

## RURAL AND SUBURBAN SURVEYS.

Under this category falls the sectional or settlement operations, and it represents the complete detailed surveys of virgin lands, whether forest-clad or open, as well as the subdivision of properties acquired for closer settlement under the provisions of the Land for Settlements Acts, and also takes account of various surveys such as endowments and Native lands for the Maori Councils. The volume of work approximates to the previous year's output; the subdivisions number 1,836, as against 1,188 in 1902-3, whilst the area, 594,535 acres, is only 13,000 acres less; the cost is higher, because, amongst other reasons, the average area of the subdivisions of 1903-4 is much smaller. A large area of remote forest-clad lands is included, and more care has been bestowed in several of the districts on the location and survey of roads. Auckland heads the list with 175,000 acres, and include the elaborate detailed survey of the Bickerstaffe and Matamata Estates. Hawke's Bay furnished the large area of 102,000 acres, which was executed by staff and contract surveyors, and included rough forest land in the Motu and other inland districts and the Argyll and Wigan Land for Settlements estates; the 35,000 acres in Taranaki cover the new settlements in the northern part of that district; the Wellington contribution of 48,000 acres embraces several inland blocks and the Normandale Settlement near the Hutt; the 27,000 acres in Marlborough include surveys of blocks of land in the Awatere Valley, Onamalu, Kaituna, Heringa, and other districts; the Nelson staff completed the subdivisional surveys and plans of 31,000 acres, the principal localities being Inangahua, Tadmor, Kawatiri, Ngakawau, Takaka, Matere, and Tutaki Districts; the 30,000 acres in Westland are scattered throughout the district; Canterbury contributes about 71,000 acres, of which about 63,000 acres are included in the Chamberlain, Rosewill, and Annan Estates, and the balance, 8,183 acres, takes in the plains near Oxford. All the foregoing Canterbury lands have been disposed of. The Otago output is also about 71,000 acres, made up of subdivisions of the Patearoa and Keenan Runs and various scattered surveys; the 2,200 acres credited to Southland include mining, sawmill, and other small areas.

## TOWN SURVEYS.

There is a considerable increase in the area subdivided as towns and villages, due to the opening-up of the back country and the requirements of the settlers. Three of the townships—viz., Otorohanga, Taumarunui, and Te Kuiti—are on the North Island Main Trunk Railway, and one—the Waioapu Settlement—is in the Rotorua District. All are upon Native lands, and were surveyed for the Maori Land Councils. Seven small areas were cut up in the inland Taranaki District. The 915 acres in Westland are contained in the Township of Runanga, laid off on the State Coalmine Reserve, near Greymouth, and the Kokotahi Village, near Hokitika. The Otago quota represents additional subdivisions in old townships. As has been mentioned in previous reports, there is little scope or opportunity for laying off new townships upon the remaining Crown lands. When such occur they are availed of.

## NATIVE LAND COURT SURVEYS.

This class of survey has also fallen off in consequence of the vast operations in past years. Only 198,000 acres were defined, at a less cost, as compared with 400,388 acres in the preceding year. The great bulk of the area is credited to the Auckland surveyors; although 64,000 acres thereof is represented by a traverse survey of the Island of Niue, in the Cook Group, effected by Mr. District Surveyor Haszard, whilst on sick-leave. There are also included four Native blocks, defined near Lake Omapere and Waioapu for the Maori Land Council. The areas in Hawke's Bay and Wellington are the work of staff and licensed surveyors upon various scattered blocks.

## GOLD-MINING SURVEYS.

The gross area, 5,823 acres, of this class of work shows an increase on that of the year 1902-3, but fewer lots were defined, the respective figures being 57 and 66. The cost is in favour of the year 1903-4. Auckland and Westland claim 2,046 acres and 2,366 acres respectively; Otago and Southland are each represented by about 560 acres; and the Nelson area is 292 acres. It is reported that there was not great activity in this branch of the work during the year.

## MAGNETIC SURVEY.

The Government were deprived of the able services of Dr. C. Coleridge Farr, who resigned the position of Magnetic Observer on the 31st March, 1904, in order to accept an important appointment on the staff of the Canterbury College. He had the direction of the magnetic survey of the colony since its initiation. The Magnetic Observatory in Hagley Park, Christchurch, was erected and equipped on his advice; and Dr. Farr carried out or superintended the whole of the