

E. G. HOPSON SHOWS REEVE PARADOXES

Proposed Change Is Declared to Be Based on False Economical Theory.

POOR WOULD BEAR BURDEN

Water Said to Be Plentiful Enough for All Legitimate Uses and Assertion Made That Waste Can Be Checked at Less Cost.

METERS ADD YEARLY COST OF \$2.50 TO EACH WATER USER

The most reliable of engineering records as gleaned by E. G. Hopson, ex-supervisor of the United States reclamation service, show that in other cities the cost of repairs and maintenance on the water mains is \$2.50 yearly for each meter.

Before the Portland Realty Board on Friday, E. G. Hopson, ex-supervisor of the Reclamation Service, expounded his views upon the subject of a city-wide water meter system for Portland.

Following is the full text of his argument against meters: "The issue is not between meters and no meters, but between the small individual users and the large users, such as manufacturers, railroads, hotels, laundries and the like are already metered, and will be in the near future; this is the universally adopted rule in all American cities of importance."

"The issue is not between waste on one side and economy on the other. Willful waste has no defenders, and should be stopped and checked as necessary to stop willful waste. Great cities like Boston, Syracuse, Newark and scores of others do this without metering the small user."

"The issue is not between fire protection and no fire protection, or poor protection. The supply of water for fire protection is amply sufficient in all localities where the street mains comply with the requirements of the underwriters."

"The issue is not whether Portland will need to increase its supply if meters are not installed. The supply conduits can carry more than twice as much water as the city uses, and the supply of water for fire protection is amply sufficient in all localities where the street mains comply with the requirements of the underwriters."

"The issue is not whether a measure of economy can be had by metering water in some cities where water is plenty should be applied here where the reverse is the case."

"It is also whether a free or even lavish use of this most necessary and cheap commodity should not, on general principles, be encouraged and not restricted."

"Public Good Cited. "It is neither our resources should be spent on a proposition which is at best may be regarded as of doubtful utility, but which many think is actually a detriment to the city's economy."

"Theory Not Approved. "It will be insisted by the meter advocates that there will be a minimum charge for a reasonable amount of water and the meter will only work to penalize the hog that uses an unreasonable amount. That sounds good but how does it work out?"

"The supply reasonable and necessary for the family of seven or eight persons with a lawn or garden is unreasonable to the apartment house dweller. It is therefore necessary to fix a minimum rate adjusted to the reasonable requirements of the large class of suburbanites that are liberal users. This at once permits the other classes to waste freely and recklessly within their legal limitations. It does not appear to be a very fair and just arrangement."

"Small Mains Criticized. "In 1912, out of about 600 miles of water mains in use in Portland of 12 inches in diameter, 170 miles were of less than six inches. It may be safely asserted that mains less than six inches in diameter are of little use for fire protection. Some of these mains are ridiculously small, such as three inches, two inches or even one inch in diameter. In 1912 it also appears that not less than 15 miles of pipe less than four inches in diameter were added to the system."

"The present supply system is said to have a capacity of 8,000,000 gallons a day. The average consumption in 1913 was only 37,000,000 gallons. If we take an extreme case and assume that the present use of water will not be reduced but will even increase to as much as 150 gallons an inhabitant a day, an amount which the eminent engineers who designed the new water supply system for New York City have considered a reasonable amount for a large American city, we will find there is yet an ample margin of safety in the matter of supply."

bill to be paid soon, has a morbid attraction. Personally, I find it impossible to enjoy the scenery or the passing features of interest to the fullest extent. The mind seems to revert to the miserable dial, with the inexorable hand that only goes one way. This is what a meter means on a house connection. You cannot waste or hoard without thinking whether you might not have saved 5 cents by deferring the meter for another day. The same thought pervades the entire domestic economy. It is the difference between freedom and paralyzation, with the ever-present thought of the saving of a cent or two, and to be balanced against the more important considerations of use and pleasure.

