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NEW JERSEY COURT OF ERRORS AND APPEALS.

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THE LONG BRANCH COMMISSION,

(Complainant) Appellant,

and

THE TINTERN MANOR WATER COMPANY,

(Defendant) Respondent.

On Appeal from Chancery.

(June, 1906.)

BRIEF OF WILLIAM H. CORBIN FOR RESPONDENT.

The essential facts existing at the time the Bill of Complaint was filed (July 30, 1903), are set forth in the communication addressed by the Water Company to The Long Branch Commission, dated July 8, 1903, appended to and made part of the Bill. (Case, p. 12a. See also par. VII of Bill, p. 9).

The decision of the Supreme Court and of this Court upon the former contract for water, referred to in said communication is reported *sub. nom. Hicks v. Long Branch Commission, 69 N. J. Law, 300.*

The Long Branch Water Supply Company was organized September 22, 1882, by Frederick A. Potts, Garret A. Hobart, George F. Baker and others, under the general water act of 1876 (G. S.

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2199) to supply water to the Township of Ocean, Monmouth County, a great township stretching from Sandy Hook to Asbury Park, a distance of 16 miles along the Atlantic Ocean. The township authorities consented, and inasmuch as there then existed a subordinate government within the limits of the township known as the Long Branch Commission, the Commissioners also signed consent to the creation of the Company. (Case, pp. 643-9.) The growth of population in the township will be seen by Exhibit on page 743. In 1900, the total permanent population was 14,391, whereof 8,872 were in Long Branch, The summer population is far greater, being estimated in Long Branch alone to be from 25,000 to 100,000. (Mayor Reed estimates 75,000 to 100,000 in Long Branch, p. 24. Seabright and vicinity 25,000, p. 25. Senator Blodgett estimates for Long Branch 50,000 to 60,000, p. 295. Assessor Nelson estimates Long Branch's summer population at 25,000, p. 396.)

The census of 1905 shows that the entire territory composing old Ocean Township (now embracing Long Branch, Ocean Township and the boroughs of Allenhurst, Deal and Seabright) has a permanent population of 15,332, whereof 12,181 are in Long Branch. (Leg. Manual, 160.) Thus Long Branch now has 79.4 per cent. of the whole population; but inasmuch as most of Ocean Township is not supplied with water the percentage of the whole population supplied is even greater.

The Water Company made contracts with the Long Branch Commission to supply water for public use for putting out fires, sprinkling streets, etc., the last one whereof expired September 21, 1901 (p. 714). There was no detailed contract respecting domestic and private uses.

Meantime the Long Branch Water Supply Company had on July 2, 1901, been consolidated with other companies into a corporation known as The Tintern Manor Water Company, the present defendant (p. 678). In the meantime, also, there had been created by law, out of Ocean Township, the boroughs of Seabright, Deal and Allenhurst. After the contract expired in September, 1901, the parties dickered for a year, the town actually, in the course of the negotiations, giving out a contract to a paper company known as the Monmouth Water Company (p. 35), which promptly broke down and did nothing. After that a contract was agreed on by the parties to this suit and signed, dated November 24, 1902 (p. 717). It was attacked by Hicks, (really by the town itself, a new council having been elected) on several grounds, all of which failed except the technical objection that the roll was not called on its final passage. It was accordingly set aside by this Court in an Opinion read by Justice Dixon June 15, 1903 (69 N. J. Law, 300). After that the town, though still using the water and although nearly two years behind in its payments, refused to do anything, and the Company on July 8, 1903, gave notice that unless payment was made it would stop supplying water for public uses on July 31, 1903 (p. 12a, et seq.) Thereupon the town filed the bill for restraint in this case which was granted on terms that the town pay $8,000 arrearages and 80 per cent. of the rates in the contract which had been set aside, pending suit, and amend its bill by tendering a fair price for the water supplied for public uses, to be fixed by the Court, and also praying that the Court fix the price for private consumers, concerning which complaint was also made in the bill (Order, p. 12). The defendant joined in the prayer that the Court fix the compensation, past and future, for water for public uses, and future rates for private uses. (Answer, p. 18, par. 12). Prior to June 1st, 1902, the Water Company's rates to private consumers had not been

uniform, being often fixed by private agreement. There was a minimum household rate of $10.00 per year, but otherwise little uniformity. (La Monte. pp. 334, 335; Conant, 347.) On June 1st, 1902, the Water Company put out a printed schedule of rates and regulations (pp. 332, 335). This schedule, after a year's trial, was revised and a new schedule was issued, dated June 1st, 1903, which is the one now in force (pp. 332, 336). A copy of this Schedule of Uniform Rates and Regulations is printed in the record (Rates, pp. 743-748). By this schedule the minimum charge for dwellings was reduced to $8.00 per house and all other charges were made uniform. The rates are on the "flat rate" or fixture plan there being only 40 meters in the entire town among 1363 taps. (Case, pp. 335, 731, 672.)

The uniformity and reasonableness of these private rates has not been seriously attacked except with respect to their unequal operation against persons who occupy their cottages during the summer months only, as compared with those who occupy their houses all the year, and on this score the Court below made a substantial change. (Decree, p. 635, l. 15). Otherwise the Court adjudged the schedule to be "reasonable and fair." (Ibid, l. 20). The Town (now city) of Long Branch has continued to use the water for its public purposes until the present time, that is, nearly five years, without any contract as to compensation.

It has 146 steamer fire hydrants in use. It draws water to a very unusual extent for sprinkling streets, keeping about 17 sprinkling carts in use during four months of the year, and a smaller number for a longer period. It also uses water in the City Hall and in the seven fire engine houses, and in three public fountains. (Reed, p. 33.) The Court below adjudged (p. 633) that for the hydrants $25 per year

each be paid (the price being formerly $40 (p. 715) and that $40 per month for water used by each sprinkling cart be paid (p. 633), and that eleven cents per thousand gallons for water used in fountains be paid (p. 634), and that the usual fixture rates be paid for water used in City Hall, Engine House, etc., (p. 634).

I.

The well-settled policy of this State in the management of water companies and other public service corporations is to confer upon the directors the power to fix rates, and these rates are not to be disturbed unless the directors violate the common law rule which requires that the rates shall be reasonable and equal.

This policy is evinced by the General Water Act of 1876, (*Gen. Stat. 2202 Sec. 364*) under which defendant is acting, which provides that the "said com- "pany may sell and dispose of the water issuing from "their reservoirs, aqueducts or pipes, for such price "or prices or quarterly or annual rents and such re- "strictions as they may think proper."

The charters granted to water companies are practically all to the same effect.

Burlington Aqueduct Company. (P. L. 1804, p. 363). Formed "for the purpose of supplying the "City of Burlington with pure and wholesome water" with power "of disposing of the water * * * * "in such manner and form as they shall think "proper." (No limitation of rates in the act.)

