

*Wellington Water-supply.*—The water-supply of this city is obtained from two sources—one from the Kaiwarawara Creek and the other from the Wainuiomata. The source of the former is about two miles distant from the centre of the town, or post-office, and is 310ft. above the lowest city level. The works in connection with this supply consist of a reservoir about twelve acres in extent, formed by a natural basin, in which the water is retained by the construction of a concrete weir across the stream. From this reservoir the water is conveyed, partly by a tunnel and partly by pipes, for a distance of thirty chains, into a storage or distributing reservoir, which is constructed of concrete at a height of 258ft. above the lowest town level. From this reservoir the water is conveyed through the city in main-service cast-iron pipes, varying from 10in. to 5in. in diameter, according to the quantity of water required to be supplied in different parts of the town, and from these mains smaller pipes are used in distributing the water through the various streets. This supply was the first that was constructed; but it was found inadequate to meet the requirements of the city, and is only now used in cases where the bursting of a pipe or other exigency necessitates the shutting-off the Wainuiomata or main supply. The latter supply has its source about sixteen miles distant from the centre of the town, and has now been in use for two years and a half. The works in connection with this supply consist of a reservoir, formed by a concrete dam being constructed across the bed of the Wainuiomata River, 395ft. above the lowest level in the town, at a narrow gorge, which forms a reservoir in a natural basin of fifteen acres in extent. From this reservoir the water is conveyed in a concrete-covered race, a mile and a quarter in length, into a concrete well 63ft. in depth; thence it is conveyed in cast-iron pipes 30in. in diameter for three and a half miles. In this distance the pipes are carried through a tunnel fifty chains in length. For the next eight miles and three-quarters the pipes are 24in. in diameter; thence 21in. in diameter for the next mile and a half, and 15in. for the next twenty chains; after which the main service-pipes are 12in. in diameter, to which distributing-pipes are connected, varying from 8in. to 3in. in diameter, to convey the water through the various streets in the city, the principal streets having two mains, which can be connected or shut off from each other, or can be supplied with water from either reservoir, as may be required. The rates charged for water are as follows: For domestic use, 5 per centum of rateable value of property if water is supplied; if water is not supplied the rate is 2½ per centum on rateable value of property; for stores and warehouses, 2½ per centum on rateable value of property; for motive-power, 4d. per 1,000gal.; for trade purposes, 1s. per 1,000gal. The cost of the first supply was £80,000, and the cost of the latter £135,000; making a total of £215,000.

*Rotorua Water-supply.*—The Government, about four years ago, commenced the construction of baths and a sanatorium for invalids in the Hot Lakes District at Rotorua, where hot mineral springs abound which have proved very efficacious in curing and relieving persons afflicted with gout, sciatica, rheumatism, paralysis, stiffness of joints, and skin diseases. The number of persons and invalids frequenting these springs from all parts of this and the neighbouring colonies—which number is daily increasing, necessitating the enlargement of the accommodation that has been provided—and also the large number of tourists frequenting the Hot Lakes yearly from all parts of the world, have induced a permanent population to settle, causing the place to become a small township.

The Government are now constructing a cold-water-supply for the use of the inhabitants, and also for the sanatorium and baths that have been erected. This supply is taken from the Paueranga Stream, at a point about three and a half miles from the township, and will be conveyed in a wooden flume for the first seventy-six chains, where a small concrete tank will be constructed. Thence the water will be conveyed in cast-iron pipes, 8in. in diameter, to the township, where branch pipes will be connected to convey the water through the different streets. The contracts at present entered into provide for about three miles of cast-iron pipes, of various diameters, being laid, and also fire-plugs and risers, connected at different points, to be used in case of fire. The mean head of water above the township will be about 84ft., and the cost of the supply when completed is estimated to be £8,000.

The total cost of the water-supplies as enumerated and described is as follows:—

*Water-supplies for Goldfields, by Government.*—Waimea Water-race, £118,576; Kumara Water-race, £54,601; Nelson Creek Water-race, £90,152; Charleston Water-race, £14,183; Mount Ida Water-race, £65,766; Thames, £80,709; Totara, £25,624; subsidies, £45,235; departmental expenses, £6,515: total, £501,361.

*Water-supplies for Agricultural Pursuits.*—Malvern Water-race, £20,460; Greendale Water-race, £202; Hororata Water-race, £7,407; Waireka Water-race, £158; Ashburton, £22,500: total, £50,727.

*Water-supplies for Cities and Towns.*—Auckland, £125,000; Dunedin, £240,257; Wellington, £215,000; Nelson, £24,860; New Plymouth, £22,000; Timaru, £70,000; Oamaru, £137,000; Rotorua, £8,000: total, £842,117. Grand total, £1,394,205.

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Inspecting Engineer.

The Hon. the Minister of Mines.