lum" in connection with the State Prison. It seems quite feasible to use a portion of the prison, remote from the main prison, for the convict insane. There is also a space of four acres inside the prison enclosure where a building for one hundred insane persons could be erected at a cost of less than seventy-five thousand dollars. A third plan is to use certain wards connected with some State insane hospital where the insane criminal patients could be placed together. A fourth plan is to build a new and distinct asylum, which would cost from one hundred and fifty thousand dollars to two hundred thousand dollars, for one hundred and fifty persons.

The Board would on the whole give the preference to the first plan, and they add that the Westborough buildings could at a future time be used for some other class of the insane. The experiment would not cost much and the buildings could be got ready in a very short time.

It may be said, in considering these plans, that nearly all hospital superintendents, and others acquainted with insane criminals, would regard the fourth plan as the only one which, on scientific grounds, would be the most successful.

We find from the Report of the Board that our State will very soon be called on to provide room either for our chronic insane, who are more than nine tenths of the whole number, or for the recent and possibly curable insane. Now the question is: Will it not be better to use Westborough and its large farm for this great number who must be provided for within a year or two, rather than spend money on it for the benefit of a comparatively small number of insane criminals? We find that cottages can be built at Westborough, and at a cost not to exceed \$200,000; the Report states there will be room enough for five hundred chronic insane persons.

The best course would be to appropriate money for this change, as well as a moderate sum to begin a criminal asylum; should the legislature refuse, however, to do this, it will then undoubtedly be advisable to adopt Westborough for the criminal insane.

PREVENTION OF INSANITY.

Dr. Mary Putnam Jacobi has made a suggestive and interesting study of this subject.¹ She regards the three great elements in the moral substratum of a person predisposed to insanity, as first, the egotistical predominance of the instincts over the faculties of reflection and external relation; second, the ineffectiveness of the will even when this is impulsive, or violent; and third, the inaptitude for ideas resulting in their poverty and imperfect combination. To overcome these defects we need a strenuous educational system. "The acquisition of knowledge, the training in morals, the formation of habits of thought, must all be centred on practical activities. . . . In minds predisposed to insanity there is often, perhaps always, a marked deficiency of elasticity. An impression sinks and remains; the mind cannot disengage itself, or recover its tone; it cannot pass quickly enough into the contrasting mood; a capacity to do this is the natural provision against strain; it probably corresponds to a law of rhythmic action in the physical mechanisms of thought. This capacity should therefore be carefully cultivated

by encouraging alternations of attention on the first sign of fatigue. . . . Irritability always means the tension of nerves overcharged with impressions, which can find no issue in movements or actions. Movement is the physiological remedy for irritability. It is the remedy sought by nature in the higher grades of irritability, where the patient is no longer conscious of the tension, in maniacal excitement and mania."

The question of occupation is the great question of moral treatment of insanity. A new world should be built up around the patient. Palliation of symptoms is of great importance. The mere continuance of a morbid function may result in collapse by destruction of its mechanism.

The above examples give a slight idea of the accuracy and clearness attending this study of Dr. Jacobi. Though the writer may not agree with her in all her conclusions, he cannot help calling attention to the power of analysis she displays. It is to be regretted that want of space prevents a fuller abstract of the paper being given.

Hospital Practice and Clinical Memoranda.

UNUSUAL OR ACCIDENTAL RESULTS OF VACCINATION.

BY ALFRED H. HOLT, M. D.

ONE of the principal arguments of the advocates of anti-vaccination is, that the operation is liable to introduce into the system some other disease than the one intended, or that the process it sets up may develop or set going a train of events more injurious than the disease it is intended to modify or prevent. However unsupported or absurd such a doctrine may be, its general discussion by those in the community who know nothing of the facts of the case has brought the people generally to look upon vaccination with great distrust, and a large part of them are constantly on the watch for some bad result to follow in those who have had the operation. When such a state of things exists it is certainly of the greatest importance for not only physicians, but the community at large, to know just what results are liable to sometimes follow vaccination when properly done. For this reason I relate the following cases. As far as I can learn by reading and inquiring none like them have heretofore been recorded.

December 3, 1881, a woman was removed from a house on Harvard Street, Cambridge, to the small-pox hospital; she was, at the time of removal, at the sixth day of the disease and at the fourth of the eruption. Her two children, one four and the other six, who had been vaccinated, had been constantly in the room with her, and up to the last night had slept in the same bed. These children and the other inmates of the house were at once vaccinated, and instructed to remain here that they might be under observation. Nine days after Dr. Turner, Assistant City Physician, and myself saw them. The girl, four years old, was sick in bed, with quick pulse, hot skin, flushed face, and some headache. She had two well-marked and in every way characteristic vaccination pustules on the arm. The boy, six years old, was about the house, although the vaccination had taken full as well as his sister's. The next day, or the tenth of the vaccination, I was called

¹ The Prevention of Insanity and its early and proper Treatment. A paper read before the American Social Science Association, September, 1881.