Hackettstown Aqueduct Company. (P.L. 1812, p. 423). The company has the power "of disposing of "and using the water which they may purchase or "procure by the mode hereinafter mentioned," etc. The company's "objects are hereby declared to be

"the bringing into and supplying the Village of "Hackettstown with pure and wholesome water." (No limitation on the company's power to fix rates nor water).

Passaic Water Company. (P. L. 1849, p. 47). "The said company may sell and dispose of the water "issuing from said reservoirs, aqueducts or pipes, for "such price or prices or annual rent, and under such "restrictions, as they may think proper."

Elizabethtown Water Company. (P. L. 1854, p. 203). Sec. 3. "The directors shall be authorized "* * * * to establish rules, regulations and by-"laws* * * * for the government of all persons "and corporations with whom they may contract for "the use and preservation of water."

New Brunswick Water Company. (P. L. 1859, p. 57). Sec. 10. "Said company may sell and dis-"pose of the water issuing from reservoirs, aque-"ducts or pipes, for such price or prices or quarterly "or annual rents, and such restrictions as they may "think proper."

Rahway Water Company. (P. L. 1859, p. 130). Sec. 7. Company authorized to contract with persons "for the supply, use and preservation of water." (No restrictions of rates).

Acquackanonck Water Company. (P. L. 1867, p. 895). Company "may sell and dispose of the water "issuing from said reservoirs, aqueducts or pipes, "for such price or prices as annual rent, and under "such restricions as they may think proper."

Plainfield Water Supply Company. (P. L. 1869, p. 1318). Objects to obtain, supply and sell water

and "distribute the same for public and private pur- "poses." (No restrictions as to rates).

Union Water Company. (P. L. 1870, p. 788). Sec. 4. May contract with persons for the supply, use and preservation of water, etc. (No limitation as to rates).

Gloucester Water Works Company. (P. L. 1872, p. 880). Created for the purpose of obtaining and selling water "and distributing the same for public "and private purposes." (No restriction as to rates).

It is conceded that the rates charged by a water company, like those of any other public service corporation, should be reasonable and uniform.

Olmsted v. Morris Aqueduct, 18 Vr. 311, 333; Spring Valley Water Co. v. Schlotter, 110 U. S. 347, 29, Am. & Eng. Encyc. Law, 19.

But the rates are to be fixed primarily by the directors. The law has cast the power on them, just as it has conferred upon them the important power of deciding what waters and lands shall be taken therefor.

Kountze v. Morris Aqueduct 29, Vr. 303, 308; Olmsted v. Morris Aqueduct, 18, Vr. 311, 329.

There is no warrant for interfering with their discretion unless it can be shown that they have abused their power by making rates unreasonably high or unequal and not uniform.

In Brymer v. Butler Water Co., 179 Pa. 229; 36 Atl., 249, 252, the Court was exercising a statutory power to review and correct water rates on com-

plaint of consumers. The Court below undertook to prescribe a schedule of charges, and this action was reversed.

The Court said: "The framing of such a general "schedule is ordinarily the right of the company; "the correction of this schedule when framed, when- "ever it may work injustice and hardship, is the pre- "rogative of the Court."

If this is true in the case of a statutory power of review, it is all the more true in the case where the statute expressly confers upon the corporation the power to fix rates, and where the power of review can only be exercised by a Court of Equity, to prevent clear abuse of its power by the company.

In this case, therefore, notwithstanding the submission of the question to this Court, there should be no interference with the company's established rates of June 1, 1903, unless the complainant shows that the company has clearly violated the rules of reasonableness or of uniformity.

There are but two inquiries for the Court: "Are the rates equal; are they reasonable?"

Messenger vs. Penn. R R. 8 Vr. 531, *534.* (*S. C. 7 Vr.* 407).

Mr. Justice Bedle, in his opinion in that case, (*8 Vr. 534*), said:

"A service for the public necessarily implies equal "treatment in its performance, when the right to the "service is common. Because the institution, so to "speak, is public, every member of the community "stands on an equality as to the right to its benefit, "and, therefore, a carrier cannot discriminate be- "tween individuals for whom he will render the ser- "vice. In the very nature, then, of his duty, and of

"the public right his conduct should be equal and "just to all. So also, there is involved in the reason- "ableness of his compensation the same principle. "A want of uniformity in price for the same kind of "service under like circumstances is most unreason- "able and unjust when the right to demand it is com- "mon."

The *Messenger* case was cited with approval in *Stewart v. L. V. R. R. 38 N. J. Law, 505, 520; D. L. & W. R. R. v. Central Stock Yard, 46 N. J. Eq. 280, 282.*

Where the company had the right to fix the rates subject to review by the Court of Common Pleas, an ordinance by the City Counsel attempting to regulate the charges is without authority of law and void.

Schroeder v. Scranton Water Co., 28 Pa., Super. Ct. 255.

The Court cannot, where no evidence is introduced to sustain the contention, judicially say that an ordinance providing for a charge for water of Six Dollars a year for a building of five rooms, or less, and One Dollar a year for each additional room, i on its face unreasonable or oppressive.

Crosby v. Montgomery, 108 Ala. 498, (18 So. 723)

"When a private corporation undertakes to sup- "ply water to a municipality, it enters upon a public "service, and the character of the business is such "that it is in a position to impose a toll upon all per- "sons seeking to take the water. This places the mat- "ter of its rates under public control, and it will not "be permitted to fix them arbitrarily for its own ad- "vantage. It may be given the power to establish "rates. * * * * A private corporation by the

"acceptance of a franchise * * * * assumes "the public duty to furnish water at reasonable rates "to all the inhabitants of the city. * * * * In "the absence of any public action tending to fix the "rates, the company may fix them at such amount as "it deems necessary to the successful operation of "its business."

1 *Farnham on Waters, p. 856.*

"When furnishing water to a city and its inhabi- "tants under contract, it assumes a public duty."

Crosby v. Montgomery, 108 Ala., 498,

II.

The presumption of law is that the directors in fixing the rates acted properly, and that the rates are, therefore, reasonable. The burden of showing the contrary is on the complainant.

The maxim, *omnia praesumunter rite esse acta, donec probetur iu contrarium,* applies to the acts of officers in the performance of their duties.

"Every reasonable intendment is to be made in "favor of the conduct of those who are clothed with "a public trust, and are acting in the line of their "duty."

Mayor, &c., ads. State, Balten, pros,, 3 Vr. 453, 458.
Hartwell v. Root, 19 Johns, 345.
West Jersey Traction Co. v. Camden Horse R. R. Co., 7 Dick. 452, 471.
Freeholders v. State, 4 Zab., 718.

And the presumption of law is generally against misconduct and in favor of the proper performance of duty by those charged with it.

