

and difficulty experienced in victualling the party. Travelling too was dangerous in many places where the mountain sides were just a mass of moving stones: on one occasion a huge rock came away several tons weight, and struck the cadet who had the instrument box on his back; but for the box receiving the first of the shock he would probably have been killed. So that the triangulation is only completed over the saddle towards the Hollyford, but Mr. Wilmot expects to be able to finish it next season. The men have refused to go again; so I apprehend some inducement must be offered so as to secure good hands when the time comes. The area triangulated is 33,000 acres.

*Rural Section-surveys.*—Ten survey parties were at work on the 1st July, 1880, that being the whole field-staff on this class of work. Mr. Edie resigned a month later, and Mr. Campbell's engagement ceased three months afterwards, while Mr. Armstrong came into the office in May. Altogether 40,841 acres have been laid out for settlement, including many small sections. The area of sections ranges from 5 acres to 320 acres, the average size being 130 acres. The average cost per acre is 1s. 1½d. for most of the above, but a suburban section-survey in the Bengier District by Mr. Langmuir, in 5-acre sections, and Mr. Armstrong's work, which was all or mostly bush, are exceptions, having averaged 3s. 3½d. per acre. Mr. Campbell's work was very much scattered and altogether exceptional. The most important of the blocks surveyed are two at Otara, amounting to over 5,000 acres, and consisting in great part of very good land. Then there is a block on the Waiarikiki Stream, Tutarau District, of 4,750 acres, the Gimmerburn Block of 4,645 acres, and a block of 4,410 acres in the Kurow District. The land in all of these is good land, although some of it may be a little hilly. A village-settlement block of about 500 acres in Mount Hyde District, near Hindon, has been laid off by Mr. Edie, in sections ranging from 7 acres to 22 acres in area. This is very good land and is situated within 2 miles of the Otago Central Railway. A number of old reserves have, by order of the Waste Lands Board, been subdivided into small sections for sale.

*Town Section-surveys.*—Of these, 720 sections have been laid off, at an average cost of £1 2s. 4d. per allotment. This work is comprised in 9 sections surveyed in Naseby; the Kurow, Waihemo, and Wayne's Townships, 240 sections; extension of Tapanui Township, 31 sections; resurvey of sections in Weatherstone Township, 44 sections; and extension of Township of Pembroke, 396 sections or allotments. There are 682 ¼-acre lots, and 38 larger, from 1 to 8 acres, have been surveyed.

*Gold-Mining Surveys.*—Of gold-mining surveys, 275 acres, in 39 sections, have been surveyed, at an average cost of 17s. 4d. per acre. These mining surveys are situated in the Naseby, Kyeburn, Mount Buster, Serpentine, and Manorside Districts of Mr. Barron's district in the Bannockburn; Fraser and Lauder Districts of Mr. Mackay's district; in the mining localities of Bluespur, Weatherstone, and Waitahuna of Mr. Langmuir's district; and in the Shotover, Skipper's Creek, and Earnslaw Districts of Mr. Wilmot's district. Generally these surveys have caused long journeys, and are detached; hence the greater cost per acre over ordinary rural section-work.

*Native Land Surveys.*—Mr. Mackenzie has been occupied part of the year in laying off a reserve in Block I., Hawkesbury District, and Block I., Moeraki District, for the half-caste claims. The soil of these blocks generally is of superior quality; the sections vary from 8 to 10 acres in area.

*Roads, Railways, and Water-races.*—Under these heading no railway surveys have been made during the past year, but 16½ miles of road surveys, at a cost of £12 4s. per mile, and 9½ miles of water-races, at a cost of £3 10s. per mile, have been executed. Of these, the only works calling for special reference by me are the new road from Outram to Hindon, and the road from Clinton to Wyndham *via* the valley of the Wyndham River. The former—the road from Outram to Hindon—was surveyed by Mr. Edie in July last, while it was being constructed under contract, the length actually surveyed being 3½ miles. As to the road itself I have to report that the £3,000 expended by Government on it, through the Taieri County Council, has resulted in a very excellent dray-road across the gorge of the Lee Stream being made, which has shortened the road for wheeled traffic from 30 to 13 miles: it is much used by the settlers on Boyd's Run, by the storekeepers at Hindon, and by the gold-miners, and has been found of great advantage to the district generally. The Wyndham Valley Road has been laid off for a distance of 10 miles from Dr. Menzies' pre-emptive right section on Block I., Mokoreta District, up the valley towards the Cairn Station, by Mr. Strauchon, and 10 or 12 miles more are now under survey. I examined this line of road in company with Mr. Strauchon, and found that an excellent route existed, which could be made practicable for wheeled traffic by the expenditure of a few thousand pounds. By means of this road, when formed, the valuable lands belonging to the Otago High School will be easily accessible both from Clinton and from Wyndham. I shall be able, so soon as I get the plans and sections from the District Surveyor, to inform the Board of Governors of the approximate cost of this road.

*Survey Parties and Inspection.*—There has been no contract-work this year in connection with the Dunedin office. Ten survey parties began work in July, 1880, whereof eight only were engaged during the year, as Messrs. Edie and Campbell ceased working for this office, as explained above, after a month or two of work. I have personally made all the inspections of blocks or other work being carried on in the field, also of all the country survey offices. Seven field-checks have been sent by me to the head office and fifteen inspections made. In my inspections of the survey offices, at the Lawrence Survey Office I found the plans and other