, as she felt
she was quite fit for her household duties.

For the next 3 months her condition improved very slow-

ly; she was sleeping well and taking her food well;
but was occasionally slightly depressed in the morning.

30th June. Patient was transferred to another asylum.

Hermmental condition had greatly improved since her
admission; and this improvement seemed to be due to
the treatment with opium.

In seven months she gained 8

CASE VI.

E. B. female, aged 55, admitted 29th Jany.

1896. Habits industrious and temperate. Had had previous attacks of melancholia. Was very depressed and believed that she was lost; that she had an evil spirit in her breast which prompted her to destroy herself. Was in this condition for 6 weeks previous to admission.

On admission physical health was fair. Mentally she was dull and felt that she could not trust herself to be left alone, as she was afraid that she would injure herself. She took her food fairly well.

14th Feby. Her condition was worse; the depression was greater, and she was continually in fear of impending evil. She also thought that she was going to be burned.

18th Feby. Patient began to take opium, 5 mins. of

Case VI. contd.

Tinct. three times daily, with 5 mins. of TTinct. Nucis Vom. The dose of opium was slowly increased until by the end of three weeks she was taking 15 ms. of the Tinct. Opii three times daily.

14th March. Patient showed signs of improvement; she was not so delusional, was sleeping better and taking her food fairly well. The improvement steadily continued, patient only having an occasional very dull day.

30th June. Was working in the wards, and took a lively interest in everything about her. By this time she In six expressed no delusions and was anxious to get home. 15th August. Patient was discharged RECOVERED.

months she gained 3 lbs.

CASE VII.

1896. Disposition quiet and reserved; predisposing cause, menopause. She had been very restless and sleepless, and had been refusing her food for months previous to admission. On admission, she was physically weak, thin and anaemic. Mentally she was very depressed and unsettled. She would not stay in bed and was constantly moaning and wringing her hands; she seemed to think that there was something in her chest which caused her misery. Patient was put to, bed and got a mixture of Tinct. Opii and Nux Vomica, 5 mins. of each three times daily. 15th Novr. Patient had improved both mentally and physically. At this time she was taking 10 mins. of Tinct. Opii three times daily. She felt that the me-

decine soothed her greatly.

H. Y. female, aged 47, admitted 16th Octr.

Case VII. contd.

The improvement slowly continued; she remained still dull and listless, and felt unable to do any work, though she slept better. For about two months there seemed to be little mental change, patient feeling depressed, restless and unable to settle herself to do anything.

3rd March, 1897. Patient had greatly improved; she felt much brighter and assisted the Nurses in the wards

She was sleeping well and taking her food well.

31st May. Patient was very anxious to get home, as she felt quite able to look after her household affairs.

14th April. Opium ddiscontinued.

11th Septr. Patient was discharged RECOVERED.

In six months she

lbs.

CASE VIII.

J. M. male, aged 70, admitted 31st Octr. 1894.

Had been dull and despondent, saying that it was all

over with him, and he would not leave his bed; had been
in this state for four weeks.

On admission, his physical health was good. Mentally he was very excited and talkative, and had hallucinations both of sight and hearing. There was considerable mental confusion and enfeeblement, loss of memory, and incoherence. On account of lameness and unsteadiness, due to rheumatoid arthritis, he was put to bed; but was very restless, and talked incoherently to himself.

1st Novr. He was ordered Tinct. Opii, beginning with 10 mins. with 5 ms. of Tinct. Nucis Vom. three times daily.

4th Novr. No marked mental improvement; still restless and sleepless at night.



Case VIII. contd.

5th Novr. Dose of opium increased to 20 mins.

8th Novr. Considerably improved; slept better, but

during the day still restless and talkative.

9th Novr. Dose of opium increased to 30 mins.

12th Novr. Still steadily improving; no ill effects

on the digestive tract, as he took his food well.

13th Decr. Slept well, and talked quietly and ra-

tionally; was still in bed, as he refused to get out

of bed until he was taken home; dose of opium being

gradually diminished.

26th Decr. Opium discontinued; steady improvement.

2nd March 1895. Patient was discharged RECOVERED.

CASE IX.

C.B. female, aged 22, admitted 9th Sept. 1897.

Disposition quiet, habits irregular; exciting cause,

mental worry on account of becoming pregnant. 10 days

Lost 14

Case IX. contd.

before admission she became excited and violent; she refused to answer any questions and was afraid the house was going to fall on her; had attempted to cut her throat with a carving knife.

On admission, her physical health was poor. Mentally she was very depressed, very restless, walking up and down the wards, wringing her hands; resistive and impulsive; habits dirty.

29th Septr. Very little change in patient's condition

Was taking her food a little better, but felt most miserable; subject to fits of weeping; habits still

faulty.

3rd Octr. Patient began to get 5 mins. tinct, opii and 5 mins. tinct. nux vom. three times daily.

11th Octr. Restlessness had considerably diminished.

Was much more composed, and doing a little work.

Case IX. contd.

13th Octr. The dose of opium was increased to 10 ms.

Depression much less marked; patient more contented.

Since taking the ppium, had slept fairly well.

29th Octr. The restlessness had entirely passed off, and the mental improvement was very marked. Was now industrious, took her food well and slept well.

17th Novr. The dose of opium was diminished to 5 ms. three times daily. Continued mental improvement; physical condition good.

30th Novr. The dose of opium was reduced to 5 mins. of the tincture night and morning.

10th Decr. The opium was discontinued. Patient had improved markedly mentally and physically since she began to take the opium.

and patient was anxious to get home. Was sleeping well, and was quite composed and industrious.

Case IX. contd.

15th Jany. 1898. She went home, having seemingly returned to her normal mental condition.

In four months she gained 26 lbs.

CASE X.

J. C. male, aged 24, admitted 6th Aug. 1895.

Four weeks previous to admission he became very restless and sleepless, and suffered from great depression,
accusing himself of various crimes. Had several times
threatened to commit suicide; was suspicious about his
food.

On admission, his physical health was good. Mentally he was very depressed, and wore a dull, vacant, stupid stare. He expressed delusions of persecution directed against his mother. Had also hallucinations of vision and hearing.

26th Septr. Very little change in patient's condition.

Case X. contd.

Still very depressed and delusional.

3rd Octr. He began to take 5 mins. of Tinct. Opii twice daily, which was gradually increased to 20 ms.

16th Octr. Had greatly improved; suicidal tendencies having apparently ceased, he was thought to be well enough to be sent out to work in the garden. He continued to recover and was quite happy working in the garden.

30th Octr. Patient tried to strangle himself with his scarf; after this he was not allowed out to work. He was kept under strict supervision, and although he would occasionally be dull and stupid, there was no suicidal tendency.

22nd Feby. 1896. Mental condition improved, although he was still somewhat confused and slow in ideation.

15th May. Speech and conduct quite rational; still

Case X. contd.

slow in ideas, otherwise maght be said to be quite well.

28th June. Patient was discharged RECOVERED.

During the opium treat-ment he gained 2 lbs.

CASE XI.

M. P. female, aged 65, admitted 4th June, 1896.

Had had previous attacks of melancholia. Had been worried at home with her daughter, who was an epileptic imbecile. She had been depressed for about a month and was very restless; had attempted to cut her throat with a knife.

On admission, her physical condition was poor. Mentally she was dull and restless, and stated that her trouble was all brought on by her daughter's bad behaviour.

At times she was very emotio nal, often starting cry-

Case XI. contd.

crying whenever she was spoken to. She was also sleepless at night.

8th June. Patient began to take opium with nux vomica, 5 mins. of each three times daily. At this time she was very restless during the day and sometimes very troublesome. Slept somewhat better at night.

15th June. The dose of opium was increased to 10 ms.

15th June. The dose of opium was increased to 10 ms. three times daily.