1 Greenleaf Evid., 16 Ed., See. 40.
Gillette v. Ballard, 25 N. J. Eq., 491, 494.
State v. Van Winkle, 25 N. J. Law, 73, 77.
Moses v. U. S., 166 U. S. 571.

In *Bank of U. S. v. Dandridge, 12 Wheat., 69,* Judge Story says:

"By the general rules of evidence presumptions "are continually made in cases of private persons of "acts even of the most solemn nature * * * * "The law itself * * * * presumes that every "man in his private and official character does his "duty until the contrary is proved; it will presume "that all things are rightly done unless the circum- "stances of the case overturn this presumption, ac- "cording to the maxim omnia praesumunter, etc. "* * * * The same presumptions are, we think, "applicable to corporations. * * * * If offi- "cers of a corporation openly exercise a power "which pre-supposes a delegated authority for the "purpose, and other corporate acts show that the "corporation must have contemplated the legal ex- "istence of such authority, the acts of such officers "will be deemed rightful, and the delegated author- "ity will be presumed. * * * * In short, we "think that the acts of artificial persons afford the "same presumptions as the acts of natural persons. "Each affords presumptions, from acts done, of what "must have preceded them as matters of right or "matters of duty."

Where the company had the right to fix the rates subject to review by the Court of Common Pleas, an ordinance by the City Counsel attempting to regulate the charges is without authority of law and void.

Schroeder v. Scranton Water Co., 28 Pa., Super. Ct. 255.

III.

The rates are to be fixed with a view to a reasonable return upon the fair value of the investment needed to provide the required works; and it is proper to include in such investment a reasonable provision for anticipated future growth of the town. Tested by this rule, the rates now in force are very low and unremunerative.

The cash cost to the contracting builder,—Independent, &c., Construction Company, — was $1,523,902.94, besides $550,000 of stock of the Tintern Manor Water Company paid out to the Long Branch Water Company as part of the purchase price, and to the constructing engineer for his services. (N. B. The above cash figures include $19,871.11 recently expended by the Water Company for new mains).

(La Monte's Schedules, pp. 730, *et seq*).

The cost to the Water Company in stock, cash and bonds, was $3,100,000 (p. 730).

Assuming a fair value of the property to be only $1,523,902.94, and the stock, therefore, to be of no value, to pay five per cent. interest on the venture requires net earnings of $76,195 per year.

But this is not a fair estimate of the full capital investment. The capital stock, $550,000, which was given out for the shares of the Long Branch Water Company, was given for value which went into the cost of the plant, and the remaining stock of the defendant company, $1,050,000, represents contractors and promoters profits which are certainly, to some extent, a legitimate item of cost. It would be fair to call the total investment in the enterprise $2,000,000. Interest at 5 per cent. on this amount is $100,000 per year. Or, if the cost be taken at

$1,523,902, which was the *cash* outlay by the defendant for the property, the annual interest at 5 per cent. on this sum would be $76,195. So that even if 5 per cent. were considered a sufficient return to the owners of the property, it ought to earn these amounts of interest plus operating expenses, which were in 1903 $28,464. On the basis, therefore, of $2,000,000 value, the property ought to earn $128,464 a year, or, on the lower basis of value, ($1,523,902), the property ought to earn $104,659.

Now, the Chancellor by his decree (pp. 631, 633) has fixed about $7,000 per year as the amount which the company should annually receive for its public service. Its earnings for 1903 (the largest in its history) from private sources was $69,848. Adding the $7,000 for public service the total earnings would be $76,848. Deducting the operating expenses of $28,464, it will be seen that in the year 1903 the net earnings were only $48,384, or about 3 1-6 per cent. on the cash cost of $1,523,902; or, if the value of the works be put at $2,000,000, only a little over 2.4 per cent.

But 5 per cent. is not a fair return upon an investment of this character. The risks are great, the depreciation is great, and perennial additions of capital must be made, and this will increase in a ratio considerably more rapid than the ratio of increase of population. Eight or nine, or even ten per cent. are not unreasonable dividends to expect in enterprises of this sort. It is obvious that the earnings thus far realized and to be looked forward to for some years to come by the defendant company will not yield a fair return upon the capital of $1,523,000 which has been invested.

But the Water Company, as required by its charter, supplies the various parts of the whole Town-

ship of Ocean, now consisting of several municipalities. About 2-3 of the entire population is found in the City of Long Branch (p. 743), its population in the census of 1900 being 8,872 of a total population of the township of 14,391. The State census of 1905, taken since the evidence was given, and of which we suppose the Court will take judicial notice, (*Adams v. Elwood*, 176 *N. Y.* 106, *Huntington v. Cast*, *Ind.* 255), shows the population of Long Branch to be 12,181, out of the total population of 15,332 for the entire Township of Ocean. Long Branch, therefore, in 1905 had 79.4 per cent. of the total population (Legislative Manual, p. 160). The number of taps in the whole system is divided in about the same ratio, Long Branch in 1903 having 1,363 out of a total of 2,260 (p. 731), and the earnings are nearly in the same ratio, Long Branch affording a revenue of $51,276 (including revenue for public uses) out of a total of $76,848; that is to say, it affords 66.7 per cent. of the entire revenue, or almost exactly 2-3. Therefore, Long Branch should be depended on, not for the whole, but for 2-3 of the revenues of the company. It is doubtless growing more rapidly than the rest of the territory, and will require more than 2-3 of the service, but we will assume that it will have only 2-3 of the service and that 2-3 of the cost of the property should be considered as for the benefit of Long Branch. In other words, the value of the plant maintained for Long Branch is $1,000,000 on the lower valuation, or $1,333,000 on the higher valuation.

Assuming it to be only $1,000,000, Long Branch should afford a net revenue to pay a fair interest on that sum. As a matter of fact, its revenue in 1903 being $51,276, and 2-3 of the operating expenses ($28,464) being chargeable to it, which is $18,976, a net revenue was obtained from Long Branch of $33,300 per year, or 3 1-3 per cent. upon the $1,000,000.

Or, if the value of the investment be considered at $1,333,000, it afforded a revenue of a little less than 2 1-2 per cent.

It has been objected that the works as built are larger and more expensive than is necessary for present uses, and while that is doubtless true, if we consider only immediate uses, it is not true if we take a reasonable outlook into the future. The company must provide not only the small supply required by Long Branch in winter, but the extraordinarily large supply required in summer, and the records of water pumped show that as early as July, 1903, 5,400,000 gallons were required to be pumped in one day (p. 750); and if we note the very rapid increase of consumption which is exhibited by the pumping record (pp. 749, 750) it is obvious that the amount required during the present summer on single days must be between six and seven million gallons, a quantity which, if pumped daily for the year, would supply 75,000 people. The peculiar circumstances make it expensive to maintain works of sufficient capacity. The company must build, and pay interest on, and support works which are required during a few months of summer, but are twice or thrice as large as are required for the other months of the year.

