death it was found that he had fractured three ribs. I met a gentleman at dinner last week, who told me that his brother, whilst engaged in a field day during the autumn manœuvres, fell off his horse at 9 a.m., but remounted and continued his duties till 2 p.m., although, as ascertained afterwards, he had broken three ribs and a bone of one arm.

If this view be correct, the extravagant hypotheses that were lately put forth to explain the occurrence of fractured ribs in insane patients would seem to be more creditable to the imagination of their supporters than to their surgical knowledge or sagacity.

It will, perhaps, be urged that in the cases I have enumerated, only one or two ribs were found broken, whilst in previous cases the number

has been much greater.

I think that this may be explained by the fact of the injury in my cases having been almost immediately detected, and further mischief being guarded against; for there can be no doubt that the mechanism of the thoracic frame being once damaged, a second fracture may be more easily produced than a first, just as may be observed in machinery, that when one cog of a wheel breaks, it is quickly followed by others, offering another illustration of the familiar axiom, "Ce n'est que le premier pas qui coûte."

Phosphorus in Melancholia. By S. W. D. Williams, M.D., Medical Superintendent of the Sussex Lunatic Asylum.

Phosphorus is rapidly becoming a favourite remedy in certain forms of disease of the nervous system, and has been strongly recommended in melancholia. I am not aware that there is any authentic record of its effect in this disease, and, therefore, think a brief resumé of half-a-dozen such cases, treated in this Asylum lately by phosphorus, may be ac-

ceptable to the readers of this Journal.

One great objection to the use of phosphorus is the difficulty of administering it pure. Solutions of the metalloid in oil or ether are extremely unpleasant and nauseous, and this is a very serious objection when dealing with the insane, who are so prone to refuse food and medicine. I have, therefore, used the pills prepared by Messrs. Kirby and Co., which are stated each to contain the thirtieth of a grain of pure phosphorus. Mr. Ashburton Thomson, in the "Practioner," doubts the efficacy of these pills, but I cannot say I agree with him. It cannot be doubted that they contain phosphorus, for if you cut a pill open in the dark the characteristic smell and luminosity are very marked.

A perusal of the cases recorded below will show that a certain amount of success has attended on the use of the phosphorus in two cases of pure melancholia, but that in the third it totally failed, as it did, to a great extent, also in a case of melancholia attonita. Neither was its use in the locomotor ataxy case very promising. Still, altogether, I think that a sufficient measure of success was obtained to

justify a more extended trial of its use in other cases.

Phosphorus is said to be accumulative, to produce dyspepsia, loss of appetite, and debility, and to have aphrodisiac effects, but if so, these results must be caused by larger doses than I employed. Case No. 1 had diarrhea about ten days after the phosphorus was omitted, but that can scarcely have been due to the medicine. Dr. Eames states that this medicine produces a coated state of the tongue, "not unlike the silvery tongue which follows the prolonged use of arsenic." I can fully bear out this statement. All the cases recorded below, without exception, exhibited this state of tongue within a few days of beginning the medicine.

In each case I commenced with one pill $(\frac{1}{30} \text{ gr.})$ twice a day. This was increased in some cases to three or four pills daily. None of the toxic effects described by Dr. Anstie, in his interesting case of "Slight Poisoning from the Medical Use of Phosphorus" ("Practitioner") were observed in any of my cases—except a slight sense of warmth at the epigastrium.

Case I.—J. F., male, et. 51 years, married, agricultural labourer. Admitted 6th Sept., 1873. No hereditary taint, but father given to drinking; first attack; has been gradually coming on for twelve months; supposed to be caused by dismissal from employ by a master, with whom he had worked for many years. On admission he was in a state of pure melancholia, apparently uncomplicated with delusion. His state of wretchedness and misery was pitiable in the extreme, and he was constantly on the look-out for some means of destroying him-His bodily health was fairly good. His nights were almost entirely sleepless, and he was treated after admission with chloral. This gave him temporary relief, but he became worse again, and on the 27th Sept. the chloral was changed for opium and chloric æther, after which he began to refuse his food, and on Nov. 12th, being no better, he was ordered $\frac{1}{30}$ of a grain of phosphorus night and morning. Within a few days the depression became much less, and by Dec. 12th had quite left him.

Result—Recovery.