30th June. Patient had greatly improved both mentally and physically; was still a little restless and worried very much about getting home.

29th July. Patient seemed to have quite recovered, and continued to take the opium up to the date of her discharge.

12th August. Patient was discharged RECOVERED.

In three months she gained 3

CASE XII.

A. M. female, aged 38, admitted 28th March, 1896. Habits industrious and regular, very nervous, and showed symptoms of mental derangement 5 months ago.

Of late she had become very restless, and feared that some one would kill her; had been sleepless, wandering about the house at night.

On admission, her physical health was good. Mentally she was depressed and most miserable, and was constantly afraid that some dreadful calamity was to overtake her; had no inclination for food, and was very sleepless.

lst April. Patient began to take opium and nux vomica, 5 mins. of each three times daily. The dose of
opium was slowly increased to 15 mins. three times
daily: this dose was arrived at three weeks since the
commencement of treatment. By this time she was

Case XII. contd.

sleeping much better, only being restless about every third night. During the day she was much more composed, and often seemed to forget her troubles. Was taking her food well.

27th May. Patient had greatly improved, but was subject to depression, lasting 2 or 3 days at a time.

Those attacks soon became fewer, and at the beginning of July she seemed to have almost recovered. Her delusions had entirely disappeared; she slept well, and was very industrious during the day.

29th July. The opium was discontinued.

15th August. Patient was discharged RECOVERED.

In four & a half months she gained 1

CASE XIII.

M. G. female, aged 24, admitted 26th Octr.

1896. Habits were temperate; exciting cause, childbirth. She had been depressed and excited for a few
months before admission.

On admission, her physical health was poor. Mentally she was dull, would answer no questions, and was continually moaning and crying. She was at once put to bed, but the first night after admission she slept none, and it was with difficulty that she could be kept, in bed.

Patient got ½ gr. of morphia night and morning. This subdued the excitement considerably; but it did not procure her much sleep. The only time patient was perfectly quiet was when she was at her meals which she took well, but began moaning immediately after.

4th Novr. There was little improvement in patient's

Case XIII. contd.

condition; she was still very restless and troublesome, and her habits were very dirty.

12th Novr. Patient had somewhat improved; she was sleeping better, and was not so noisy during the day.

She generally had a good day followed by a bad night.

28th Novr. Patient had considerably improved; the motor restlessness had greatly diminished; her habits were quite clean; and her physical condition had vastly improved. For the next month she was improving slowly but steadily.

6th Jany. 1897. The morphia was discontinued.
27th Jany. The restlessness had almost all passed
off, but patient seemed to be slightly confused.
1st March. Patient was working in the kitchen.

20th April. Patient was discharged RECOVERED.

Since admission she had gained several lbs.

CASE XIV.

C. T. female, aged 43, admitted 4th Jan.1897.

Very reserved disposition; had always been regarded as being peculiar; mother was very neurotic. Patient had been very depressed for a few months; she said she was afraid to live, and had threatened to commit suicide on several occasions.

On admission, her physical health was fair. Mentally she was very much depressed, suspicious, and constantly in fear of an impending calamity; was very restless and sleepless at night.

7th Jany. Patient began to take opium and nux vomica, 5 mins. of each, three times daily. Was very suspicious of every one about her; very restless and sleepless since admission.

12th Jany. The dose of opium was increased to 10 ms.

After this the patient began to sleep much better,

Case XIV. contd.

but still remained rather restless and depressed during the day.

7th Feby. Patient had improved considerably, both mentally and physically; slept well, took her food well, and was very industrious. The delusions seemed to have disappeared. For the next few months patient improved slowly, being only, occasionally mildly depressed. Was very industrious and worked in the kitchen.

28th August. Patient continued to take the opium.

The depression had entirely disappeared, but there was marked mental enfeeblement.

30th Aug. Patient took an attack of influenza, and was confined to bed for about 3 weeks. She did not seem to have recovered from the influenza until the beginning of October.

Case XIV. contd.

10th Feby, 1898. Patient went home, having quite returned to her normal condition.

During the opium treat ment she had gained 7 lbs.

CASE XV.

E. C. female, aged 49, admitted 8th April 1896. Habits regular; had had one previous attack of melancholia; had a great suicidal tendency, and had threatened to drown herself previous to admission. Had been very depressed for a week previous to admission. On admission, her physical health was very poor. She suffered from innominate aneurism, and had also symptoms of aneurism of the abdominal aorta. Mentally she was very depressed and was very anxious to put an end to her existence; had no inclination for food; complained greatly of annoying pain in the umbilical region; was also very sleepless. She was at once put

Case XV. contd.

to bed, and got a mixture of opium and nux vomica, 5 mins. of each, three times daily (with 5 grs. of iodide of potass.).

15th April. The dose of opium was increased to 15 ms.

28th April. Patient was sleeping a little better,

and did not seem to be so anxious to put an end to

herself; still complained of abdominal pain. During

May the patient was more composed; was still rather

sleepless and somewhat depressed. As she had considerably improved since admission, her friends were anxious to give her a trial at home.

12th June. Patient was discharged. She still remained dull and somewhat sleepless, but the suicidal tendency had markedly diminished. She had continued to take opium up to the time of her discharge.

Weight not taken, as she was confined to bed.

C A S E XVI.

G.H. female, aged 50, admitted 9th Feby. 1898. She was very depressed and suspicious for 2 months, and had delusions of being poisoned, and that she had committed unpardonable sins.

On admission, her physical health was fair. Mentally she was dull and taciturn, and frequently complained of pains in her head; was also somewhat sleepless.

10th Feby. Patient began to take opium and nux vomica, 10 mins. tinct. opii and 5 mins. tinct. nucis vom. three times daily. She was subject to fits of crying.

16th Feby. The dose of opium was increased to 15 ms.
Slight mental improvement since admission.

20th Feby. Patient had improved considerably both mentally and physically; slept well, and the depression had almost entirely disappeared.

Case XVI. contd.

28th Feby. Patient seemed to have regained her normal mental condition; continued to take the opium.

5th March. The dose of opium was reduced to 10 ms.

Continued mental improvement.

21st March. Dose of opium reduced to 5 mins. three times daily.

31st March. Patient was discharged RECOVERED.

C A S E XVII.

J.D. female, aged 31, admitted 6th Novr. 1897.

Quiet disposition, habits industrious; had had one previous attack of melancholia, which had come on after the birth of a child. Duration of present attack about a week; exciting cause family worry; took no interest in her household duties, or anything else around her.

In six wks.
gained 9
lbs.

Case XVII. contd.

On admission, her physical health was fair. Mentally was labouring under slight mental depression; felt unfit to do any work; was subject to fits of crying.

30th Novr. Seemed little change in patient's condition; was most restless and unsettled, and always asking to get home; spent most of her time watching doors trying to get an opportunity to escape.

7th Decr. Patient began to take 5 mins. opium three times daily. Still remained very restless, and took no interest in anything around her.

16th Decr. The dose of opium was increased to 10 ms. threettimes daily; no marked change in her mental condition.

3rd Jany. 1898. Patient escaped from, the Asylum by breaking a window; ran home, but was brought back the same day; still remained slightly depressed.

Case XVII. contd.

14th Jany. The opium was increased to 20 mins. three times daily; patient was very restless that day, and was put to bed; said that she would escape again through a window; took her food and slept well, but would not compose or settle herself to do any work.

20th Jany. The dose of opium was increased to 25 ms. There was considerable mental improvement; occupied herself by knitting.

29th Jany. Mental improvement continued; still confined to bed.

8th Feby. Patient up; mental improvement continued; depression had almost entirely disappeared. The dose of opium was diminished today to 15 mins.

25th Feby. Patient seemed to have almost quite recovered. The opium had been reduced to 5 mins. three times daily.

26th Feby. Patient was discharged RECOVERED.

Weight the same as at commence-ment.

C A S E XVIII.