This condition is no fault of the company, but grows out of the circumstances of the case, because Long Branch is a summer resort with a short season. In view of this, the company fixed its rates so that every house would pay its full share, whether it were fully occupied part of the year or all of the year, and its schedule of June 1st, 1903, is arranged accordingly (p. 743); but the Vice-Chancellor has decided that this is unjust to the summer residents, and has accordingly cut off, as near as we can estimate, $10,000 of our net annual

revenues; so that, instead of $33,300 net revenue in Long Branch, we may expect, for the present, about $23,300, or 2 1-3 per cent. on the $1,000,000 of investment. Or, if the investment be considered $1,333,000, then our net revenues will be only 1 3-4 per cent.

As a matter of fact, the capital invested by the company is now represented by outstanding bonds to the extent of $1,500,000, bearing interest at 5 per cent., making an annual interest charge of $75,000 a year, whereof 2-3 or $50,000 per year is justly chargeable to the revenues from the City of Long Branch. As we have seen, those revenues have heretofore at best been only $33,300, or 2-3 enough to pay the interest on the bonds, and as cut down by the Vice-Chancellor's decree, they will probably pay not more than one half of the interest.

It has been asserted that the old Long Branch Water Supply Company was very successful. In fact, it was not. It had outstanding $100,000 of bonds at 5 per cent., and $250,000 of capital stock. It paid dividends on the stock (p. 758) for seventeen years at an average rate of 4 1-2 per cent. from 1883 to 1899. Before 1883 and after 1899, it paid no dividends whatever. When the town grew, and its works became inadequate, its apparent prosperity vanished, and dividends had to be suspended. The fact is that under such conditions as exist in Long Branch, to give good service, water rents must be very high, and the defendant company has tried to make them moderately low, and to keep them on a par with towns under ordinary conditions; and it seems quite obvious that nothing but a rapid growth of the population served by the company can save it from ultimate insolvency. That the company did right in laying the great water main from Swimming River so as to anticipate the future seems clear.

Mr. Sherrerd, complainant's expert witness, says that in planning a water supply one should look forward for thirty years (Sherrerd, p. 486), and he thinks that looking forward fifty years presents too long a forecast. Mr. Blodgett, President of the Water Company, says that when the big main was put in it was planned by the directors to carry a supply for fifty years (p. 245), but it by no means follows that it will carry a supply for more than thirty years. Moreover, the company did not provide distributing mains or reservoirs or anything else on the basis of such a long outlook, but only the principal main, 36 inches in diameter. The total length of that main is 41,947 feet (p. 741), and its total cose was $281,233 (p. 585), besides cost of laying.

Suppose that it were somewhat too large, and that it should have been of a size of thirty inches instead of thirty-six, which is by no means proved, the difference in cost could scarcely have been $100,000 for the whole works, or $66,000 for the portion of it properly chargeable to Long Branch.

In the case of *Slingerland v. Newark, 25 Vr. 62, 69.* where it was objected that under condemnation proceedings the city was taking more water than at present needed, Justice Dixon said:

"It would, of course, be absurd for the city to con-
"struct water works, adequate only for its present
"wants, and the prosecutor does not assert that the
"works now contemplated are unreasonably large
"in view of the city's prospective growth."

In *Olmsted v. Proprietors of Morris Aqueduct, 17 Vr.* 495, Judge Parker said:

"A company that undertakes to supply a city or
"town with water does not perform its duty to the

"public unless it provides, not only for ordinary "seasons, but for long summer droughts. Provis- "ion must be made in advance for such contingen- "cies, for when the drought shall come it will be "too late to apply a remedy. To make sure that a "water famine shall not exist for even a single week, "it is necessary to anticipate the condition of things "which experience teaches will frequently occur, "and in time make provision by increased facilities "to supply water abundantly at a period when it "shall be most needed. Not only does the comfort "of the inhabitants demand this, but their health as "well. It is well known that when a company un- "dertakes to supply a town with water the ordinary "methods to obtain water to extinguish fires are "abandoned by the people, and under such circum- "stances it would be gross negligence in the com- "pany to permit the supply of water to be inter- "mitted or diminished to any considerable extent, "and thus endanger the property within the town."

In the same case when in this court on writ of error (*18 Vr. 311*), Justice Van Syckel said:

"It is impossible to estimate with precision the "quantity of water that will be needed to supply the "wants of a population of about six thousand; nor "can it be computed with accuracy what the supply "of water will be from the district hitherto relied "upon. In a matter of such extreme necessity, all "contingencies must be provided for, and the sup- "ply should be so ample that a lack of water could "not be reasonably apprehended. A supply to that "extent is necessary to enable the company to per- "form its duty to its consumers."

(And on page 332). "In accepting such a charter "the company impliedly engages on its part to use "it in such manner as will accomplish the object for

"which the Legislature designed it. It cannot re-
"fuse to perform the public duties thus cast upon
"it, without surrendering the franchise."

The basis of all calculation as to the reasonableness of rates to be charged is the fair value of the property used by the company for the convenience of the public And there is to be considered the right of the company to derive a fair income on the fair value of the property at the time of its use, taking into account the cost of maintenance or depreciation and current operating expenses, and the right of the public to have no more exacted than the services in themselves are worth.

Kennebec Water Co. v. Waterville, 97 *Me.* 185.

The reasonableness of the rate may be affected for a time by the degree of hazard justly contemplated by those who made the original investment, but not by unforeseen risks, and such allowance may be made as is demanded by a fair public policy. *Ibid.*

The town must pay a reasonable price for the water for public uses, and cannot arbitrarily fix it.

Valpariso City Water Co. v. Valpariso, (*Ind. App.* 1903), 63 *N. E.* 1063.

Industrial Trust Co. v. St. Cloud, (*Wis.* 1902), 93 *N. W.* 114.

Hurley Water Co. v. Town of Vaughan, 115 *Wis.* 470.

Where the city has the power by ordinance to fix the rates, it must not fix them so low as to confiscate the property of the water company.

Cedar Rapids Water Co. v. Cedar Rapids, 117, *Iowa* 250.

The question of "What rates are reasonable" is

fully discussed in the new work, *Farnham on Waters and Water Rights, Vol. I, p. 867*, and the cases are there collected.

The question to be considered is whether or not the rates are fixed so low as to deprive the company of a reasonable return on its investment, under all the circumstances of the case. Where the city has power to fix the rates, this power does not give the right to fix them at so unreasonable and unjust an amount as to confiscate the property. In a Pennsylvania case it was held that a rate was not unreasonable which would yield enough to maintain the plant in a reasonable manner, provide a sinking fund for the payment of debts and pay the legal rate of interest on capital judicially expended in the construction of the plant.

Wilkesbarre vs. Spring Park Water Co., 4th Lack Legal News, 367.