"Waste Not Defended. "Now, although I would advocate a free and lavish use of water by the individual consumer, I would favor rigid penalties for willful waste. The Boston rigorous system of inspection reduced the per capita consumption from 91.5 gallons to 64 gallons without the use of meters. It was on one of the larger services. The method of inspection consists of applying a special meter on the street mains at selected points to determine localities where unusual waste occurs. This is followed up by a household inspection of the water meters. The supply is, or should be, amply sufficient for all purposes and for a great deal to run away, in the form of leaks or other useful or ornamental purposes, without thought or record."

"Necessary Waste Tolerated. "The occasional use of water to prevent freezing of service pipes should not be considered as a waste, particularly in a city like Portland, where cold weather is the exception and not the rule. It would be much more to protect all pipes from frost than to run a little of the service water through the pipes to prevent freezing. If a meter on every service pipe metered the household, however, hesitate to use this already legitimate method of protection."

"The waste due to leaky plumbing fixtures and dripping faucets, however, repaired or the owner penalized. Any willful running to waste without use or enjoyment should be considered as an abuse, and reasonable penalties should be levied on the offender. The sprinkling of lawns, desirable as it is, should not be carried to an abuse, and reasonable limits should be set and strictly enforced to prevent abuse. Practically all of these wastes, however, can be remedied without the use of meters, and at a less cost and with less friction and annoyance."

"Metering of Large Users Approved. "About 40 per cent of the city supply is used by large users, such as hotels, restaurants, and other public purposes. I do not think the opinion that these large users should be metered is at all seriously questioned. In cities like Baltimore, New York, Boston and other large centers the large user is already metered, and no objection should arise to the universal metering of all such users. In cities like Portland, where the large user is not already metered, the issue now before the people is to install meters on all such users. It is not a question of whether to meter, but with the avowed purpose of following up this with a general application of meters to all users. It is a question of step that is to be deprecated and defeated."

"Portland's Consumption Contrasted. "If you compare the use of water in Portland with that in some of the other cities, it will be found that Portland makes a good showing. Compare Portland with its consumption of 112 gallons with: Washington, D. C., 230 gallons; New York, 190 gallons; Boston, 180 gallons; Philadelphia, 170 gallons; St. Louis, 160 gallons; Chicago, 150 gallons; San Francisco, 140 gallons; and Portland, 112 gallons. And also some of the larger centers with a consumption almost similar to Portland, such as: Baltimore, 110 gallons; Cincinnati, 100 gallons; St. Paul, 90 gallons; and Portland, 112 gallons. It will be found by comparison that the use of water in Portland as compared with other cities is quite moderate."

"Calculations indicate an available delivery for purposes of fire protection from the main arteries leading into the city, including the water district of about 15,000 gallons per minute at Fourth and Stark streets. This is a very ample margin of water for fire protection requirements. At other localities in the district less favorably situated with regard to main arteries the delivery is not so ample, but can easily be increased by the installation of larger distributing mains."

"The present supply system is said to have a capacity of 8,000,000 gallons a day. The average consumption in 1913 was only 37,000,000 gallons. If we take an extreme case and assume that the present use of water will not be reduced but will even increase to as much as 150 gallons an inhabitant a day, an amount which the eminent engineers who designed the new water supply system for New York City have considered a reasonable amount for a large American city, we will find there is yet an ample margin of safety in the matter of supply."

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- 15c Fancy Maine Sugar Corn 8c Can
10c Choice Sardines 5c Can
15c Sugar Peas 6 1/4c
30c and 35c TEA 15c Pound

SALE MONDAY 9 A. M.

SALE MONDAY 9 A. M. SIMON'S Cuts Prices.

Simon makes deeper cuts on remainder of all merchandise saved from the fire of Jones' Cash Store. Without mercy or regard for former cost Simon butchers prices to the bone.