E.M. female, aged 32, admitted 8th April,1897.

Quiet disposition, habits of late somewhat irregular;

had been constantly tippling with alcohol since birth

of her last child. Ten days previous to admission,

she had become quite despondent and had had frequent

outbursts of excitement.

On admission, her physical health was good. Mentally she was much confused, very depressed, and liable to frequent outbursts of excitement.

21st April. Since admission patient had been very sleepless, frequently requiring sulfonal at night; was subject to fits of crying; could not sleep, she said, because she saw a vision of her dead child. On this date she was very dull, would scarcely answer any questions, and seemed depressed.

26th April. Patient became more excited and destructive.

Case XVIII. contd.

During the next two months patient was very maniacal and sometimes depressed.

10th July. Patient began to take opium and nux vomica, 10 mins. opium and 5 mins. nux vomica, three times daily. The dose was slowly increased to 15 ms. 27th August. Patient had so much improved that she was allowed to work in the kitchen. At this time she was sleeping well, but was rather confused mentally. After this she had no more attacks of depression. She continued taking the opium mixture until the end of December. There was a marked mental improvement; was sleeping well, taking her food well, and was very industrious.

4th Feby. 1898. Improvement continued. Patient now seemed almost perfectly well.

12th Feby. Patient was discharged RECOVERED.

Weight the same as at commence-ment of treatment.

C A S E XIX.

M.D. female, aged 60, admitted 6th Novr. 1897. Quiet disposition, temperate habits; had had one previous attack of melancholia many years ago; had had some family worry of late, for the last 6 or 7 weeks. Her manner had become quite altered; was restless and sleepless at night, and had hallucinations of sight and hearing; also had delusions about persons putting poison in her food; had attempted to drown herself in a burn a few hundred yards from her house. On admission, her physical condition was good. Mentally she was dull and reticent and extremely suspicious, especially regarding her food.

10th Novr. There was no mental change; had been taking her food fairly well, but was somewhat sleepless.

Patient began today totake 10 mins. of opium and 5 ms.

nux vomica, three times daily.

Case XIX. contd.

13th Novr. There was a slight mental improvement.

She was sleeping well, and the restlessness was not so marked.

17th Novr. The dose of opium was increased to 15 ms.

three times daily. She felt much better, and admitted

that she had had delusions before coming to the Asylum.

7th Decr. The improvement still continued; the hallu
cinations of hearing seemed to have entirely disappear
ed. 20th Decr. Patient was feeling much better; was

still atmitmes depressed, but was able to assist in

the ward.

14th Jan. 1898. The dose of opium was increased to 20 mins. three times daily. She was still somewhat suspicious and restless at night.

20th Jany. Opium increased to 25 mins. three times daily. There was a considerable mental improvement;

Case XIX. contd.

occupied herself with knitting the most of the day.

8th Feby. Patient now up; mental improvement continued. She still remained a little restless, but the mental depression had almost entirely disappeared. The dose of opium was this day diminished to 15 mins. of tincture, three times daily.

22nd Feby. Patient seemed almost quite recovered.

10th March. The opium had been slowly diminished and was this day discontinued.

12th March. Patient was discharged RECOVERED.

CASE XX.

A.C. female, aged 37, admitted 26th June, 1896.

Habits regular; pregnancy was the exciting cause of the attack; had showed slight mental derangement 3 months previous to her confinement. After her

In four months she lost 18

1bs.

Case XX. contd.

confinement the mental depression became more acute.

She became quite unmanageable at home, constantly crying and lamenting her past life; had been in this state for 10 months.

On admission, physical health was fair. Mentally she was very dull and was continually bewailing her sad fate. She was troubled with hallucinations of hearing; was very sleepless and frequently required sulfonal; did a little work during the day, but was very depressed and restless.

10th July. Patient began to take opium and nux vomica, 5 mins. of each three times daily.

15th July. Patient began to sleep better, only being talkative and restless occasionally.

26th July. There was a slight mental improvement.

Seldom had fits of crying, and the mental depression

Case XX. contd.

did not seem so acute.

10th Aug. The dose of opium was increased to 10 ms. three times daily. Patient often became restless and talkative towards morning.

26th Aug. Last night patient became very restless, very talkative, and wept frequently; she got 30 grs. sulfonal and slept well afterwards. During the day she was more composed, but was frequently very dull in the morning.

12th Sept. There was a considerable improvement; she was sleeping better; during the day was very industrious, took her food well, and seemed to take quite an interest in everything about her.

28th Sept. Patient was sleeping well, and the dullness had entirely disappeared. During October the
improvement continued. Was taking the opium up to

Case XX. contd.

the time of her discharge.

29th Oct. Patient was discharged RECOVERED.

In three months she gained 5

CASE XXI.

J.G. female, aged 42, admitted 13th March,
1897. Quiet disposition; habits regular; had had one
previous attack. Exciting cause of present attack,
child birth. For a fortnight previous to admission
she was very restless and depressed; imagined that her
children were being ill treated.

On admission, physical condition was fair. Mentally
patient was very nervous and excitable, and was afraid
that something dreadful was to befall her children.

She had been an inmate of this Asylum after the birth

Patient was put to bed at once. A few days after

of her first child, 6 years previous.

Case XXI. contd.

admission patient became more excited, and was very sleepless, shouting "I have no brain", and striking her head with both hands. This shouting would last for hours; her appetite was poor, and she had occasionally to be fed.

8th April. Patient became very excited and required three Nurses to keep her in bed. Got a hot bath, and slept for three hours; on waking was again excited.

10th April. Patient became, again excited. She got for the next 3 days patient got the morphia every morning and she remained quiet most of the day.

14th April. Patient was very excited in the morning.

14th April. Patient was very excited in the morning.

Got a hot bath (Temp. 98°). In one hour she went to

sleep and was removed to bed and slept for 3 hours.

In the evening she was quite quiet, and said she felt

Case XXI. contd.

satisfactory.

much better; she was slightly confused. During the next 3 weeks patient improved slowly, only occasionally getting excited for a time in the morning. When this was very acute, she got \(\frac{1}{4} \) gr. morphia, after which she at once went to sleep.

7th May. Morphia was discontinued.

17th May. Patient was allowed up; at this time she was sleeping pretty well, and had only an occasional outburst of excitement, always occurring in the early morning. For a month patient was doing very well.

16th June. She again became very excited and got \(\frac{1}{4} \) gr. morphia, after which she quietened down immediately.

18th June. Patient again became excited. She got a hot bath, was put to bed, and slept for 5 hours. On the following day patient was very restless. She was taking her food well and her physical condition was

Case XXI. contd.

21st June. Patient was allowed home on trial, but was brought back on 3rd July, as she became too excited to be kept at home. Her weight on returning was 9 st. At this date patient was considerably depressed and still became excited, in the early morning. The treatment with morphia was again tried, and it suited patient well, as she got a few hours of sleep, after \$\frac{1}{4}\$ gr. hypodermically, and when she awoke she remained quiet during the rest of the day.

16th Augt. The morphia was discontinued, as patient was composed all day. From this date patient rapidly improved.

28th Augt. Patient seemed to have quite returned to her normal mental condition.

11th Sept. Patient was discharged RECOVERED.

In five months she lost 3

CASE XXII.

I.M. female, aged 26, admitted 25th Sept.1895.

Seven months previous to admission she gave birth to

an illegitimate child; about two months after the con
finement she became very moody and depressed; she often

expressed a desire to put an end to herself, and the

day before admission she attempted to strangle herself

by means of a rope.

On admission, she was pale, careworn, and anaemic.

Mentally she was suffering from marked depression, being disinclined to speak, except occasionally to demand in an excited manner that she should be poisoned or shot, as she was not fit to live.

26th Sept. Patient very depressed and restless and always asking for poison.

12th Oct. She attempted to commit suicide by tying a piece of string tightly round her neck.

