

for future requirements of all irrigators. The scheme is practically completed, and will serve all parts of the area commanded next season. Last season fifty settlers had 2,462 acres under irrigation.

Earnsleugh Scheme.—The extension to this scheme has not been long authorized, but the erection of the pipe-line, which comprises the major portion of the work, is in hand. In addition, $1\frac{3}{4}$ miles of race has been enlarged, and $1\frac{1}{2}$ miles of distributary race completed. A special section, comprising 2 miles of race and 20 chains of pipe-line, to supply three settlers, is nearly completed. Work on the first portion of the scheme has mainly consisted of installation of additional gauge-boxes. Thirty-seven irrigators were supplied with water, the total area under irrigation being 1,194 acres.

Ardgour Scheme.—This scheme was in working-order throughout last season, and only maintenance work has been undertaken. 1,416 acres were irrigated by thirteen settlers.

Last Chance Scheme.—This scheme is nearing completion, and will be finished by next season with the exception of the distribution to some unoccupied Crown land, which has not yet been opened for settlement. Five miles of main race, $3\frac{1}{2}$ of distributary race, and 1,200 ft. of siphon were completed, and 30 chains of small flume is in hand. Five measuring-weirs and all necessary stock-crossings, &c., have been completed. Twenty-one irrigators watered 1,217 acres.

Tarras Scheme.—This scheme is nearing completion, and it is anticipated that nearly all the settlers will be supplied with water next season. A limited number of settlers received a partial supply this season. During the year $6\frac{1}{2}$ miles of the main race was completed, $3\frac{1}{2}$ miles of this being concrete-lined. Three siphons, of 34-in.-diameter pipe, of a total length of 1,970 ft., have been constructed in the gorge. Numerous concrete culverts and stock-crossings have been installed, and $4\frac{1}{4}$ miles of the lower main race built.

Teviot River Scheme.—This scheme is practically completed, and will be finished before next irrigation season. Water was supplied throughout last season, except that during the first part it was not possible to run a full supply through the upper race owing to slips. This was remedied as the season progressed. 5 miles 6 chains of main and distributary races have been constructed, and also 6,200 ft. of pipe siphon, in addition to the detail work necessary for the distribution of water. Water was supplied to thirty-four irrigators for 2,506 acres, and the combined irrigation and power scheme has worked very satisfactorily.

Bengerburn Scheme.—Maintenance work only has been done. Fourteen irrigators were supplied, for 104 acres.

Hawkdun Irrigation Scheme.—Repairs to Eweburn reservoir are nearly completed. This scheme, which absorbs Mount Ida Water-race, has been further investigated.

GENERAL SURVEYS.

A survey has been made of the Upper Manuhirikia dam reservoir for the purpose of determining its correct capacity. A detail survey has also been made of the dam-site and its surroundings, and the access road to the dam-site. The plans of these surveys are in course of preparation. The plans of the Roaring Meg survey are being prepared, and a survey is in progress for a scheme out of the Luggateburn to serve Crown lands. A scheme for the Miller's Flat district, out of the Minzionburn, has been surveyed, and the details are now being worked out, and the measure of public demand investigated. A survey of the Arrow irrigation scheme is in hand, and will be far enough advanced to enable agreements to be obtained and work commenced next summer.

WATER-SUPPLY AND DRAINAGE.

Rotorua.—The new water-supply system has now been completed. 262 chains of 12 in. cast-iron mains were laid during the year, and all the old wooden pipes were removed, trenches filled in, and tunnel at 3 m. packed with stone. Considerable survey and investigation work was done during the year in connection with drainage works at this tourist and health resort, and plans and specifications were prepared and tenders invited recently.

Tokanui Mental Hospital.—A 6-in.-diameter concrete pressure pipe-line, 3 miles 72 chains in length, has been laid from the Te Awamutu Borough Council's main on Frontier Road, to provide an improved water-supply to Tokanui Mental Hospital, and a $2\frac{1}{2}$ m. line of galvanized piping, with regulating-valve, has been run from the main pipe to the hospital reservoir.

Hanmer.—A new water-supply is being provided at Hanmer, and practically all the materials required have been delivered. Concrete anchor-blocks and supporting-cradles have been erected, and the 12 in. main has been laid for a distance of 2 miles 33 chains with suitably constructed road-crossings over it where necessary. A commencement has also been made with the laying of the 6 in. and 4 in. pipes for the reticulation of the township: this is to take the place of the wood-stave pipes which were originally laid and are now past their usefulness.

TRAMWAYS.

Auckland.—The Auckland City Council has duplicated 54·75 chains of single track between Vincent Avenue and Upland Road, on the Remuera line. The first section of the Edendale Extension, 76 chains in length, as far as Parrish Street, was completed, passed by the Department, and opened for traffic on the 9th February last; and the second section, 59 chains in length, from Parrish Street to the terminus at Calgary Street, was completed, passed, and opened for traffic on the 2nd March last. Nine new cars were tested by the Department and passed for use.