of containing 700,000gal. The height of the first reservoir is 345ft., and the height of the second 300ft. above the level of the town. These reservoirs are connected by an open conduit. From the second reservoir the water is brought into town by cast-iron pipes varying in size from 7in. to 10in. in diameter; thence the water is carried in distributing-mains of various dimensions through the town, in proportion to the quantity of water requiring to be delivered. The total length of the mains, including branch supplies, is about fourteen miles; these are calculated to supply about 400,000gal. of water per day. The total cost of the works in connection with this water-supply was £24,860. The rates charged for water are as follows: Dwelling-houses, 3½ per cent. on the annual rateable value; stores and warehouses, 2 per cent. on the annual rateable value; driving machinery, at a fixed sum per annum, according to the diameter of the supply-pipe—viz., 1in., £7; 1½in., £10; and 2in., £15 per annum.

Timaru Water-supply.—The water-supply for the Town of Timaru is taken from the Pareora River, and conveyed for the first two miles in open conduits, tunnels, and flumes, and for a short distance in an earthenware pipe 18in. in diameter, and thence to the town in cast-iron pipes, 14in. in diameter. The length of the main supply-pipe is sixteen miles, and the service-pipes in town about twelve miles, making a total of twenty-eight miles of pipes. The carrying capacity of the main pipes is 1,042gal. of water per minute, or 62,500gal. per hour. A concrete weir is constructed across the Pareora River, in a narrow gorge about eighteen miles distant from the town, which forms a dam in the river; and from this dam the water is taken into the open conduit at an elevation of 800ft. above the level of the town, and is discharged from the pipes into a reservoir covering an area of about one acre, excavated in clay, and lined on the sides with bluestone pitching. This reservoir is 250ft. above sea-level, and gives a maximum height above the town of 124ft. The total cost of the works in connection with this supply was £70,000. The charges for water are as follows: (1.) Upon all lands and buildings to which water is supplied whose rateable value on the valuation-roll does not exceed £12 10s., 10s.; exceeding £12 10s., but not exceeding £100, 7 per cent. on annual valuation; exceeding £100 and not exceeding £200, 6 per cent. on annual valuation; exceeding £200 and not exceeding £300, 5 per cent.; exceeding £300, 4 per cent. (2.) Upon land and buildings to which water can be but is not supplied, situate within a hundred yards of any part of the waterworks, one-half of rates above mentioned. (3.) Upon all buildings used as stores or warehouses or for any purpose other than a dwelling-house, £2 10s. per centum on rateable annual value. (4.) Any dwelling-house remaining actually unoccupied for not less than six months in any year, if the owners or occupiers give notice in writing to the Council of the dates on which the same became vacant and on which it was again occupied, shall be rated at only one-half the amount otherwise payable. Extraordinary supply—under the head of supply to single tenements consuming or using more than the ordinary supply—is charged by meter at the rate of 2s. per 1,000gal., at a minimum of 7,500gal. per quarter. Owners of blocks of buildings desiring one meter only, and using more than the ordinary supply, are charged manufacturers' rates and minimum. Hotels—first-class, having ten or more bed-rooms, per annum, £2 10s.; second-class, having less than ten bed-rooms, £1 10s. Lodging- and boarding-houses having five or more bed-rooms, £1 10s., and under five bed-rooms, 15s. per annum each. For public baths, per 1,000gal., 1s. 3d.; manufactories, 1s.; supplies for motive-power, water-engines, and hydraulic lifts, 4d. per horse-power per hour, but the minimum charge is 20,000gal. per quarter; boilers for steam-engines, £1 per annum per horse-power; condensing-engines, £2 per horse-power per annum; butchers' and bakers' shops, 25 per cent. additional on ordinary supply; livery stables, 10s. per horse-power per annum for the maximum number kept; cattle, mules, or asses, 5s. per head per annum; for marine boilers or ships of war, 1s. per tun; for ordinary shipping, 2s. per tun; breweries, chemical works, and public wash-houses, 1s. per 1,000gal.

Oamaru Water-supply.—The water-supply for the Town of Oamaru is brought from the Waitaki River at a point about twenty-five miles distant from the town. The water is conveyed in open conduits, tunnels, and flumes for about twenty-four miles, at the end of which there is a reservoir, situated about one and a half miles from the town, constructed partially by excavation, having at one end an earthwork embankment, with a puddle wall in the centre. This embankment has a slope of 3 to 1 on the breast and 1½ to 1 on the outside, the inside slope being faced with a layer of puddle 12in. in thickness, and afterwards pitched with stone, having a coating of broken metal. In bringing the water from the Waitaki River to the reservoir, six tunnels, two of which are forty-five chains in length, had to be constructed, and also sixteen aqueducts, which are of timber. The largest of them has a maximum height of 95ft., and 480ft. in length, carried in eight spans of 60ft. each; the works for the remaining distance being open conduits, constructed 2ft. 6in. wide at the bottom, and 4ft. deep, having a slope of 1 in 1 on the sides. To take the water out of the reservoir there is a tunnel constructed at one end of the embankment six chains in length, and in this an oval pipe 37in. by 22in. is placed, at the end of which there are two mains connected, of pipes 18in. and 24in. respectively. At the reservoir end of the tunnel a concrete valve-tower is erected, and the supply is regulated from this tower to meet the requirements in the town. The greatest depth of water in the reservoir is 45ft., and when full it is capable of holding 80,000,000gal. The length of the main supply from the reservoir is about two miles, having a maximum head of 270ft., and a minimum head of 20ft., above the level of the town. In connection with this water-supply there are fourteen miles of cast-iron main service-pipes, varying from 18in. to 3in. in diameter, and seven and a half miles of wrought-iron and galvanized-iron pipes from 2½in. to ½in. in diameter. The rate charged for water for domestic purposes ranges from 5 to 6 per cent. on the annual rateable value of the property, and the rates charged for driving machinery are as follows: One-quarter horse-power and under, per annum, £5; one-quarter horse-power to one-half, £7 10s.; one-half horse-power to one, £12 10s., and up to four horse-power at this rate; above four horse-power, £10 per horse-power for twelve hours per day, and £12 10s. per horse-power for twenty-four hours per day; all charges being based on theoretical horse-power. The total cost of constructing this water-supply, including the purchase of land, was £137,000.