Case XXII. contd.

27th Decr. Patient began to take opium and nux vo-mica, 5 mins. of each, three times daily, gradually increasing the dose.

13th Jany. 1896. The dose of opium increased to 20 mins. Little improvement in mental condition; still strong suicidal tendency.

12th Feby. There was some improvement both mentally and physically.

10th May. Patient was still taking the opium and continued to improve; had attacks of depression in the morning; said she would not care to go home, as she would be afraid to trust herself.

lst July. Patient had improved greatly; was much
brighter, and was engaged in doing some little work
about the wards. The suicidal tendency had disappeared, but patient was very reticent.

Case XXII. contd.

1st Decr. Continued improvement; took more interest in her surroundings and worked industriously every day in the sewing room.

23rd Feby. 1897. Patient went home on 28 days' pass, and as she continued well the pass was extended for another month, at the end of which time patient returned to the Asylum.

In two months she gained 4

CASE XXIII.

M.M'G. male, aged 29 years, admitted 5th Jan.

1896. For several weaksshe had been in a depressed state and imagined that everybody was conspiring against him. Two days before admission he had inflicted

Case XXIII. contd.

a deep wound on the right side of his neck, from which he bled profusely.

On admission, his physical health was poor; he was very anaemic, having lost a considerable quantity of blood. Mentally he was very depressed, confused and restless. He was placed in bed, where he was very restless, and imagined that he was going to be killed.

11th Jany. Patient still very depressed, restless and sleepless; said that everybody was against him.

12th Jany. Patient began to take opium, 10 mins.

Tinct., three times daily. (with 10 ms. tinct. nux vom.)

17th Jany. The dose of opium was increased to 15 ms.

22nd Jany. Patient was much brighter, and hopeful of his getting better.

1st Feby. Patient has improved very much; was bright and cheery; delusions passing away. Was allowed up.

Case MXXIII. contd.

11th Feby. Improvement continued; ate and slept well.

22nd Feby. The dose of opium was diminished gradually to 5 mins. three times daily. Depression had almost entirely disappeared; but patient was very timid,
shy, and childish in conduct and manner.

28th Feby. Opium was discontinued.

lst March. Patient was sent out to work; there was very little depression, but he sometimes said that he thought there was something wrong.

25th March. Patient out working every day; with the exception of some slight depression, patient was doing well.

In six
weeks he
gained 7
lbs.

C A S E XXIV.

J.P. male, aged 30, admitted 3rd Jany. 1898. Industrious, but of a silent and morose disposition. For about 6 weeks he had been depressed, and refused his food, as he was suspicious of it; had delusions about the state of his bowels; and had threatened to commit suicide; slept seldom.

On admission, his physical health was rather poor.

Mentally, he was dull, listless and apathetic; answer-

ed questions with difficulty; said that he was very

miserable, and that he was sure he was going to die.

16th Jany. There was very little change in patient's

mental condition; one day he was bright, and then he

fell back into the same listless state.

17th Jany. Patient began to take opium, 10 mins. of tinct. opii, three times daily. The dose was gradually increased to 20 ms. t.i.d.(with 10 ms.tinct.nux vom.)

Case XXIV. contd.

2rd Feby. Patient much improved; was bright and cheery the greater part of the day, though sometimes a little depressed in the forenoon; was more willing to answer questions, and thought he was getting better.

22nd Feby. Continued improvement; only occasionally of a morning that depression was present of a hypochondriacal kind; still inclined to think too, much concerning his stomach and bowels.

28th Feby. The opium had been rapidly diminished in dose, and was on this date discontinued. Depression seemed to have passed off; there remained only some slight mental confusion or weakness.

25th March. Patient was discharged RECOVERED.

In 6 wks. he gained 7 los.

C A S E XXV.

A.M. female, aged 64, admitted 10th Novr.1897.

Quiet disposition, habits temperate and regular; had a previous attack of melancholia about 30 years ago. For 3 months before admission she had been depressed and restless, and quite unfit to attend to her household duties.

On admission, her physical health was fair. Mentally she was depressed and very restless, and said that she felt very miserable; was sleepless and refused food.

She was at once put to bed, but it was with difficulty that she could be kept in it.

15th Novr. Patient began to take opium and nux vomica, 5 mins. of each, three times daily.

17th Novr. Slight improvement in patient's condition.

The restlessness was not so great, and she was staying in bed.

20th Novr./

Cma s e XXV. conta.

20th Nowr. Patient was very much more composed, and the dullness was passing off; took her food and slept well.

22nd Novr. Patient was allowed to get up.

21st Decr. Patient was steadily improving, and was doing a little work in the wards; still somewhat restless and very anxious to get home.

12th Jany. 1898. The dose of opium was increased to 15 mins. tinct. Patient was still very restless, but did her utmost to appear composed.

29th Jany. Dose of opium was increased to 20 mins.

Patient had improved slightly, but still remained slightly unsettled.

3rd Feby. Patient had greatly improved; the restlessness had also diminished, and she was very anxious to
get home.

Case XXV. contd.

three times daily.

28th Feby. The dose of opium was increased to 30 ms.

tinct. t.i.d. Patient still remained somewhathrest
less, but the mental depression had almost disappeared.

4th April. Dose of opium was diminished to 10 mins.

three times daily; patient was now steadily improving;

restlessness greatly diminished; was industrious.

8th April. The dose of opium was diminished to 5 ms.

llth April. The opium was discontinued; patient was keeping well.

22nd April. Patient was discharged RECOVERED.

In five months she gained 5

CASE XXVI.

ment. /

H.B. female, aged 21, admitted 6th Novr. 1897. Had always been nervous; habits regular; the exciting cause seemed to have been a love disappointment; for a few weeks before admission she had been very depressed; she imagined she had committed some great sin, for which she was to be murdered; she had requested her doctor to put an end to her existence. On admission, her physical health was fair. Mentally She had an anxious expression, and was in constant dread of impending danger. 9th Novr. Patient began to take opium and nux vomica, 5 mins. of each, three times daily. Patient very depressed, had hallucinations of hearing. 12th Novr. Patient was sleeping a little better, but was very dull and took no interest in anything about her. By the 15th, there was a slight mental improve-

Case XXVI. contd.

improvement; the hallucinations of hearing were not so marked; and she began to assist in the wards; also was taking her food well.

17th Novr. The dose of opium was increased to 10 ms.

t.i.d. The mental improvement continued; talked more

freely and did not feel so depressed.

7th Decr. Patient was working in the sewing room and the dullness was slowly passing off.

15th Decr. There was no marked mental change; she was still nervous and afraid that something was to befall her.

20th Decr. The dose of opium was increased to 15 ms.

Patient was at that time more depressed and would do

no work; there was a slight tendency to stupor.

6th Jany. 1898. The dose of opium was increased to

20 mins. t.i.d.; patient still remained dull and taciturn /

Case XXVI. contd.

taciturn; took no interest in anyhting around her and had to be fed by a Nurse.

11th Jany. The dose of opium was increased to 25 ms.
Mental condition unchanged.

26th Jany. The dose of opium was increased to 30 ms. tinct.; there was slight mental improvement; answered when spoken to, out still very much confused.

28th Jany. Patient tried a little sewing, but took a few minutes to every stitch.

8th Feby. The mental improvement continued; she took her food herself, and wrote a letter to her mother telling her that she was keeping much better; her actions are still very listless.

20th March. During the last month patient had greatly improved; was more active and talked freely when spoken to; her health was good.

Case XXVI. contd.

4th April. The dose was reduced to 25 mins. t.i.d.;

Patient was much better both mentally and physically;

was industrious, occupied herself by knitting and making paper flowers.

9th April. The dose of opium was reduced to 20 ms. tinct. t.i.d. Improvement continued.