IF YOU WANT BARGAINS, GO TO SIMON'S

- GROCERIES: 10c Gold Dust Washing Powder 5c, 20c Gold Dust Washing Powder 10c, 10c Graham Flour, sack, \$1.00, 20c Canned Sauerkraut, 8c, Arm and Hammer Soda, 8c, 10-lb. can Wedding Breakfast, 75c, 10-lb. can Carnation Syrup, 50c, 10-lb. can Clover Maple Syrup, 85c, 4-lb. can Log Cabin Syrup, 65c, 1/2-gal. can Log Cabin Syrup, 65c, Gallon can Log Cabin Syrup, \$1.25.
PIE FRUIT: Peaches, Apples, Apricots, Plums, Cherries, Blackberries, Grapes, Loganberries, Figs, Pumpkins, Rhubarb, etc., per can, 25c.
CHI-NAMEL PRODUCTS: The entire paint stock saved from the fire of the Old Pacific Lumber Company now selling here at about HALF PRICE. Brick and Cement Paint, very special, the gallon, 75c. White Enamel, very special, 50c. 5-gal. Varnish, gallon, 75c.
DRY GOODS: 10c Apron Gingham, yard, 3c, 10c Calico, yard, 4c, 10c Percale, yard, 4c, 25c Pongee Flannel, yd., 7 1/2c, 8-4 Unbleached Sheeting, the yard, 15c, 75c Ready-Made Sheets, 40c, 25c Table Oil Cloth, 15c, 15c Bath Towels, 10c, 15c Linen Toweling, yd., 10c, \$2.00 Lace Curtains, 1.25, 15c Pillow Cases, 9c.
LADIES' FURNISHINGS: 35c Ladies' Ribbed Vests or Pants at 17c, 25c Ladies' Hose, now 12c, 15c Children's Hose, now 7c, One lot of Children's Hose Supporters, now at 4c, 60c Ladies' Mesh Union Suits, 25c, 60c Ladies' Persepolis Union Suits, now at 21c, All Ladies' Muslin Underwear, now at 10c, 50c Child's Rompers, 20c, 50c Child's Dresses, 30c.

- 42-Piece Dinner Set \$1.98. Clear White Porcelain Dinner Set of 42 pieces, durable quality, embossed design, worth \$3.00, set at \$1.98. LAWN MOWERS: The Cadet Cutlery Co. lawn mower, with 25-hp. motor, best lawn mower to buy. Sells elsewhere at \$2.75. All kinds of Garden Tools, 50c.
HARDWARE, ETC.: \$2.00 "Frost King" Ice Cream Freezers, \$1.00, 45c Granite Buckets for 20c, \$20.00 Cast Iron White Enamel (5-foot) Bath Tubs, \$14.00, \$5.00 18x30 Cast Iron White Enamel Sink, \$2.95, 75c Plumbers' Friend Force Cups, 35c.

SIMON'S SALVAGE STORE. J. SIMON & BRO. 131-133 FIRST STREET. Near Alder

- 15c Kipper Herring 6c Can
15c Karo Syrup 8c Quart Can
15c White Soap 3c
10c Peroxide Bath Soap 5c
10c Heinz' Pork and Beans 6c
10c Altmore's Mince Meat 5c
10c Colton Tomatoes 5c
15c Bayless Mustard Horseradish 7c
8c Prunes—Very Fine 4c Pound
10c L. X. L. Chicken Tamales 6c Can
\$1.25 Holland Herring 75c Keg

METERS ARE URGED

Water Bureau Engineer Says Revenue Would Increase.

CONSUMPTION TO BE CUT

Argument for Mr. Daly's Scheme Is That Life of Small Pipes Also Would Be Extended and Saving Would Be Made.