Brymer vs. Butler Water Co., 179 Pa., 231, (*36 Atl.* 249).

The last named case was brought before the Common Pleas under a statute giving that Court visitatorial powers over water companies upon petition of consumers, and authorizing the Court to determine the reasonableness of charges, and to decrease the same. The case first came before the Court in *172 Pa. State*, 479 (*31 Atl.* 707), on application for injunction, and finally in *179 Pa.* as above cited, the Court said:

"Ordinarily, that is a reasonable charge or sys-
"tem of charges which yields a fair return upon the
"investment. Fixed charges and the costs of main-
"tenance and operation must first be provided for.
"Then the interests of the owners of the property
"are to be considered. They are entitled to a rate
"of return, if their property will earn it, not less than

"the legal rate of interest; and a system of charges "that yields no more income than is fairly required "to maintain the plant, pay fixed charges and oper- "ating expenses, provide a suitable sinking fund for "the payment of debts, and pay a fair profit to the "owners of the property, cannot be said to be un- "reasonable." * * * * "The cost of the water "to the company includes a fair return to the per- "sons who furnised the capital for the construction "of the plant, in addition to an allowance annually "of a sum sufficient to keep the plant in good re- "pair, and to pay any fixed charges and operating "expenses. A rate of water rents that enables the "company to realize no more than this is reasonable "and just. Some towns are so situated as to make "the procurement of an ample supply of water com- "paratively inexpensive. Some are so situated as "to make the work both difficult and expensive. "What would be an extortionate charge in the first "case might be the very least at which the water "could be afforded in the other."

Water rates which will produce little more than three and one-third per cent. on the actual cost of the water works after deducting current expenses, do not constitute just compensation to the water company, where it is compelled to pay a much higher rate on money which it appears to have fairly borrowed, and the prudence and economy of the management are not successfully impeached, *San Diego Water Co. vs. San Diego*, 118 *Cal.* 556 (*50 Pac.* 633) and the reasonable value of the property rather than its actual cost is to be taken as the basis of computation.

San Diego Land Company vs. National City, 174 *U. S.* 739.

This last case affirms the Circuit Court (74 Fed. 79), which held that the city should take the pres-

ent value of the water plant as a basis, having due regard to the cost of its maintenance, to its depreciation by wear and tear, and also to the rights of the public. If upon such a basis a fair interest is allowed, no just cause of complaint can exist.

In determining whether rates are too high or not, the interests of the company are to be considered as well as those of the consumer. A scale of rates which affords no profit to the company is not too high.

Goebel vs. Grosse Pointe Water Works, 128 *Mich.* 307 (85 *N. W.* 744).

IV.

The Rates to Private Consumers are Reasonable and Uniform.

Complainant has not attacked the uniformity of the rates, nor has it shown that they are unreasonable. The sum of the evidence on this head shows nothing adverse to defendant.

Complainant produced four witnesses who complained of private rates, *Rothenberg*, (p. 107), who had been paying ten dollars a year, but was raised, under the Uniform Schedule, to $32. It appeared he had a bath tub, water closet, stable, washstands, kitchen and two taps in store, including a soda-fountain.

In another property at West End his charges had been raised from $32 to $40 for a drug-store with a dwelling over it. In another property, Ocean avenue, the charge was $119 for a drug-store and office building and an apartment, including 6 water closets, 4 bath rooms, a soda-fountain, and a variety of other fixtures, the house having twelve bachelor apartments. West End Court property was charg-

ed $25. It contains a public laundry, a restaurant, etc. There is not the least evidence that the rates as raised are not in accord with the Uniform Schedule.

Moses Kahn, (p. 115), testified that whereas he formerly paid $10 per year he had been raised to $27, his house containing a meat market, two water closets, 2 bath rooms, sinks, 3 laundry tubs, etc., etc. There is no evidence that the charge was not according to schedule, or was unreasonable.

Siegfried Hirschfield, (p. 120), testified that he pays $81 per year for his three houses containing two stores, three families, bottling works, three horses, sundry faucets, etc. No evidence that the rates are either unreasonable or not according to schedule.

Alfred O. Hicks, (p. 122), testified that for his store, lodge-room, 3 water closets, bath room, soda-fountain, tumbler washer, and sundry faucets, etc., he pays $32, whereas he formerly paid $20 per year.

In all those cases it is obvious that the parties were grossly undercharged before; in fact, their fixtures had been put in from time to time without a corresponding advance in rates. There is not the slightest evidence of inequality or unreasonableness in the charges as now levied. That they were previously unequal and inadequate is admitted.

The only evidence by complainant, bearing on the question of the unreasonableness of rates was the following:

Counsel put in some evidence respecting the following places having municipal ownership of water supply:

(1) Belmar, a little borough now charging by meter, formerly at flat rates. Very small plant, which just about pays running expenses, with no profit (p. 68 *et seq.*). Lately put in meters; revenues now less; don't now how it will come out.

(2) Atlantic Highlands, where it is said that the lowest price for Kellogg's standard house would be $16.50. The plant does not pay. By tax levy for what is called sewer flushing and for hydrants plant pays 4% interest on outstanding debt. (Price, p. 78.)

(3) Red Bank, where Kellogg's standard house would be $18, same as Long Branch. After twenty years this municipally-owned plant has just reached a paying basis. (Cullington, pp. 96, 97.)

(4) Perth Amboy, Kellogg's standard house $16. This concern, having South Amboy and two extraordinary factories as large customers, gets a revenue of $55,000 per year. Three large customers pay at least $23,000 of the revenue (p. 105). Cost for interest and operating, $45,000 a year. System inadequate. "Practically rebuilding our system of mains." (P. 105.)

(5) Freehold, Kellogg's standard house $15. Water supplies and sewers operated together. Now self-sustaining, but part of cost has heretofore been paid for by general tax. No evidence of any profit. (Enright, pp. 136, 143, et seq.)

(6) Asbury Park; Kellogg's standard house, $14.50. Recently raised water rate from $1 to $1.50 per thousand cubic feet in hopes to make both ends meet. Runs behind $5,000 per year. Coffin, p. 161.)

These plants are run by the public. Most of them have wells on the ground. They are not operated to make profit, or a return on capital, but to supply water. None of them can be properly compared to the Long Branch system, but even if they were, there is nothing in the facts disclosed to show any unreasonableness of the Long Branch charges. They rather tend in general to confirm them.