12th April. The dose of opium was reduced to 20 ms.

night and morning; patient almost quite well, but actions are still slow.

17th April. The dose of opium was reduced to 20 mins. tinct. night and morning.

18th April. The dose of opium was reduced to 10 mins.

night and morning. Patient seems quite returned to

her normal mental condition.

20th April. Opium discontinued.

22nd April. Patient is quite well, and is to be discharged next week.

In five months she gained 13

lbs.

CASE XXVII.

E.L. female, aged 54, admitted 2nd Feby. 1897.

Quiet, industrious woman; for three months previous to admission had been very despondent, very sleepless, and at times became excited; declared that she and all her family were doomed; often refused to take her food.

On admission, her physical condition was poor. Mentally she was very much depressed; took no interest in anything around her; sat in a crouched up attitude, moaning and wringing her hands.

10th Feby. Patient began to take opium and nux vomica, 5 mins. of each, three times daily. At this time she was very restless and depressed, and constantly in dread of an impending calamity; occasionally refused to take her food.

25th Feby. There was no mental change; patient was resistive, often refused her food, and was very dirty

Case XXVII. contd.

in her habits; she slept fairly well at night; was being fed with a masal tube.

lst March. Patient still being fed daily with the tube; very weak, had to be put to bed.

13th & 14th March. Patient took her food fairly well, but was very restless and troublesome; it was with difficulty she could be kept in bed.

15th March. Began to refuse her food again; had again to be fed with the nasal tube; steadily refused her food up to 31st March.; was occasionally sleepless at night, and required to get sulfonal.

April. During the month there was no marked mental improvement; patient took her food well, and seemed to be looking better physically; was sleeping a little better at night.

8th May. The dose of opium was increased to 20 mins.

Case XXVII. contd.

tinct. three times daily. After the dose of opium was increased, patient began to improve, both mentally and physically; the restlessness rapidly diminished, and she slept well.

12th July. Patient was up and moving about; she was still rather depressed and would not compose herself to do any work.

1st Sept. Continued slow improvement.

she could not get home.

30th Sept. Patient began to work well; also took her food well, but occasionally became rather confused.

At times she became emotional and began to cry because

5th Jany. 1898. Patient still remained somewhat restless and nervous, but was steadily improving; was still taking opium.

15th Feby. Patient was more composed and very anxious

Case XXVII. contd.

to get home. The dose of opium was reduced to 20 ms. of tincture, twice daily.

25th Feby. The dose of opium was again reduced to
15 mins. of tincture, twice daily. The mental improvement still continued, and she was very industrious.

9th April. The dose of opium was reduced to 10 ms. twice daily.

22nd April. The mental improvement continues; patient is still taking 10 mins. tinct. opii , t.i.d.

In 14 months sh gained 20 lbs.

C A S E XXVIII.

M.F. female, aged 31, admitted 27th Augt.1897.

Habits temperate; exciting cause of attack, child birth.

For two months previous to admission, she had been very delusional; she imagined that her child was dead, and that she had poisoned it; before her confinement she would not believe that she was pregnant, but declared that she felt rats in her abdomen; had also threatened to do herself bodily injury.

On admission, her physical condition was poor. Mentally she was quite dazed and confused; had not the least idea of her surroundings; had no memory; and would answer no questions. She slept little the night after admission. On the following day her temperature was 99; the vagina discharge was offensive; got a vaginal douche twice daily; remained very restless, and took her food badly.

Case XXVIII. contd.

2nd Sept. Patient was as dazed as ever and her habits were dirty; took little food, and was very sleepless at night.

6th Sept. Patient began to take opium, 5 mins. tinct. three times daily.

8th Sept. Patient seemed a little brighter and seemed to be coming to herself again.

11th Oct. The dose of opium had been gradually increased to 20 mins. tinct. three times daily; was still confined to bed; was subject to outbursts of excitement during which time she attacked the Nurses.

30th Oct. Patient had got, up; there seemed a slight mental improvement; still very reticent and occasionally impulsive.

13th Novr. No mental change; took her food well, but would do no work, nor speak to anyone.

Case XXVIII. contd.

20th Decr. Patient was improving slowly; seemed to have formed a delusion against one of the other patients, and would throw a chair at this other patient, or any other article within her reach; she was doing a little work in the wards; was taking her food well, and sleeping better than formerly. Her physical condition was improving.

3rd Feby.1898. The improvement has continued; she is not so impulsive as formerly.

22nd Feby. There was no further mental change.

12th April. Patient continued taking the opium; had improved greatly, both mentally and physically, and was not so impulsive as formerly.

22nd April. Patient is still taking the opium, and the mental improvement continues.

In seven months she gained 11 lbs.

C A S E XXIX.

J.B. female, aged 22, admitted 5th Jany. 1898.

Nervous disposition, habits industrious; had been depressed for about four months before admission; had been sleepless and had delusions against her friends; had also threatened to commit suicide.

On admission, her physical condition was good. Mentally, she was nervous and afraid of some impending calamity.

6th Jany. Patient began to take 10 mins. tincture of opium, and mins. tinct. nux vomica, three times daily.

11th Jany. The dose of opium was increased to 15 ms. tinct. three times daily.

14th Jany. Patient had improved considerably since last entry; the nervousness was much less marked; took her food well and slept well.

Case XXIX. contd.

20th Jany. Improvement continued; patient was slight ly depressed in the morning, and brightened up towards the afternoon.

28th Jany. The mental depression seemed to have entirely passed off; ate and slept well and was very industrious.

31st Jany. The dose of opium was diminished to 10 ms. of the tincture, three times daily; patient remained well.

22nd Feby. Patient was steadily improving, though still a little nervous.

23rd Feby. The dose of opium was reduced to 5 mins. three times daily.

28th Feby. Patient was almost quite recovered; was only occasionally very mildly depressed; the opium discontinued ondthat day.

Case XXIX. contd.

22nd March. Patient now seemed to have returned to her normal condition; her physical health was good.

30th March. Patient had a relapse; was very depressed; opium was given, 15 mins. threettimes daily.

4th April. The dose of opium was increased to 20 ms. t.i.d. No mental change.

9th April. The dose of opium was increased to 25 ms. t.i.d.; still remained very depressed.

22nd April. Patient is still taking 25 mins. tinct. opii, t.i.d.; has greatly improved since last note; she is now quite bright and cheerful, and is most industrious.

In three months she gained 2

CASE XXX.

P.M'Q. female, aged 49, admitted 15th Jany.

1898. Had had one previous attack; the present attack had lasted a few days; had been much confused mentally, and would hardly answer any questions; at times became excited; and her habits were very faulty.

On admission, her physical condition was poor. Mentally she was dull and listless; there was great men-

tal confusion, and occasionally she became excited;
was troubled with hallucinations of sight. She was
put to bed. Was constantly picking the skin of her
arms.

5th Feby. Patient began to take opium and nux vomica, 10 mins. tinct. opii, and 5 mins. tinct. nucis vomicae, three times daily; was up, but very restless, pulling off her clothes and picking her skin; did not take her food well.

Case XXX. contd.

11th Feby. The dose of opium was increased to 20 ms.
there was no mental improvement; patient was still as
restless and troublesome as formerly.

25th Feby. The dose of opium was increased to 30 ms.

tinct. opii, three times daily; there was a slight mental improvement; patient had stopped picking her skin;

was still restless, and occasionally sleepless at night.

27th Feby. The dose of opium was increased to 40 ms.

tinct. opii, three times daily; patient was steadily
improving; the restlessness had greatly diminished;

had stopped taking off her clothes at all hours of the
day; was also sleeping better; her bowels were quite
regular.

22nd March. Mental improvement continued; the restlessness had entirely disappeared; still slightly depressed, but occupied herself by assisting the Nurses Case XXX. contd.

with the ward work.

4th April. The dose of opium was reduced to 30 ms.

t.i.d.; there was a great mental improvement; she was

quite active and most industrious; talked freely.