PORTLAND, June 5.—(To the Editor.)—Several times during recent weeks reference has been made in the columns of The Oregonian to the reports of the water engineer to the commissioner Daly upon different phases of the meter problem and by your comments thereon I fear a wrong impression has been conveyed regarding the attitude of the engineers in this matter. Will you therefore kindly grant me space to say that I am unqualifiedly in favor of the policy of extending the use of meters until every service line in the city is supplied, and, furthermore, I believe that the work of installing meters should be commenced at once and continued as rapidly as is consistent with economy of operation and as the needs of the service require. From the statements which have appeared in print I think many have gained an erroneous impression regarding the time required to complete this work. The time that will actually be taken will depend upon the growth of the city and the rapidly with which the present mains are overloaded, but in my opinion it is not probable that the work of metering present services will be completed in less than five years' time. It will, therefore, be seen that the cost of the work will be extended over a considerable period and need not be burdensome during any one year. Other Cities' Methods Cited. The experience of other cities in this respect is that the installation of meters on old services at the rate of from 10 per cent to 20 per cent per year produces satisfactory results, and I have no reason to think such a plan would not work advantageously in Portland. By this method the consumption would be gradually regulated and controlled as the city grows, thus deferring the time when larger mains must be laid, and hence a saving in interest charges will be effected, continuing for a term of years and largely offsetting the original cost of meter installation. As an illustration of the probable effect of this regulation and control, I will state that in November 20, 1914, the total mileage of water pipes in use in this city, of all sizes, was 671.3. Of this number 543.1 miles were four-inch pipes and 128.2 miles of six-inch pipes, only about 6 per cent being larger than two inches diameter. The estimated population supplied with city water on the above date was 252,000, or, say, an average of 875 per mile of pipe, or 48,075 residents along the 128.2 miles of small pipes and supplied by approximately 10,000 services. Assuming the cost of meters for these services to be \$10 each, in place, the total cost would be \$100,000. Mains Must Be Replaced. The 128.2 miles of small mains will unquestionably in time have to be replaced with larger-sized pipes, as the population increases and the demand upon these particular pipes exceeds their normal capacity. The cost of substituting six-inch and eight-inch mains for these small pipes will approximate \$1.40 per foot, or \$140,000 for the 100,000 feet of pipe to be replaced. It is assumed, then, that the serviceable life of but one-half of these small pipes could be prolonged for five years, the saving in interest charges alone would be \$106,611.10, or more than sufficient to cover the cost of installing meters on the entire mileage of small pipes; and, besides, the meters would still be good for years of service in detecting leaks and insuring that each consumer is paying only for the water actually used by him. Furthermore, it is but reasonable to expect that an improvement in the supply and increased pressure will obtain in other districts whose mains of a larger size have already been installed. For instance, I have no doubt that if meters had been generally installed in the Peninsula district three or four years ago, the laying of the 30-inch Highland main, now being completed at an approximate cost of \$225,000, could have been delayed for at least five or ten years, with the saving of the interest charges, amounting to approximately \$100,000; and a similar saving in interest charges could undoubtedly be effected for all other services, the total amount made for larger mains than those now in use. Effect of Meters Calculated. If regard to the effect of meters upon the water supply for the entire city and the revenue derived therefrom, permit me to say further: That Portland, with its population of 252,000, has installed 2,255 meters during the year 1914, the average per capita consumption was found to range from 12.5 gallons in the West Side business district to 127.3 gallons in the East Side business district, down to 41.9 gallons in the residential district, and through the Vernon standpipe, the average for the residence districts alone, in the entire city, being 64.1 gallons per day. Deducting the record of the meters in the East and West Side business districts, and assuming that the average use of water in the city would not exceed the average rate through meters in the residence districts, it is estimated that the city will give a total consumption of 20,989,000 gallons for the entire city. It is noted that this amount is appreciably less than the capacity of outlet No. 1 (which exceeds 22,000,000 gallons per day). If the above amount, 20,989,000 gallons per day, was actually passed through meters and paid for at present meter rates, 10 cents per 100 cubic feet or 13-1/2 cents per 1000 gallons, the yearly income would amount to \$1,021,481, or say \$1,000,000 in excess of the entire receipts of the department for water sold during the year 1914, when the water actually furnished approximated 30,000,000 gallons per day. If all the water furnished—30,000,000 gallons—was metered the rates could be reduced 40 per cent, or from 13-1/2 to 8 cents per 1000 gallons, and the revenue would still exceed that obtained during the past year. Meters Reduce Consumption. In other cities it is found that by the use of meters the average per capita consumption is reduced, from that which prevails under flat rates, without hardship to anyone, the rates being adjusted so as to allow a generous use of water, amply sufficient for all legitimate purposes, the cost of same being generally less than by flat rates. In some cities it is noted that about 70 per cent of the consumers pay less, while the remainder have to pay more than they paid under a flat rate, the total income from the sale of water not being greatly affected. All unite, however, in saying that there is a distinct saving in being able to control careless consumers, which results to matter. The advantage of the entire water supply system. I have stated that other cities approve the use of meters, and as an example of the use of policy I would name the City of Los Angeles, known the