It is difficult to compare one town with another, not only because the conditions are always diverse, but because the methods of making rates are not the same in any two towns. Probably the fairest comparison that can be made is to take a standard average house, such as the ordinary citizen occupies, and then figure up in each town what the water rents would come to. This Mr. Kellogg did, and the result is found in Kellogg's schedule of standard house, p. 697. Mr. Kellogg is superintendent of two water companies, with years of experience, and has made a study of the matter, and has ascertained the rates for thirty-six different towns and cities,—some under municipal ownership; some supplied by companies; all of them in New Jersey except two. The result is that the average in the standard house with the ordinary fixtures is $17.77. Twelve of the thirty-six towns charge exactly $18, which is the price in Long Branch; ten of them charge more than $18, and the rest charge less. It was shown by Mr. Sherrerd (p. 420), that Mr. Kellogg made a mistake with reference to the present rates in Newark. He put the house at $16.50, whereas it should have been $15. The resulting average, however, is not thereby materially changed; but really, Newark should be dropped out of the list as Mr. Sherrerd shows that Newark has an enormous water works, a gravity system operated by the public, capable of supplying 50 million gallons per day, but really supplying about 30 (p. 485), and that after fifty years of opera-

tion, its entire water debt is still unpaid, and the expenses of its plant have had to be paid to the extent of 5% by general tax levy. And that is so, although its debt is funded at 4%, and its bonds sell at a rate which gives it money at even a lower rate of interest (Sherrerd, pp. 486-7-8). The works are not operated for profit. Moreover, Newark is an old, densely built up city of the first class, with a stable population throughout the year, and not at all to be compared to a seaside resort like Long Branch.

The striking results shown by Kellogg's table have not been met by the complainant. It is perfectly clear that the residents of Long Branch are charged for water for private uses, not an exorbitant price, but an average price, notwithstanding the difficult conditions existing there. Furthermore, the Vice-Chancellor, by his decree, has so cut down the rates to the summer occupants that it is estimated that the Company's revenues will be reduced at least $10,000 per annum, which will result in reducing the household average rate probably to about $14, possible to even less, for there are only 1373 taps in Long Branch.

We submit that the Company's printed schedule of rates of June 1st, 1903, has not been successfully attacked, and should be confirmed. The Vice-Chancellor has gone to the extreme in the interest of the summer residents in cutting down their rates as he has done.

Counsel for appellant argued that the Court should force the Water Company to give up its flat rate system and install meters in every house. This would be an arbitrary act on the part of the Court, not justified by the evidence. The system of making charges is for the Company and the evidence clearly indicates that practically all companies in

New Jersey follow the flat rate system. Kellogg's schedule (p. 697) contains a list of thirty-four New Jersey towns, all having flat rates, and he testifies that those which have an alternative meter rate have very diverse rates (p. 206). There is no evidence in the case of any town abolishing the flat rate system except Belmar and Red Bank which have just made the change. (Titus, p. 66, l. 27; Collington, p. 91.) Belmar does not know yet whether it will pay or not (p. 70, l. 20), and Red Bank is in the same situation. The City of Newark has been putting in meters gradually (p. 438) so that about forty per cent. of the total consumption is now metered (p. 439).

The Vice-Chancellor declined to compel the installation of meters, saying that it would require from twelve to fifteen hundred meters, and that the use of meters is not so general as to justify him in doing that (pp. 625-6). The cost of these meters, as shown by appellant's witness Mr. Sherrerd, would be, on the average, eighteen dollars. He estimates the total cost for Long Branch from twenty-five to thirty thousand dollars (p. 481).

In domestic service the change from flat rates to meter rates appears to be done for the purpose of saving water, for consumers are more careful when they know the water is measured, and companies that are short of water adopt this economy. It would be a difficult matter to make just meter rates in Long Branch for clearly the resident who uses his house twelve months in the year ought not to be charged as high a rate by measure as the summer cottager who uses his house for three or four months. A more practical way is to make a reasonable flat allowance for those houses that are vacant part of the time.

There is not sufficient evidence in this case to enable the Court to make a proper schedule of meter rates for all purposes. The rates fixed in the Company's schedule of June 1st, 1903, (p. 745), are intended for those who use large quantities of water, and there are only forty such who take water through meter in Long Branch. It is in the legitimate discretion of the Directors in the management of their business to make meter rates or flat rates to their customers. They are acquainted with the details and exigencies of the business, and the Court should not substitute its judgment for that of the Directors on such a question, unless upon cogent evidence of an abuse of power.

V.

RATES FOR WATER FOR PUBLIC USE.

Engine Houses. Should pay the regular schedule of rates. They are fitted up as houses are, and no reason is perceived why they should not be treated as other houses having similar service. The Chancellor has so decided. (Decree, p. 634.) The rates chargeable in that manner amount at present to $193 per year (p. 761).

Drinking Fountains. Are used for people, horses and dogs, with steady streams running night and day for eight months. It is submitted that these should be metered, and a fair rate charged, and it is suggested that the meter rates stated in the printed schedule (p. 745) are fair, the Company to place and maintain the meters. The Chancellor has fixed for this service 11 cents a thousand gallons (p. 634), or about half the usual rates. Surely the city has nothing to complain of in this.

Fire Hydrants. There are now in use in Long Branch 146 fire hydrants. They are not the ordinary hydrants seen in the streets, but are three-way

with one large steamer nozzle four inches in diameter and two smaller nozzles, and afford much greater use of water than an ordinary hydrant (p. 247). The price paid for them under the old contract was $40 per year each (p. 715).

On the hearing of the present case, the defendant offered to make the very low rate of $25 each for these hydrants, and complainant admitted the reasonableness of this charge, but insited that it should be accompanied by an agreement to give the sprinkling service at the very low rate which was provided in the contract which was set aside by the Court of Appeals (pp. 275-8). This the defendant declined to agree to. The price to be charged for the use of fire hydrants is determined very largely by the shortness of the intervals at which they are set. In Long Branch they are set at intervals of about one thousand feet, there being in the city 146,008 feet of mains and 146 hydrants (p. 741). These are very long intervals, indeed, the old contract required that the city should take one hydrant for every 500 feet of additional main, but it had not been done (p. 715), and the Water Company gets very small revenue from its mains when the intervals are so great, and consequently is justly entitled to greater pay for each hydrant. Mr. Kellogg testified as to the rates for hydrants in various towns, and in practically all of them the intervals are less than any in Long Branch. The rates are as follows: Metuchen, $25; Woodbridge, $30; Cartaret and Seawarren, $25; Summit, $45 and 40; Somerville, $28; East Orange, $30; Morristown, $25; Montclair, $26; (pp. 214, 215). In Plainfield the rate is but $15, but the intervals there are very short—about 200 feet—which really, even at that rate, makes the total revenue on the mains probably greater than any other town affords (p. 215). In the towns concerning which complainant put in evidence, the water supply is controlled by the public, and there is consequently

no rate for public fire hydrants, and the only evidence with respect to charges for such service, is that of Mr. Kellogg, from which it will be seen that the charge of $25 per hydrant, conceded by the defendant and allowed by the Vice-Chancellor in the decree (pp. 275 and 633) is practically the minimum price paid anywhere. There is nothing in the case to challenge the reasonableness of this charge, and indeed it is very low under the conditions existing in Long Branch.

