

standing, miscellaneous surveys. Later there will be the subdivisions of some Crown land required, the leases over which are about expiring.

The Otago staff has 60,000 acres of settlement survey in hand, and prospective work is sectional survey of land likely to be acquired under the Land for Settlement Act, and the subdivisions into small grazing-runs of possibly 200,000 or 300,000 acres out of a large area that will shortly be dealt with by the Classification Commissioners.

Southland has in hand at the present time 10,000 acres of settlement survey and the subdivision of 20,400 acres for landless Natives, and there is some miscellaneous work that will have to be undertaken as opportunity offers.

In addition to what has been outlined for the several districts, there is the certainty that services will have to be rendered by at least some of them in the subdivisions of estates that will be purchased under the Land for Settlement Act; and in the North Island there is the prospect of further surveys being required in connection with the operations of the various Maori Land Boards.

As usual, some minor triangulation will be necessitated in connection with large areas of settlement surveys that will be undertaken in the various districts during the year, and it is possible that a limited amount of standard survey may be carried out during the winter months.

SURVEYORS' BOARD OF EXAMINERS.

Six Board meetings and six committee meetings were held during the year, and an inquiry held into alleged defective work of a licensed surveyor, the result being the suspension of his license for three years.

At the September examination seventeen candidates presented themselves; of these, three passed and received the usual certificate of competency—viz., D. A. Crawford, H. E. Walshe (both Government cadets), and J. Dawson.

At last March examination there were fifteen candidates, eight of whom passed—viz., A. G. Saxby, T. Learmont, O. R. Farrer, C. Kenny, L. W. Ward, J. Stevenson, S. E. W. Baker, and T. Cagney (a Government cadet).

Licenses have been issued to A. E. Baker, E. A. P. Clare, W. A. Graham, A. Templer, and J. D. Dawson, all of whom held qualifications as authorised surveyors.

The profession is greatly indebted to the Right Hon. the Premier, Sir Joseph G. Ward, for bringing before the Imperial Conference of last year the subject of reciprocity in the admission of land surveyors to practise throughout the Empire, when the following resolution was carried unanimously: "That it is desirable that reciprocity should be established between the respective Governments and examining authorities throughout the Empire with regard to the examination and authorisation of land surveyors, and that the memorandum of the Surveyors' Institution on this subject be commended for the favourable consideration of the respective Governments."

MAGNETIC SURVEY AND OBSERVATORY.

The routine work of the observatory—magnetic, meteorological, &c.—has been carried on thoroughly and successfully by Mr. H. F. Skey, B.Sc., and his assistants. Records of the eighty-seven earthquakes were obtained by the Milne seismograph. Of the diurnal magnetic curves obtained during the year by the Adie magnetograph, eighteen of the most disturbed are reproduced and appended.

Facilities were extended to the scientific staffs of both the "Nimrod" British Antarctic Expedition and the Carnegie Institute's magnetic surveying vessel "Galilee," by which the members of the staff of the former were enabled to make a thorough standardisation of their magnetic instruments, and Mr. W. J. Peters, commander of the "Galilee," and his staff were able to institute an accurate comparison between the magnetic instruments of the "Galilee" and those of the observatory.

It is very gratifying to record that the proposal in my last report that the Dominion should take part in the international work of a complete magnetic survey of the globe, by extending our operations to the outlying islands, has been taken in hand, and, so far, successfully carried out. In November last, in conjunction with the Canterbury Philosophical Institute's scientific expedition, magnetic observations were made on Stewart Island, the Snares, Auckland, and Campbell Islands, and a thorough magnetic survey of the Chatham Islands has just been completed by Mr. Skey and his assistant, Mr. Kidson. In the southern expedition, Dr. Farr—who originally established the observatory in Christchurch—assisted by Messrs. Cook and Collins, kindly undertook the