

for the purpose of leading the wire-rope to the positions occupied by the boats when on shore. This work has been carried out supplementary to the construction of a small groin, which was completed last year, for the purpose of arresting the coastal sand-drift and forming a suitable beach for the reception of the boats. The whole scheme has answered so satisfactorily that the number of boats engaged in the fishing business has increased from two to nine, while the conveniences provided will enable the size of the boats to be increased, with the result that the fishermen have approached the Government with a view to the installation of a much larger winch.

Okarito.—Some protection-work to prevent the river encroaching on the wharf has been carried out.

IRRIGATION.

Steward Settlement.—The works for completing irrigation of this settlement have been completed by the Department within the estimated cost, tenders having been previously invited, but declined owing to the lowest one being considerably in excess of the estimate. The settlers have already utilized the water for irrigation to some extent.

In order to prevent encroachment on the settlement by overflows from the Awamoko River, a stop-bank with protecting groins has been constructed. All the works in connection with the irrigation of this settlement are now completed.

Otekaike Settlement.—A survey was made and plans prepared for the irrigation of this settlement by water derived from the Otekaike River, and a start was made with the construction of the races and headworks in April last, but up to the end of June, owing to floods in the river, not much progress had been made.

Central Otago—Ida Valley.—During the past year the survey-work in connection with headworks required and with the main distributing-races has been practically completed. Some further survey-work is required in connection with the minor distributaries. Considerable information has been obtained with a view of improvement of the Bonanza Race for the purpose of bringing in water from the Greenland dam, and for the purpose of first utilizing this water for the generation of power before its distribution for irrigation, the object being to obtain power for the purpose of pumping the tail-water into the main distributaries and so utilizing it over again.

The question of constructing additional reservoirs on the Manorburn has been fully investigated, and a site for a dam selected which will enable a considerable addition to the available watershed to be made.

Some surveys have also been completed with the object of diverting water from adjacent creeks so that it can be utilized for the irrigation of the Ida Valley. The information now in the hands of the Department will enable construction-works to be put in hand on short notice when the agreement with the landowners and occupiers has been completed.

Survey-work has also been carried out with a view to testing the practicability of pumping water from the Manuhereki River to supplement other waters for this irrigation-work. The total length of line surveyed and levelled during the year amounts approximately to 340 miles. The rigorous climate in this district considerably retards outdoor work during the winter time, so that practically the whole of the survey-work has to be confined to about eight months in the year.

Alternative plans have been prepared for the additional dam in the Manorburn, and also for the main distributary race intake-weir, Moa Creek.

Maniototo.—A small amount of survey-work was carried out to approximately locate the main distributing-races below the Linburn-Pataeroa Ford across the Taieri River.

SEACLIFF MENTAL HOSPITAL WATER-SUPPLY.

Plans in connection with this work have been completed, contracts prepared and submitted for approval, but no work has yet been carried out.

UTILIZATION OF WATER-POWER.

Kaituna Water-power Scheme.—The gauging of the outflow of Lake Rotoiti has been continued during the year.

Huka Falls Power Scheme.—Similar gaugings have been continued during the year.

Hutt Power Scheme.—Gaugings of the flow in the Hutt River have been continued during the year.

Lake Coleridge Power Scheme.—In consequence of the decision of the Government to put in hand the construction of this scheme, the completion of the surveys was put in hand, and up to the end of the year full information as regards the outlet tunnel and the diversion of the Acheron River was obtained. A survey has been made of a road to give access to the site of the power-station and the residences of the employees who will be engaged there. This work has been completed, and contracts have been prepared and entered into for the construction of the road. Plans have also been prepared for a bridge over the Acheron on this road.

OHINEMURI SILTING.

Survey-work in connection with the location of the Ngararahi and Koutou diversions of the Waihou River has been completed, and contracts are in course of preparation with a view of inviting tenders for a part of the work for the purpose of removing the silt from the river below the confluence of the Ohinemuri, and also for the purpose of generally clearing and enlarging the bed of this river in order that the flow of the flood-waters may be facilitated. Drawings for the construction of a suction dredge