Sprinkling Carts. The amount of water required for sprinkling is phenomenally large. Twenty-six miles of streets are sprinkled. From 17 to 19 carts are used, and the evidence shows a very lavish use of the water. The amount is reckoned up on pp. 699, 278, and by the testimony amounts during the summer months to about 371,800 gallons per month per cart; at the minimum charge of 15 cents per thousand gallons this would be $55.77 per month per cart. On the hearing *defendant finally offered to make a flat rate of $40.00 per month per cart*, being only $10\frac{3}{4}$ cents per thousand gallons (page 278), which complainant rejected as "utterly unsatisfactory." Counsel then offered to place meters on all the carts, paying one-half the cost, the town to pay the other half, and to give the town the water at a fair price (p. 281). This was also rejected. The Vice-Chancellor adopted defendant's offer of $40 per month per cart.

When it is remembered that this is pumped and filtered water, sent a dozen miles and delivered under pressure, and that this price is at the rate of 3 1-3 barrels of water for one cent, the reasonableness of the charge is obvious, and the uncompromising attitude of the complainant in refusing every fair offer to settle is very noticeable (pp. 275-80). The schedules put in by both sides of the prices for water sold in large quantities, show nothing approaching

for cheapness this figure of 10¾ cents per thousand gallons. The fact is it is too cheap.

There are about 77 months of water cart service in one year in LongBranch. This at $40 per month would come to $3,080, a very moderate outlay considering the great service rendered, which includes eight or nine months of service in sprinkling the asphalt pavements during the night, in addition to the copious sprinkling of everything in the summer.

The Company was necessarily put to the construction of new and expensive works. It was not proper for them longer to continue with their small and outgrown works at West End, threatened as they were with contamination, and otherwise unsuitable, and for so large a population as Long Branch has in summer, the Company was justified and by its duty required to make heavy expenditures to provide a large supply for present and future uses, and to provide for the filtration of it, and its delivery in copious quantities to the town. The principal main is, of course, larger than now required, and a share of the cost belongs to other municipalities. But making due abatement for all these considerations, water works of a value of from one million to twelve hundred thousand dollars were reasonably required for the proper supply of Long Branch. Even the little works of the old Long Branch Water Supply Company had reached a value of $450,000 (and cost substantially that) when sold out to the Tintern Manor Water Company seven years ago.

With the best and most economical management the defendant cannot make its works pay interest under the terms of the Vice-Chancellor's decree for several years to come; and when it is considered that annually considerable outlays of new capital must be made for extending mains, it is difficult to see

how the enterprise can ever be made to pay more than a very low return of interest upon the capital invested. To cut the Company down to anything less than the Court of Chancery has allowed would be a confiscation of its property. The Company has not abused the power to fix rates through the directors to whom the law has entrusted that power, nor have facts been laid before the Court sufficient to justify it to enter upon a revision of the schedule of charges to be made for the water. The Vice-Chancellor took up the only point where there was any clear evidence justifying action, that is the matter of vacant houses during part of the year, and his action in that single item has proved to be quite drastic. The defendant might well have appealed from the decree, but inasmuch as it has not done so, it is submitted that the decree should not be modified in the interest of the complainant.

June, 1906.

WILLIAM H. CORBIN,
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New Jersey Court of Errors and Appeals.

Between, THE LONG BRANCH COMMISSION, *Complainant and Appellant,* *and* TINTERN MANOR WATER COMPANY, *Defendant and Respondent.*	*On Appeal from Decree in Chancery.*

BRIEF FOR APPELLANT.

This is an appeal from a final decree advised by Vice Chancellor PITNEY, in which he fixed the rates to be paid by the municipality and private individuals in Long Branch, for water furnished by the Tintern Manor Water Company. A company of that name has been organized to construct water works in Monmouth County, some miles west of Red Bank. It made a contract on the 21st of August, 1900, with a Construction Co., for the erection of its plant (p. 673.) On July 2nd, 1901, an agreement of merger or consolidation (p. 678) was entered into between this company and other companies therein named, including the Long Branch Water Supply Company, which, as we shall see, had been previously purchased by the Tintern Manor Water Company. Disputes arose between the Water Co. and the Construction Co., concerning the performance of this construction agreement, whereupon, on the 6th of March, 1903, a contract of settlement was reached, adjusting the differences between them (p. 721) Meantime a contract between the Long Branch Commission

(appellant herein) and the old Long Branch Water Supply Company, expired September 21, 1901. A copy of this contract is found on p. 714. A new agreement (Schedule B, p. 717) between the Consolidated Company and the municipality was authorized, but never executed by the authorities of Long Branch, providing a public rate of $25. a hydrant, and $100. a year for each sprinkling wagon, provided no more than $1,600. should be annually expended for sprinkling purposes; in return for which the Company agreed to furnish the municipality free with water for all other municipal purposes, including all municipal buildings and public fountains. The Water Company further agreed to pay annually to the City the sum of $650. to be credited on the franchise tax. The only provision that the contract contained in regard to rates to private consumers, is found in the fifth clause, to the effect that "this contract is granted upon the express condition that the rates charged for the use of the water to property owners, residents and private consumers, shall not be increased during the term of this contract" (p. 719, line 21). In the month of June, prior to the time when the foregoing contract was authorized, a new schedule of rates to private consumers had been promulgated by the Water Co. which at once created excitement and discontent among the consumers. It is this schedule that the fifth clause of the proposed contract ratified. Because of the dissatisfaction with this proposed contract, on account of the inordinate increase in rates, principally to private consumers, a contest against the adoption of the contract by the municipality ensued, with the result that a certiorari setting it aside was sustained in this court. *Hicks* v. *Long Branch,* 40 Vr. 300. During the progress of that suit, the Company adopted a new schedule, known as the schedule of June, 1903 (p. 743). After the execution of the proposed contract had been thus prevented, a long negotiation ensued between the Company and the muni-

cipality, looking to the making of a new contract, the latter insisting that it was concerned with an adjustment on reasonable terms of the private rates as well as with the public rates, while the Company maintained that the rates proposed to be charged to individuals in no way concerned the municipality. (Dr. Reed's evidence, page 36). The Company, in the meatime continued to furnish the municipality with water, from the expiration of the old contract on September twenty-first, nineteen hundred and one, and had commenced suit in the Supreme Court to recover compensation therefor, based upon the contract rates, and finally wrote a letter (Schedule "A", p. 12a) threatening to turn off the public supply from the municipality, calling attention to the continued efforts and negotiations which had proved abortive, and the large amount of arrearages due the Company, and expressing a willingness, "if the arrearages were paid, to continue the old contract for a reasonable term of years, or to enter into the contract which was set aside by the Courts, upon the technicalities mentioned, or to make any other fair contract" and concluding with the statement that "unless the matter is settled during the present month, we shall cease supplying Long Branch with water for municipal purposes, on the first day of August next."