in great haste by the woman who had charge of the children to see the girl, she thinking she had the small-pox. I found that she had passed a restless night and that toward morning an eruption appeared which soon covered the face, body, and limbs. This eruption presented very much the same appearance as the so-called German measles; it was of a dusky red color, a little raised above the healthy skin, and was distributed in irregular patches; some of those on the body were as large as the palm of the hand, while those on the limbs, hands, and feet were smaller. The eruption covered at least seven eighths of the surface, it was a little rough to the touch, and with a lens there could be seen scattered over the patches a very few small cup-shaped vesicles. The temperature of the girl was a little elevated and she still complained of headache, but did not appear very sick. I saw her the next morning; she had passed a good night, sweating rather profusely in the last part of it. She was sitting up in bed playing, and was hungry. The eruption had faded a good deal and was much less elevated. The next day the eruption had wholly disappeared except that it had left a brownish tinge of the skin which also was gone in a day or two.

The next case was in a girl sixteen years of age who came from the British Provinces and had never been vaccinated. The ninth day after vaccination she had a slight headache, and that night was kept awake by an intolerable itching of the body and limbs; in the morning it was discovered that she was covered with an eruption. Dr. Turner was called, and at his request I saw her in the evening, when she presented the following appearance: the skin was dry and hot, the pulse quickened, and the temperature a little elevated, but she did not appear much sick; the eruption was much like that described in the first case in color and distribution, but was much more elevated and rougher to the look and touch; there were the same microscopic cup-shaped vesicles scattered over the patches, and some of the smaller patches themselves were more raised at the edge than in the centre. The next morning the girl looked bright, the skin was moist and she was improved in every way. The eruption was paler and less elevated. The next day, or the third after the full development of the eruption, it had disappeared, leaving the same brownish tinge to the skin observed in the first case. The vaccination had been successful and she had two well-marked pustules on the arm, which apparently were in no way modified either in their course or appearance by this eruption. The second time I saw this case I was requested by Dr. Turner to see two others, both in the same family: these children, aged respectively five and seven years, were primarily vaccinated twelve days before; the operation was successful in both of them and they had two pustules each, that in every way presented a normal appearance for this stage of the disease. Five days before one of the children, a girl, complained of not feeling well, and the next day an eruption appeared which, from the description of the father, was like that in the two cases above described. This at the time I saw her had disappeared, except there was a large, but not elevated, patch on the right cheek; the skin of the body at the site of the eruption had the same brownish tinge, while that of the face and arms was dry and cracked, and in many places peeling; this did not occur in any of the other cases. The eruption appeared on the other child a day later, and when I saw him it

had disappeared, leaving the same appearance of skin observed in the other cases. I am informed by Dr. Turner that he saw one other case, in a girl, primarily vaccinated at the same time these children were. These vaccinations were all done by Dr. Turner and myself and with the animal virus sold by Codman & Shurtleff.

As will be seen, all of the cases occurred in primary vaccination, all of them about nine days after a successful operation, and all ran through about the same course.

I am well aware that no definite conclusion can be drawn from so small a number of cases, but from the facts presented I think it a reasonable presumption that this eruption was in some way brought about by the vaccination. If such is the case and this result is going to occasionally follow vaccination with animal virus it is highly important that the fact be known.

As I have said at first, so far as I know, no such cases have been before described. They are certainly very different from the cases of vesicular eruption, described by Flint and other writers, that sometimes follow vaccination. I have seen a case of this kind within a week and there is no resemblance by which one could be possibly mistaken for the other.

Reports of Societies.

PROCEEDINGS OF THE SUFFOLK DISTRICT MEDICAL SOCIETY.

H. C. HAVEN, SECRETARY.

SURGICAL SECTION.

FEBRUARY, 18, 1882. DR. R. M. HODGES presiding. Fifty members present.

DR. D. W. CHEEVER reported

A CASE OF ŒSOPHAGOTOMY, WITH FATAL RESULTS.¹

The reader also spoke as follows:—

This patient, formerly a seafaring man, had of late been engaged in bar-tending; and the confinement, together with the probable abuse of stimulants, must have impaired the vigor naturally resulting from his former mode of life. Again, he did not enter the hospital until the third day, and was therefore already much exhausted. It is probable that respiratory trouble existed at the time of entrance. Lividity of hands and feet and marked failure of the heart's action were prominent symptoms throughout the last two days of his life. It was thought that an abscess had already formed, as experience in similar cases and experiments on animals both showed this to occur, as a rule, on or before the third day. At the operation, however, no pus was found, but great œdema around the foreign body. On the second day after the operation he was able to take some nourishment. The pulse and respiration, however, steadily went up. Death probably resulted from pneumonia of a low type.

In these cases of œsophagotomy death occurs where the foreign body has been present for some time. The danger increases in direct proportion to the number of days elapsing before operation. In twenty cases collected by Dr. Cheever there were four deaths; first, pneumonia, operation fifty hours after accident; second, collapse of lung with gangrene of œsophagus, and inflammation of the stomach; third, operation,

¹ Vide page 265 of this number of the JOURNAL.