

where meters are employed by fixing a minimum tax—to be paid by all water takers—which shall cover a certain quantity, based on a reasonable estimate of domestic needs. Water used in excess of this quantity should be paid for by measurement, and special arrangements may be made for tenement houses. Cold weather waste can never be completely stopped until property owners are obliged to arrange their plumbing so that the water can be completely drawn from the pipes when liable to freeze. By the use of meters the waste will be reduced to the minimum amount required to prevent the pipes from freezing, and it would become a question to the water taker whether it was economy to waste water or remodel his fixtures.

Some consumers protest against the use of meters because they are unsanitary and in proof of their statement say that they are not in use in other cities. To show that such is not the case I will give a few figures taken from recent returns. Of 77 German cities with a population of 7,600,000 twenty-six per cent. sell water *exclusively* by meters. In the remainder meters have been generally adopted. Since 1878 Berlin has used meters exclusively in selling water. Manchester, New Hampshire, has a population of 44,126 and uses 1135 meters. Providence, Rhode Island, with 14,896 taps has 9286 meters. Halifax with 13,966 taps uses 44 meters. In the United States 43.1 per cent. of all the works have meters in use. Alleghany, with a consumption per capita of 233 gallons per diem, uses no meters. Atlanta, with 89.6 per cent. of taps metered, consumes 36 gallons, and Fall River, with a population of 74,398 and 74.6 per cent. of taps metered, consumes only 29 gallons per capita, or 2,157,542 gallons per diem. Halifax with one-half the population of Fall River has an estimated consumption of 6,500,000 gallons. No further comment is necessary.