was next tried with good results. The analysis of the water by Mr. Skey proves that it is excellent. Engineering survey, plans, &c., have been prepared for a pipe-track a distance of 1 mile 40 chains from the present inlet to the tunnel, also sections have been made of proposed dam. The site of this dam is 34 ft. above the present reservoir, and 131 ft. above the pipe-level at the Rotorua Postoffice. Iron pipes, 12 in. diameter, for the whole distance of two miles and a half to reach the present main, would cost about £8,500.

Whakarewarewa (Baths, Paths, and Supervision).—The paths have been kept in order. The Spout baths have been repaired and reroofed with P.B. felt. Tool-shed, 10 ft. by 7 ft. by 8 ft., built. Repairs to road. Built frame-work of timber and split totara posts over steam and mud holes. Made and fixed three new spout-valves to Spout baths. Fixed 36 ft. 6 in. drain socket pipes at entrance nursery gate. Built two concrete tanks of a capacity of 4,000 gallons each for windmill at nursery. Fixed 30 ft. steel tower, with 12 ft. Star windmill and pump; also 550 ft. of 2 in. and 1 in. galvanised iron pipe connecting pump with tanks. Built stable, 50 ft. by 18 ft. by 14 ft., shed divided into four stalls, feed, and harness, and one workroom and loft, 50 ft. by 18 ft.; also lean-to shed, 50 ft. by 17 ft. Maintenence, &c., has been looked after.

Waiotapu Springs.—A track, 1 mile 48 chains, has been made to the top of the Kakaramea

Mountain, enabling visitors to ride to the top and have a fine view of the surrounding district.

Papamoa Nos. 1 and 2 Special Settlement (Drainage).—Mr. C. B. Turner made an engineering survey of a proposed drain to connect settlers with the drain made by the Te Puke Drainage Board, the distance being 1 mile 49 chains, and also chained and levelled down the Board's drain for two miles, with a view of obtaining a better fall and removing obstructions, the drain being blocked up with timber. A contract for making a drain 7 ft. by 4 ft., averaging 4 ft. deep, has been let; length, 1 mile 49 chains. Of this, 60 chains has been completed. The balance of the authority, if any, should be spent in clearing and deepening the outlet drain.

Opene Stock-paddock (Taupo-Napier Road).—The stock-paddock is now completed with a ring

fence of 97 chains (seven wires), including one dividing fence, and has been put in charge of the

Surfaceman.

Mamaku Block.—The engineering survey has been finished to within 20 chains of the Arahiwi Railway-station, a distance 4 miles 6 chains. Two miles of quantities and three miles of plans have also been done. Three contracts have been let on this road—one to complete the clearing and grubbing, and two for forming a road 14 ft. wide: length of formation, 24½ chains, and 52 chains of stumping and clearing. The authority is now exhausted. As this is the only road by which settlers between Mamaku and Arahiwi are supposed to get to the station, it is important that it should be completed as soon as possible; at present it is hardly fit for horse traffic. Three culverts have been put in; length, 66 ft.

Manaku-Rotorua-Tirau.--The engineering survey plans and quantities have been completed for the whole distance of 3 miles 14 chains, and the work let in six contracts. Of these, five have been completed, leaving one in hand. The work consists of clearing, stumping, and forming a 14 ft. road, with the necessary culverts. The length formed during the year is three miles, with sixteen culverts, 360 ft. The existing contract will be finished in a few weeks; this will complete the road right through. The road has been sown with grass-seed.

Mangarewa-Kaharoa Block.—The authority for the expenditure of £577 on this road has

been received. Mr. Webb is now engaged on the survey of it.

Taumata Block.—This road, 6 miles 16 chains in length, has been surveyed, also 60 chains of plans and quantities finished. The grades are mostly 1 in 10, as it is through very rough and broken bush country. Four contracts have been let, the work consisting of felling, clearing, grubbing, formation, &c.—61 chains of formation, 2 miles  $17\frac{1}{2}$  chains of clearing and felling, and 42 chains of grubbing, &c. The authority is exhausted, and I would respectfully suggest more money should be voted, as it is important that the settlers should have access to their sections, as well as opening a road into sections still open for selection.

Umurua Block.—Engineering surveys of 1 mile 69 chains are completed. The bushfelling done consists of 31 chains 2 chains wide, and 1 mile 29 chains 1 chain wide; clearing 1 mile 60 chains 33 ft. wide, stumping 16 ft. wide. One contract still to be completed.

Lichfield-Atiamuri.—The Government portion of this road, fourteen miles in length, extending from its junction with the Tauranga-Runanga at Atiamuri towards Lichfield, has been maintained. 3 miles 63 chains has been re-formed, and the drains and ditches looked after, by one surfaceman.

"Thirds," General.—The sum of £57 has been spent on the formation of 45 chains of road,

and in building one culvert 30 ft. in length in the Okoheriki and Taumata Blocks.

Gisborne-Opotiki.—The Whakatane County have spent their grant of £50 on the construction of the Tahora Bridge and in forming 10 chains of dray-road.

Aratiatia Rapids.—This road has been maintained for the length of two miles during the year; a few chains of rock embankment was also re-formed.

Opotiki-Hast Cape.—The Whakatane County have spent their grant of £60 on the maintenance of sixty miles of dray-road.

Okere Fails.—Longitudinal sections and cross-sections have been taken for the electric-light

power, also a road formed into the falls about 30 chains in length.

Rangitaiki Bridge, Galatea.—About 15,000 ft. of timber (totara) has been sawn and delivered at the bridge-site, and a co-operative contract let to Messrs. Bird and party for the construction of the bridge. It should be completed in six weeks or two months.

Branch Road from Waiotapu to Galatea Road.—There has been 2 miles 22:36 chains graded

and let to the Maoris in co-operative contracts.

Tongariro River Groin, Tokaanu-Taupo Road.—For the last two years and a half this river has gradually been deviating from its course, eating away the western bank, and this threatened to cut off the approach to the bridge. To stop this a wire-netting groin 71 chains long has been