16th April. The dose of opium was reduced to 20 mins.

tinct. opii, t.i.d.; mental improvement continues.

22nd April. Patient's physical condition is improving,

and she seems now to have quite recovered; is still

taking opium.

In two
months she
lost 155

CASE XXXI.

E.N. female. aged 62, admitted 26th Jany. 1898. Had been very depressed for a few days previous to admission; imagined that her neighbours were constantly persecuting her; was troubled with hallucinations of hearing; and had threatened on several occasions to drown herself.

On admission, her physical condition was weak. Mentally she was most suspicious and was afraid we were to poison her; imagined she was to be taken up for fire-raising.

1st Feby. Patient began to take opium and nux vomica, 10 mins. tinct. opii and 5 mins. tinct. nucis vom. three times daily.

4th Feby. Patient was facile, emotional and confused in her conversation; there was slight thickness and hesitancy in utterance; had dreams of persecution;

Case XXXI. contd.

and had also hallucinations of hearing.

12th Feby. The dose of opium had been gradually increased to 20 mins. tinct. three times daily; was keeping rather better; but still remained very depressed, and had hypochondriacal delusions.

tinct. three times daily; there was no mental change.

22nd March. Patient had improved greatly during the previous few weeks; the delusions had disappeared;

1st March. The dose of opium was increased to 25 ms.

4th April. The dose of opium was increased to 30 ms.

t.i.d.; mental improvement continued.

9th April. The dose of opium was increased to 35 ms.

t.i.d.; was somehwat restless, but the dullness had

almost entirely disappeared.

14th April. No further mental change.

slept well and took her food well.

Weight the same as at commence-ment of treatment.

C A S E XXXII.

E.B. female, aged 21, admitted 26th Jany. 1898.

Exciting cause, child birth; had been very depressed for a few weeks previous to admission; was very sleep-less, moving about the house muttering to herself.

On admission, her physical condition was fair. Men-tally she was very depressed; had a vacant expression, often refused to answer any questions; she was much confused, and always took a few seconds to realise what had been said to her.

27th Jany. Patient began to take opium and nux vomica, 10 mins. tinct. opii, and 5 mins. tinct nucis vom. three times daily.

10th Feby. The dose of opium was increased to 15 ms. tinct. t.i.d.; slept well.

15th Feby. The dose of opium was increased to 20 ms. tinct. t.i.d.

Case XXXII. contd.

21st Feby. The dose of opium was increased to 25 mins.
tinct. t.i.d.; there was a decided mental improvement;
talked quite freely, and occupied herself by knitting

1st March. The dose of opium was increased to 30 mins.

t.i.d.; the mental improvement continued.

or assisting the Nurses with some ward work.

22nd March. The mental depression had at this date almost entirely disappeared, patient being only a little dull in the morning.

2nd April. The dose of opium was increased to 40 mins.

t.i.d.; no further mental change.

14th April. Patient was steadily improving.

15th April. Opium was reduced to 30 ms. tinct. t.i.d.

16th April. Opium reduced to 20 mins. tinct. t.i.d.

20th April. Opium reduced to 15 mins. tinct. t.i.d.; patient mentally greatly improved.

22nd April. Patient now seems to be quite well.

CASE XXXIII.

J.R. female, aged 40, admitted 14th Jany. 1898. Quiet disposition, habits regular; had been slightly depressed a year previous, but for three weeksbefore admission had become much worse; was quite unable to do her housework, and was given to wandering aimlessly about; said that she felt inclined to throw herself out of the window so that she might have rest. On admission, her physical condition was poor. She was thin and anaemir. Mentally she was dull and taciturn; she felt as if her brain was on fire, and was troubled with a buzzing noise in both ears; did not take her food well.

20th Jany. Patient began to take opium and nux vomica, 10 mins. tinct. opii, and 10 mins. nux vomica, three times daily.

26th Jany. The dose of opium was increased to 15 ms.

Case XXXIII. contd.

tinct. three times daily; she had been sleeping better, but still remained very depressed, and felt that her head was not right.

3rd Feby. The dose of opium was increased to 20 ms. tinct. t.i.d.; was still depressed, and imagined she had no right to be here; was confined to bed, as she appears to be very weak.

28th Feby. The dose of opium was increased to 25 ms.

tinct. t.i.d.; there was a slight mental improvement;

the delusions are less marked and the headaches great
ly diminished; was at this date up out of bed.

22nd March. Patient was much more cheerful and very industrious; was anxious to get away home; her physical condition had improved.

2nd April. The dose of opium was increased to 30 mins. tinct. t.i.d.; mental improvement continued.

Case XXXIII. contd.

12th April. The dose of opium was reduced to 20 mins.

tinct. t.i.d.; no further mental change; ate and slept

well. Patient was at this date free from the head
aches which had so frequently troubled her.

15th April. Patient remains well .

21st April. Dose of opium reduced to 15 mins. tinct.
t.i.d.; patient now seems almost quite recovered; she
takes her food well and sleeps well. She is now very
anxious to get home.

In three months she gained 9

C A S E XXXIV.

J.B. female, aged 24, admitted 17th Decr.1897.

Her present attack seemed to have begun about 6 months before; at that time she seemed to have some skin disease, and imagined that people were accusing her of infecting all those with whom she came in contact; was constantly tippling, though never intoxicated. A few days previous to admission she attempted to drown herself near Bathgate.

On admission, her physical health was poor.

Mentally she was very depressed, sleepless, and occasionally became somewhat excited; her appetite was very poor.

27th Decr. Patient began to take opium and nux vomica, 5 mins. of each, three times daily. Her mental condition, at this date, was much the same as on admission.

Case XXXIV. contd.

6th Jany. 1898. The dose of opium was increased to 10 mins.; patient was still very depressed; she stated that she would never go back to Bathgate, as the people there would persecute her as formerly.

27th Jany. The dose of opium was increased to 15 ms.

Patient was sleeping well, but otherwise there was no marked change.

3rd Feby. Patient had improved considerably; she occasionally became slightly excited.

8th Feby. The dose of opium was increased to 20 ms. tinct. t.i.d.; there was no mental change.

28th Feby. The dose of opium was increased to 25 ms. tinct. t.i.d. There was a slight mental improvement.

22nd March. Patient had considerably improved; she occasionally had outbursts of excitement, but not so frequently as formerly.

Case XXXIV. contd.

4th April. The dose of opium was increased to 30 ms. tinct. t.i.d.; no, mental change.

9th April. The dose of opium was reduced to 25 ms.
tinct. t.i.d.; mental improvement continued; patient
was working daily in the ward kitchen.

15th April. No further mental change.

22nd April. Patient is still taking 25 mins. tinct. opii, t.i.d.; mental improvement continues.

In four months she lost 8

C A S E XXXV.

M.C. female, aged 54, admitted 1st April, 1898.

On admission, her physical health was fair. Mentally she was slightly depressed and rather sleepless; felt quite unable to take care of herself, and was very restless. On this date she began to take opium and nux vomica, 5 mins. of each, three times daily.

7th April. The dose of opium was increased to 10 ms.
t.i.d.; the restlessness was not so marked and she
slept well.

12th April. The dose of opium was increased to 15 ms.

t.i.d.; there was a decided mental improvement; she
slept well, and was only slightly depressed in the
morning.

15th April. Improvement continued; patient is anxious to get home, as she felt quite fit to look after
her house hold duties.

In three weeks she gained 4

CASE XXXVI.

M.M'K. female, aged 22, admitted 14th March, 1898.

Her present attack had lasted for a few days.

On admission, her physical health was fair. Mentally she was very depressed and very suicidal; took no interest in her surroundings; would seldom answer questions; was very sleepless, and her habits were dirty.

17th March. Patient began to take mixture of opium and nux vomica, 7½ mins. tinct. opii and 5 mins. nux vomica, three times daily.

