## SEACLIFF MENTAL HOSPITAL.

Sir,—

I have the honour to submit the following report for the Seacliff Mental Hospital for the year 1907.

Seacliff, 30th June, 1908.

The year opened with 754 inmates, and at the close there were 735, showing a decrease of 19. This was effected by the transfer of 24 chronic patients to Sunnyside, thus the natural increase

during the year was 5.

The average number resident was 725, and the total number under care during the year 875—namely, 551 males and 324 females. The total admissions were 121, and the number of patients discharged, recovered or relieved, was 63, being rather over 50 per cent. Taking into account the average number of readmissions, these figures indicate a higher "permanent-recovery rate" than 33 per cent.—the estimated average at Home.

There were fifty-one deaths during the year, being about the average. One-fourth of these were due to senile decay. There were four fatal casualities during the year, full reports of which

were sent to you at the time.

Apart from heredity, which, of course, may be considered more or less a factor in cases, the main apparent cause of insanity was alcoholism—namely, 23 out of 121 admissions. However, one becomes year by year more and more impressed with the futility of general statistics of insanity, where a single cause has to be assigned for what occurs at the meeting-place of many roads. The poisons generated inside the body are accountable for more cases of insanity than those which are introduced from without, and we cannot expect any marked reduction of mental disease, or, indeed, of ill health in general, until there is a more widespread recognition of the universal need for fresh air, regular daily exercise, and avoidance of excesses and carelessness in regard to food, as well as drink. All authorities agree that the common precursors of the onset of acquired insanity are indigestion, poisoning of the system, and failure of bodily nutrition, and that the question as to whether the mental balance will be regained or not depends mainly on the possibility of restoring nutrition.

During the past year at Seacliff we have been investigating and giving special attention to the matter of teeth. Passably fair sets we find to be extremely rare, and the loss of almost all power of proper mastication and comfort in eating are common even among the young adults who are sent to us. This gives rise to indigestion and poisoning of the system, and has obviously been an important factor in undermining the constitution. The regular attendance of a dental surgeon is of paramount importance in the treatment of these cases, and during the past year we have found obvious and marked improvement resulting from thorough and systematic attention to the The question of mastication and its effects on digestion is clearly not the only one involved. The benefit derived appears to be due as much to the removal of nervous irritation which has been kept up by decaying teeth, and to the cessation of the poisoning of the system through the absorption of septic products from the mouth. In view of the emphatic statement recently made by Dr. Pickerill, Director of the Dental School at Otago University, regarding his observation of the extremely defective condition of local teeth, I am satisfied that the systematic attendance of a dental surgeon at the Mental Hospital is a matter of more than passing importance. how much can be effected in the way of restoration by after-care and patchwork, one realises the stupendous benefit and saving of expense that could be quite simply brought about by care in early childhood, and, indeed, before birth. The rudiments of both sets of teeth lie embeddied in the jaws before birth, and their proper growth and development is mainly a question of general hygiene and feeding of mother and child. As Dr. Pickerill wisely says, the problem of teeth is far too wide and extensive to be effectively coped with by operative and mechanical dentistry: the essential reform must lie in prevention, especially during the formative periods of infancy and early childhood.

Work on the estates at Seacliff and Waitati has been carried out on the usual lines throughout the year. The season's experience in the systematic growing of potatoes further confirms our conclusion as to the great importance of special care in the selection and keeping of seed-tubers; also the necessity of ascertaining the needs of each district in the way of specific plant-foods (phosphates, potash, and nitrogen compounds), with a view to economy in the use of artificial manures. Thus at Seacliff it has been found in general that, whether on new or old land, the increase of crop resulting from a liberal application of the most suitable chemicals is comparatively slight—farely exceeding 15 to 25 per cent.—whereas at Waitati, on poor, hilly, manuka ground, which in the unmanured state yields only two or three tous to the acre, a crop of seven or eight tons is found to result in ordinary seasons from the mere addition per acre of a dressing of, say, 6 cwt. superphosphate, 1 cwt. sulphate of ammonia, ½ cwt. sulphate of potash. Potash, which has been shown by experiments in Ireland, France, and elsewhere to double, or even treble, the potato-crop in some soils, has proved not only of no value when used alone at Seacliff and Waitati, but actually diminishes the yield if anything beyond very minute dressings are employed. In combination with superphosphates, from 5 to 10 per cent. of a pure potash-salt, such as the sulphate, proves advantageous, but we find it the least essential constituent, the indispensable fertiliser for potatoes in these districts being superphosphates.

The following statement of our actual returns during the year from an area of 66 acres of leasehold land near Seacliff may prove of general interest, as showing the profits which it is possible to derive under favourable conditions from comparatively small holdings. Fifty-five acres were given over to sheep, and 11 acres were cropped with potatoes—viz., about  $7\frac{1}{2}$  acres British Queen,

21 acres Up to Date, and the remaining acre Sutton's Abundance and other varieties.