

DRAUGHTSMEN'S EXAMINATION.

The annual examination was held in September, when eight candidates sat and six second-grade certificates were gained. Amendments have been made to the regulations, transferring most of the preliminary plan work to the examination-room, with a view to relieving candidates and equalizing the conditions of the test, and also remedying other defects which had become obvious in the working. As soon as any considerable number of men hold the certificates the staff will find that they have a weight and an assured position which will be a great advance on the conditions of former years.

SURVEYORS' BOARD.

The anticipations of an increased number of candidates owing to the cessation of war have been amply fulfilled. At the September examination twenty-two candidates sat, and only three passed; while at the March examination twenty-six sat and twenty-one passed. The numbers at this last examination were not far behind the total for all the Australian States put together, where the same examination is set on the same day under the reciprocity arrangement.

At the end of 1919 Messrs. Sadd and Simmonds were replaced by two new members of the Board: Messrs. Brook and Chambers.

GENERAL.

*Extract from Report by H. M. Skeet, Chief Surveyor, Auckland.*

"Two young Samoans who came to New Zealand under arrangement with the Samoan authorities to study our methods of field surveying and office routine proved very efficient and willing officers. Mr. Tauvela Hunter, the first of these, returned to Samoa after passing the preliminary survey examination. He was relieved by Mr. Melei, who after a short period in the office joined Mr. A. T. Leeds's survey party in the Waikato. The draughting-work done by both of these young men was consistently good, though modelled largely on a different method than that in vogue here."

*Extract from Report by G. H. M. McClure, Chief Surveyor, Wellington.*

"*Water-supplies to Soldiers' Settlements.*—During the past year water-supplies were installed in Kairanga, Cloverlea, and Putorino Soldier Settlements. So far as Kairanga and Cloverlea were concerned, the supply is derived from artesian wells in existence when the properties were purchased, and additional ones since put down. The necessary reticulation is now completed, and all the sections have a permanent supply of pure water, a most necessary requirement for dairy farms. This work, as well as the roading in these two settlements, was carried out in a very thorough and capable manner by Mr. A. H. M. Wright, Engineer to the Kairanga County Council, to whom the thanks of the Department are due.

"Owing to the area in the Putorino Settlement—some 922 acres, comprising fifteen dairy farms—and the impossibility of an artesian supply, it was found necessary to install a high-pressure water-supply. This entailed extensive engineering surveys and plans, as there were two possible sources of supply. After much consideration it was decided to utilize Rhodes Stream. This entailed the erection of a weir on Ngei Road, the construction of a reservoir, the laying-down of supply-pipes, and the reticulation of the settlement. These were works of some magnitude, as provision had to be made for a daily supply of at least 10,000 gallons, and it is gratifying to record that this indispensable work is now complete in spite of the difficulty of procuring material and labour. Although at the inception the question of providing Putorino with an adequate water-supply was beset with many engineering difficulties, these were successfully overcome by Mr. Sidney A. R. Mair, Engineer of the Rangitikei County Council, who initiated the scheme, made the engineering surveys and plans, and supervised the construction of the entire works free of cost to this Department. I wish to place upon record my appreciation of the valuable services rendered by Mr. Mair, and to thank him for the able assistance he has given me."

Full details of the personnel of the staff, both field and office, are given in the report by the Under-Secretary for Lands.

In conclusion, I am pleased to place on record the appreciation by the various Chief Surveyors of the manner in which their officers, both permanent and temporary, have carried out their duties during the year, and I desire to convey my thanks to the whole of the Survey staff for their good work.

Table 1.—RETURN OF FIELD-WORK EXECUTED BY HEAD OFFICE STAFF FROM 1ST APRIL, 1919, TO 31ST MARCH, 1920.

| Land District. |    |    |    | Standard Surveys. |                |              |                | Rural Standard Surveys. |                |              |                | Other Work.        |
|----------------|----|----|----|-------------------|----------------|--------------|----------------|-------------------------|----------------|--------------|----------------|--------------------|
|                |    |    |    | Completed.        |                | In Progress. |                | Completed.              |                | In Progress. |                |                    |
|                |    |    |    | Miles.            | Cost per Mile. | Miles.       | Cost per Mile. | Miles.                  | Cost per Mile. | Miles.       | Cost per Mile. |                    |
| Auckland       | .. | .. | .. | 37·4              | £ 71·05        | 46·7         | £ ..           | ..                      | ..             | ..           | £ ..           | £ s. d.<br>361 8 0 |
| Hawke's Bay    | .. | .. | .. | ..                | ..             | 33           | 50·86          | ..                      | ..             | 43           | 30             | ..                 |
| Wellington     | .. | .. | .. | ..                | ..             | ..           | ..             | 43                      | 21·92          | 10           | ..             | ..                 |
| Otago          | .. | .. | .. | 40                | 48·24          | ..           | ..             | ..                      | ..             | ..           | ..             | ..                 |