22nd March. The dose of opium was increased to 15 ms.

tinct. t.i.d.; remained very depressed, but was sleeping better; took her food well.

4th April. The dose of opium was increased to 20 ms. tinct. t.i.d.; no marked mental change.

9th April. The dose of opium was increased to 25 ms.
tinct. t.i.d.; there was a considerable mental improve-

Case XXXVI. contd.

would answer questions more freely; her physical condition was also improving.

15th April. The mental improvement continues.

20th April. Patient is still taking the opium; still improving mentally.

In one month she lost 2 los.

CASE XXXVII.

B.C. female, aged 40, admitted 28th March, 1898. She had been found wandering about and could give no coherent account of herself; she said she had sinned and wished to die for her sins.

On admission, her physical health was fair. Mentally she was very depressed and much confused; she had a most vacant expression, and would not answer when spoken to; was also very sleepless.

Case XXXVII. contd.

and nux vomica, 5 mins. of each, three times daily; she was very sensitive, and often refused her food.

7th April. The dose of opium was increased to 10 ms.

tinct. t.i.d.; was now sleeping well, but still remained dull and taciturn; took her food well.

12th April. The dose of opium was increased to 15 ms.
tinct. t.i.d.; there was a marked mental improvement;
patient would talk quite freely.

15th April. Patient now seems quite well, and is working daily in the kitchen; takes her food well and sleeps well.

22nd April. Patient is still taking opium, but is quite well, and is most industrious.

In three weeks she gained 6

C A S E XXXVIII.

G.R. male, aged 25, admitted 30th Decr. 1897. Had an attack of excited melancholia at 16 years of age; present attack started with depression three months previous to admission; three weeks previous to admission he had attempted suicide by drinking liniment; for three days had had attacks of excitement. 30th Decr. On admission, he was dull, depressed, apathetic and listless; refused to answer any questions. 7th Jany. 1898. Patient was depressed and miserable; never spoke to anyone, but sat staring vacantly; there was some motor restlessness, shown by an aimless wringing of his hands. 12th Jany. Patient began to take opium, 10 mins. of the tincture, three times daily. (with 10 ms. nux vom.) 16th Jany. There was no improvement; the dose of

opium was increased to 15 mins. tinct. t.i.d.

Case XXXVIII. contd.

3rd Feby. There was some slight improvement; the motor restlessness was not so great; he spoke a little, and said he felt a little brighter; he slept well and took his food well.

Weight the same as at commence-ment of treatment.

11th Feby. Patient was transferred to Woodilee Asylum.

C A S E XXXIX.

P.B. male, aged 53, admitted 20th Oct. 1897.

Present attack had lasted since February; had been an inmate of Morningside Asylum for several months; while there he was exceedingly depressed and sleepless, and once attempted suicide by battering his head against the wall; had to be kept under constant supervision.

On admission, he was very depressed, stating that he had long ago got tired of his life.

Case XXXIX. contd.

and restless; was confined to bed; began to take tinct.

opii, 10 mins. three times daily.(with 10 ms. nux vom.)

23rd Oct. Depressed and restless; slept none; took

very little food; the dose of opium was increased to

15 mins. tinct. t.i.d.

24th Oct. Patient was much quieter, but still very depressed; slept a little last night.

26th Oct. His condition was much the same; slept a little better; last night he slept 3 hours; the dose of opium was increased to 20 mins. tinct. t.i.d.

20th Oct. Still very depressed, but the restlessness and suicidal tendencies had disappeared; he occasionally slept for a couple of hours; did not take his food well; the dose of opium increased to 25 mins.

5th Novr. The opium had begun to interfere with his

Case XXXIX. contd.

digestion and to cause obstinate constipation, which produced considerable uneasiness.

11th Novr. As the opium was interfering with digestion and nutrition, and causing obstinate constipation, it had to be discontinued.

Weight the same as at commence-ment of treatment.

CASE XL.

P.G. male, aged 56, admitted 21st Feby. 1898.

For 4 months he had been depressed and in constant dread of some calamity befalling him; he also had delusions that people were watching him; would neither work nor eat; and was sleepless at night.

On admission, he was very depressed and confused, and could not speak, but was watching everybody as if suspicious of them.

23rd Feby. Patient began to take opium, 10 mins.

Case XL. contd.

tinct. t.i.d.; was very dull and depressed, refusing to speak, and occasionally refusing his food.

25th Feby. Opium seemed to agree well with him; he slept soundly at night; there was already an improvement in his condition; was brighter and more willing to speak; appetite was good.

28th Feby. Continued to improve; he was a good deal brighter and his general physical appearance was improved; slept and ate well.

23rd March. Continued improvement; patient was at this date taking 20 mins. tinct. opii, t.i.d.; the depression and confusion were disappearing; he spoke quitenfreely and brightly, and often took a look at the newspapers; was quite hopeful that he would soon recover; he worked daily in the wards and seemed to take a delight in listening to some of the other pa-

Case XL. contd.

patients playing the violin, &c.

lst April. Improvement maintained; patient spoke
quite freely and was a willing and useful worker; depre
pression had almost entirely disappeared.

11th April. Continued to improve; was bright and cheery.

14th April. Dose of opium was reduced to 10 mins. tintinct. t.i.d.; still going on well.

17th April. Dose of opium reduced to 5 mins. t.i.d. patient has now quite recovered, and his physical condition is greatly improved.

19th April. Opium discontinued.

22nd April. Patient remains well, and is to be discharged next week.

In two months he gained 13 lbs.

CASE XLI.

A.W. female, aged 68, admitted 11th Decr. 1897.

For a week previous to admission she had been most restless and troublesome, and subject to sudden fits of temper; she imagined that people were constantly thrashing her; she was sleepless and would not keep any bedclothes on her during the night.

On admission, her physical condition was poor; she was anaemic, and the heart's action was weak and irregular. Mentally she was much confused; her memory was greatly impaired; she had no idea where she was; and she imagined that the place belonged to her; she was restless during the day, and sleepless and noisy at night. On account of her weak physical condition patient was put to bed.

20th Decr. Patient began to take a mixture of opium, digitalis and nux vomica (10 mins. of tinct. opii,

Case XLI. contd.

10 mins. tinct. digitalis, and 5 mins. tinct. nucis vom.) three times daily; patient was most restless and talkative and had to be constantly watched to keep her in bed.

30th Decr. The restlessness was not so great; patient was sleeping better and would stay in bed.

6th Jany. 1898. The dose of opium was increased to 15 mins. tinct. opii, t.i.d.; patient was quite demented, but she was much more settled, and her physical condition was somewhat improved.

19th Jany. Patient was transferred to another Asylum; During the the motor restlessness was markedly reduced, and she was also sleeping better.

treatment she gained 1 1b.

C A S E XLII.

E.H. female, aged 29, admitted 28th Sept. 1897. She had had a previous attack of melancholia; for a few weeks previous to admission she had been very depressed, refusing her food, and was sleepless. She was either morose and silent, or occasionally she became very much excited.

On admission, her physical condition was poor; she was very anaemic. Mentally she was dull and taciturn, but was subject to occasional outbursts of excitement; she did not take her food well, and was sleepless; frequently got 30 grs. sulfonal at bedtime, after which she slept well.

30th Sept. No marked mental change, the outbursts of excitement being somewhat more frequent; she was very religious and was continually reading her hymn book.

1st Oct. Patient began to take opium and nux vomica,

Case XLII. contd.

5 mins. of each tincture, three times daily.

15th Oct. The dose of opium was increased to 10 mins.

t,i.d.; there was no marked mental change; at times

she was very dull, and at other times very excited.

25th Oct. The dose of opium was increased to 15 mins.

t.i.d.; the outbursts of excitement were becoming less

frequent, and patient was sleeping better.