Case II.—J. B., female, at. 30 years, single. Admitted 6th June, 1873, when she is described as having a restless manner, and constantly wandering about day and night; as having great lowness of spirits without any apparent cause, and as expressing herself as being fearful she shall destroy herself to escape from her misery, although

she is unable to assign any cause for her dejection. Menstruation regular; bodily health fairly good. Was treated with chloric æther and opium, and with chloral. The attack lasted 70 days, and on August 17th she was reported as recovered. On August 28th she relapsed, and remained ill nearly as long, but by November 27th was considered well enough to be brought before the Committee for discharge. The excitement attendant on the prospect of regaining her liberty was too much for her, and she relapsed before she could be removed from the asylum. She was now put on phosphorus, and the attack only lasted 27 days, since when (two months) she has remained cheerful and well.

Result-Recovery.

Case III.—J. B., female, et. 54 years, widowed. Admitted 15th November, 1873. Disease was stated to be hereditary, and to have lasted five months. On admission she was very greatly depressed, and her expression was one of most intense anxiety. She stated that she was not fit to live, and that she had a constant desire to commit suicide, but apparently she had no delusion. This case seemed so closely to resemble the two previous ones that it was hoped that the same treatment which had proved useful in those cases would be equally efficacious in this one, and she was consequently ordered phosphorus soon after admission. It was persevered with until January 5th, 1874, viz., seven weeks, but without any benefit. She remained in the same state of intense misery as on admission, and her nights were so sleepless that her general health began to suffer. The phosphorus was therefore omitted, and she was ordered opium. benefit was almost immediate, and she is now (February 10th) convalescent.

Result—Failure of phosphorus, success of opium.

Case IV.—E. T., female, æt. 33 years, single. Admitted 9th October, 1873, in a state of melancholia attonita, with a strong suicidal and homicidal impulse, but little history could be obtained. For some time after admission she remained quiet, but very dejected, and her bodily health being indifferent, she was treated with stimulants—iron and codliver oil. But, though she got stronger in body, she became decidedly worse mentally, and was at times extremely violent, although invariably preserving an aspect of profound dejection. On November 18th phosphorus was prescribed, and, up to December 20th, she so far improved as to be able to employ herself in the laundry; but on that day she began to relapse, and refusing to take the pills, they were not persevered with. Since then there has been no improvement; on the contrary she becomes, in many respects, worse.

Result—Partial benefit, not maintained.

Case V.—M. O., female, et. 27 years. Admitted 7th February, 1874. This is the first attack, and has lasted ten days, and is stated to be due to excessive attention to her religious duties. On admission

she was in a state of religious exultation, and had delusions on religious subjects, but in the course of a day or two she became very depressed, and slept but little at night. Chloral gave her rest for a night or two, but soon lost its effect, and opium was tried without benefit; indeed, she seemed to be lapsing into a state of melancholia attonita. On the 17th phosphorus was ordered; on the 22nd she was much improved, and the tongue had the silvery white appearance already described as due to this medicine. This case is still under treatment, and there is every prospect of recovery.

Result—Probably recovery.

Case VI.—G. W., male, et. 39, widower. Admitted 23rd July, 1872. Supposed cause, intemperance both in smoking and drinking. When admitted he was suffering from acute mania, supervening on gradually increasing impairment of the powers of movement of the lower extremities, which had been put down to paralysis, but was evidently due to locomotor ataxy, and was quite independent of the mental symptoms.

The mania gradually, and ultimately entirely passed away, but the ataxic symptoms slowly increased. He remained sane for many months, indeed up to December 30th last, when he became very depressed, indeed quite melancholic. Phosphorus was therefore ordered, and the mental symptoms have passed off, but there was no improvement in the locomotor ataxy.

Result-But little benefit.

Notes of a Case of Tubercular Meningitis in an Adult without Tubercles in the Lungs. By Oscar T. Woods, B.A., M.B., Senior Assistant Medical Officer, Warwick County Asylum.

Emma Daffern, æt. 16. Admitted September 3rd, 1870. Idiot. History.—Schedule states, "Has little knowledge of time or place; says she is six months old, and that her sister (æt. 4) is 19," &c. Has always been a very troublesome child; went to school in early childhood, but had to be removed as she beat the other children. For the past nine years has gradually been getting more vicious and troublesome, and now she bites or beats everyone in the house with her. If displeased tears her clothes; can sew, but breaks the needles when she fancies she has done enough. No consanguinity of parents. Brother died of phthisis.

State on Admission.—A short, strumous looking girl, dark hair, brown eyes, cranial development is bad, forehead low, palate highly arched, little facial expression. Says she is six months old, that she has five fingers altogether; can count up to 10; when asked the days of the week, says Sunday, Saturday, Friday, Sunday.

During her stay in the asylum, although at times ill-tempered and