country over as a city of the most progressive and modern type, and especially in this true regarding its municipal water supply system. Within the last two years it has completed a system of aqueducts and pipes of large size conveying a 25,000-gallon gravity supply from a mountain source 22.5 miles distant at a cost of over \$17,000,000, which must be conceded as being quite an undertaking even for a city of 350,000 inhabitants or over. Engineer Is Quoted. From the records it appears that they now have an abundant supply for which they have no immediate use except for irrigation purposes, and yet this is what William Mulholland, chief engineer of the Los Angeles water department, has to say upon the subject of a universal meter system: "We favor meters because we believe it is the only fair and equitable method of selling water; because it prevents waste, and because it accomplishes a saving in size of mains which would otherwise be required. We have been metering for 12 years at as fast a rate as finances will permit, and we intend to continue this policy until every tap in the city is metered. Completion of aqueducting in no way changes our policy in this regard." Please note that this statement was made February 26, 1914, or subsequent to the completion of the new conduit. Permit me also to say that a majority of the water works engineers that Portland can rightly claim a place among the cities of the land possessing an efficiently managed municipal water works would be a source of gratification if Portland were to conduct its water works as efficiently as the engineer, D. D. CLARKE, Engineer Water Bureau.

A project for draining and reclaiming 1,000,000 acres of land in Egypt, work on which has been begun, is a most costly and most expensive task of the kind ever attempted.

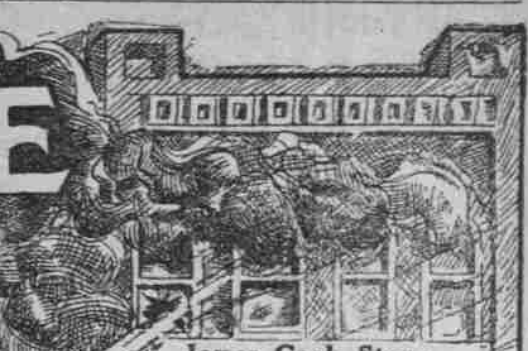
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Jones Cash Store. Men's, Women's and Children's Furnishings, Hats, Shoes, Fur, Hosiery, Groceries, Bedding and Dry Goods. Open 7 Days a Week. Sale Open 7 Days a Week at Simon's Salvage Store, 131-133 First Street.

Men's Furnishings: "Arrow" and "Silver" Brand Collars, each .50c, 15c Men's Black Hose, .75c, 10c White Handkerchiefs, .30c, 85c Bib Overalls, .50c, \$1.25 Black Sateen Shirts, .65c, \$1.50 to \$2.00 Dress Shirts, .50c, \$1.50, \$2 and \$2.50 Felt Hats, .75c, 50c Work Shirts, .15c, 50c Belts, .25c.

42-Piece Dinner Set \$1.98. Clear White Porcelain Dinner Set of 42 pieces, durable quality, embossed design, worth \$3.00, set at \$1.98. LAWN MOWERS: The Cadet Cutlery Co. lawn mower, with 25-hp. motor, best lawn mower to buy. Sells elsewhere at \$2.75. All kinds of Garden Tools, 50c.

Fishing Tackle, Etc. A Big Stock of Fishing Tackle, Lines and Hooks at 50 CENTS PER DOLLAR.

10c Campbell's Soups 4c, 20-Mule Team Borax, 5-lb. pkg., 35c, 15c Del Monte Tomatoes, Solid Pack, 8c, 30c Coffee, 3 lbs. for, 50c, \$1.25 Holland Herring, 75c Keg.

10c Colton Tomatoes 5c, 15c Bayless Mustard Horseradish 7c, 8c Prunes—Very Fine 4c Pound, 10c L. X. L. Chicken Tamales 6c Can, \$1.25 Holland Herring 75c Keg.

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