23rd Decr. Patient was still taking the opium; the mental improvement continued.

2nd Feby. 1898. The dose of opium was reduced to 10 mins. t.i.d.; during the past month patient was greatly improved; the outbursts of excitement had ceased, and she was working in the laundry; was sleeping well, and taking her food well.

11th Feby. The dose of opium was reduced to 5 mins.

Case XLII. contd.

t.i.d.; was at times somewhat depressed.

15th Feby. The opium was discontinued; patient seemed to be quite recovered.

12th March. Patient was discharged RECOVERED.

Weight the same as at commence-ment of treatment.

CASE XLIII.

A.J. female, aged 26, admitted 24th Feby. 1898.

Quiet disposition, habits temperate; has had several

fits which seem to have been epileptic; the exciting

cause of attack was prolonged lactation; for about a

fortnight previous to admission, she was very stupid;

she had delusions that she had committed serious crimes.

Her behaviour was peculiar, and she neglected her children and work; had threatened to drown herself and to

set, fire to the house.

Case XLIII. contd.

On, admission, her physical condition was fair. Mentally she was much confused; was very dull and taciturn and her speech was slow and drawling.

26th Feby. Patient began to take 5 mins. tinct. opii and 5 mins. tinct. nucis vom. three times daily.

3rd March. The dose of opium was increased to 10 ms.

t.i.d.; there was a slight mental improvement; she still remained somewhat depressed, but did a little work in the ward.

7th March. The dose of opium was increased to 15 ms.
t.i.d.; the mental improvement continued.

4th April. The dose of opium was increased to 20 ms.

t.i.d.; patient still depressed, especially in the morning.

9th April. The dose of opium was increased to 25 ms.
t.i.d.; patient was steadily improving; slept well, is

Case XLIII. contd.

very industrious, and the dullness was very slight.

18th April. The dose of opium reduced to 15 mins.

t.i.d.; patient seems now quite well, and is very anxious to get home.

22nd April. Dose of opium today reduced to 5 mins.

tinct.; patient is quite well, and will very soon be discharged.

8. SUMMARY.

I. 27 Cases Recovered and 16 Improved.

These 16 cases will probably all proceed ultimately to recovery. Melancholia is an eminently curable affection, and it is not claimed that opium was the cause of the recovery or improvement.

II. The test of its efficacy is chiefly to be found in its power of cutting short the attack. The average duration of an attack of melancholia is generally stated about 8 months. In the foregoing cases the average duration was 6.17 months. It will be observed, however, that the duration of the attack prior to, the administration of opium varied in the different cases from one week up to one year. The average duration of the attack between the commencement of the treatment by opium and the complete recovery of the patient or the appearance of distinct improvement was

3.39 months. It is therefore almost fair to speculate that if the cases had presented themselves for treatment within a reasonably early time from the commencement of the attack, the attack would have lasted under treatment with opium about 4 months or about half the time which an ordinary case of melancholia takes to recover on the average.

ment it may be pointed out that in 24 cases in which the average duration of the disease previous to treatment by opium was 1.08 month; the cases recovered within an average of 2.8 months. On the other hand, in 17 cases in which the average previous duration was 5 months, the time between the exhibition of the drug and recovery or distinct improvement was on the average 3.1 months.

- IV. 27 of the cases gained weight; 10 lost weight; in 5 the weight remained stationary; and in 1 it was not taken. The average gain in weight over 42 cases during treatment was 2.5 lbs; 10 cases lost 80 lbs.; but more than the half of that weight (43 lbs.) was lost by three patients, who persistently refused food for many weeks. 7 of the patients who lost weight recovered, and 3 improved, so that loss of weight alone is not a contra-indication to the use of the drug. In the majority of the cases nutrition was improved and digestion was not interfered with.
- V. In all the cases sleep of a natural kind was induced during the night; excitement and irritability were allayed during the day; the anxious expression disappeared; and the tendency to, suicide, which is the great danger in melancholia, was greatly modified, and in some cases entirely removed.

8. SYNOPSIS OF CASES.

100									
N	lo. of			Duration of		Max.	Weig		
	Case	Age	Sex	Before op.	During op.	. Dose	Lost	Gained	Result
-						mins.	lbs.	lbs.	
	1.	38	M.	1 mo.	3 mos.	30		10	Recovere
* * * * * * * * * * * * * * * * * * * *	2.	47	F.	3 mos.	6 mos.	20	21		Recovere
	3.	28	F.	6 mos.	3 mos.	20		2	Recovere
	4.	49	F.	2 mos.	4 mos.	20		3	Recovere
	5.	33	F.	5 mos.	6 mos.	10		8	Improved
	6.	55	F.	2 mos.	6 mos.	15		3	Recovere
	7.	47	F.	2 mos.	6 mos.	10	2		Recovere
	8.	70	M.	1 mo.	2 mos.	30	14		Recovere
	9.	22	F.	6 wks.	6 wks.	10		26	Recovere
	10.	24	M.	3 mos.	1 mo.	20		2	Improved
	11.	65	F.	l mo.	2 mos.	10		•3	Recovere
	12.	3 8	F.	5 mos.	4 mos.	15		1	Recovere
	13.	24	F.	3 mos.	2 mos. (gr. mo	rphia)	4	Recovere
	14.	43	F.	3 mos.	8 mos.	10		7	Recovere
	15.	49	F.	1 wk.	2 mos.	15	#		Improved
	16.	50	F.	2 mos.	6 wks.	15		9	Recovere
	17.	31	F.	5 wks.	10 wks.	25	- sa	me -	Recovere
	18.	32	F.	3 mos.	6 mos.	15	- sa	me -	Recovere
	19.	60	F.	2 mos.	4 mos.	25	18		Recovere
	20.	37	F.	10 mos.	3 mos.	10		5	Recovere
	21.	42	F.	6 wks.	4 mos.	(1/4 gr.m	.) 3		Recovere
	22.	26	F.	7 mos.	2 mos.	20		4	Improved
			Test						

SYNOPSIS OF CASES continued.

		1 8 2 ²						
No. o Case	f Age	Sex	Duration o Before op.	f attack During op.	Max. Weight Dose Lost Gained			Result.
23.	29	M.	l mo.	6 wks.	mins.	lbs.	lbs.	Improved.
24.	30	M.	2 mos.	6 wks.	20		7	Recovered.
25.	64	F.	3 mos.	5 mos.	30		5	Recovered.
26.	21	F.	1 mo.	5 mos.	30		13	Recovered.
27.	54	F.	3 mos.	14 mos.	20		20	Improved.
28.	31	F.	2 mos.	7 mos.	20		11	Improved.
29.	22	F.	4 mos.	3 mos.	25		2	Improved.
30.	49	F.	3 wks.	2 mos.	40	5		Recovered.
31.	62	F.	l wk.	3 mos.	35		1	Improved.
32.	21	F.	1 mo.	3 mos.	40	6		Recovered
33.	40	F.	l yr.	3 mos.	30		9	Improved.
34.	24	F.	6 mos.	4 mos.	30	8		Improved.
35.	54	F.	1 mo.	3 wks.	15		4	Improved.
36.	22	F.	l wk.	1 mo.	25	2		Improved.
37.	40	F.	l wk.	3 wks.	1.5		6	Recovered
38.	25	М.	3 mos.	1 mo.	15	- sam	e -	Improved.
39.	53	Ma	8 mos.	3 wks.	25	- sam	e -	Improved.
40.	56	М.	4 mos.	2 mos.	20		13	Recovered
41.	68	F.	l wk.	l mo.	15		1	Improved.
42.	29	F.	l mo.	5 mos.	15	- sam	e -	Recovered
43.	26.	F.	2 wks.	2 mos.	15	1		Recovered.

As these patients were confined to bed during the whole time of their treatment, their weights were not taken.

N.B. The above note refers only to Case 15.