The municipality then filed its Bill in this cause, praying an injunction to prevent the threatened cutting off of the public supply, tendering itself ready and willing to pay any sum that may be found, in the Supreme Court, where the City's action was then pending, to be proper for it to pay for the services it had enjoyed since the twenty-first of September, nineteen hundred and one. An order to show cause why an injunction should not issue was signed, upon the filing of that Bill, and upon the return of the rule to show cause the defendant appeared, filed affidavits, and claimed that the City should be compelled, as a condition of relief, to pay it some part of

the arrearage, and prayed that that Court, rather than the Court of Law, should settle the rates ultimately to be paid. The Company, at the same time, reasserted its claim that neither the Court nor the City had any interest in the amount of the rates to private consumers, and persisted in the contention that that was a matter of its own concern alone. The Vice Chancellor in his conclusions, reached at that time, announced the view that the Company should be enjoined in cutting off the public supply, on condition that the municipality would submit to the Court of Chancery the adjudication of the rates, and pay to the Company a certain sum, based upon the old rates, and further that the Company should submit the ascertainment of the private rates to the same tribunal. Whereupon, both parties consented to this view, the Company discontinued its suit at law, the municipality paid the proportion of arrearages required by the Vice Chancellor, and amended its Bill by the insertion of the following clause (p. 12):

> "IX. Your orator shows, and hereby tenders itself ready and willing to pay any sum that may be found by this honorable court, for the privilege it has enjoyed of the use of water for municipal purposes, through the mains of the said defendant since the expiration of said contract, on the twenty-first day of September, nine hundred and one, and it charges that it would be inequitable and productive of irreparable damage to your orator and its citizens at large if the said Water Company, under this condition of affairs, should be permitted to cut off the public supply while it continues to enjoy the privilege of serving private consumers through mains which occupy the public streets, alleys and roads of Long Branch, some of which were laid under the contract which has expired, and others since that time, and during the negotiations aforesaid." And also by amending the prayer of said bill, by inserting therein, before the prayer for general relief, the words: "And that the proper and fair rates for water heretofore furnished and

> hereafter to be furnished to the complainant by the defendant, and to be hereafter furnished to private consumers in Long Branch may be ascertained and determined by this Court."

Whereupon the Company filed its answer agreeing to such ascertainment.

The Court of Chancery was therefore by virtue of the condition it imposed upon both parties, in granting each a portion of the relief they desired, at the time the bill was filed, and by the consent of both parties, charged with the duty of ascertaining "the proper and fair rates for water heretofore furnished, and hereafter to be furnished to the complainant by the defendant, and to be hereafter furnished to private consumers in Long Branch."

The jurisdiction of the Court to interfere by injunction to prevent the cutting off of a public water supply, and the avoidance of the performance of a public duty in cases of this of this kind, is unquestioned. The authorities are all quoted in the case of *Bienville Water Supply Company* vs. *Mobile* (Ala.) 20 So. Rep., 742. The court undoubtedly possessed the power to impose terms and conditions upon the granting of the injunction. (*Sternberg* v. *Wolf*, 11 Dick. Ch., 389). The complainant as a condition of securing the injunction, was required to submit to the court the ascertainment of the fair and reasonable rates, public and private, to be charged by the Company. The Company acquiesced in that condition, and has formally submitted to the jurisdiction. It is therefore a case where no rates were sanctioned, and where the court was to enter upon an ascertainment of what is fair and reasonable. The suit was not commenced to set aside a contract that has been made between the Company, and either public or private persons. Both parties stood before the court unembarrassed by any agreement. The court was to ascertain what is fair and reasonable—neither side has any presumption to overcome. The court was not charged with the duty of

passing upon the fairness of rates that the company has seen fit to adopt, but the responsibility of determining what are "proper and fair rates" for the Company.

The parties have appealed to the court to "ascertain and determine" rates, not to overrule or acquiesce in a schedule hitherto promulgated. The position of the court seems to be similiar to that created by the Legislature, and described in *Janvrin* v. *Revere Water Company* (Mass.) 55 N. E. Rep. 381, where a statute, in the event of a Water Company and a municipality being unable to agree in regard to the rates to be charged for the supply of water, authorized two judges to determine the matter. It was contended in that case that the Legislature had undertaken to impose legislative powers upon the court, but that contention was overruled, and the court held that in such a case the judges would be called upon to hear both sides to determine what would be a reasonable rate, under all the circumstances.

WHAT IS THE RULE THAT GOVERNS THE COURT THEREFORE IN THIS SITUATION?

The Water Company is a public service corporation. It enjoys from the State, and from the several municipalities in which it operates, public franchises. It has corresponding public duties, and one of these is to serve all alike, and at reasonable rates.

Olmstead v. *Morris Aqueduct,* 18 Vr., 329,

Crumley v. *Watuga Co.,* 42 S. W. Rep., 1058.

American Water Works Co. v. *the State,* 64 N. W. Rep. 711.

What is a reasonable rate?

The defendants contend that only such a rate is reasonable as will insure to the Water Company a reasonable return upon its investment.

This, however, is not an exact statement of the rule. The whole subject has been recently most learnedly discussed in the case of *Kennebec* v. *Waterville* (Me.), 54 Atl. Rep., p. 12.

There a dispute, very similar to the one at bar was to be determined, and the court first took up the question of the reasonableness of the rates, and ascertained the basis for determining such reasonableness. The contention there made, as in the case at bar, was that the company was entitled, without regard to anything else, to a fair return upon its investment, and while that was considered as one element of the problem, the court after full consideration, determined, however, that it must be considered in connection with the fair value of the service to the consumer.

The opinion says:

> "Yet while the company is entitled, so far as this case shows, to a fair return upon the value of the property used for the public at the time it is being used, the public (that is, the customers,) may demand that the rates shall be no higher than the services are worth to them, not in the aggregate, but as individuals. The value of the services in themselves is to be considered, and not exceeded. These views are established by the highest judicial authority in our country."

The opinion then continues:

> "In *Smyth* v. *Ames,* 169 U. S. 466, at page 554, 169 U. S., page 433, 18 Sup. Ct. 42 L. Ed. 819, the court said: 'Such a corporation was created for public purposes. It performs a function of the state. Its authority to exercise the right of eminent domain and to charge tolls was given primarily for the benefit of the public. It is under governmental control, though such control must be exercised with due regard to the constitutional guaranties for the protection of its property. It cannot, therefore, be admitted that a railroad corporation maintaining a highway under the authority of the state may fix its rates with a view solely to its own interests, and ignore the rights of the public. But the rights of the public would be ignored if rates for the transportation of persons or property on a railroad are exacted without reference to the fair value of the property used for the public, or the fair value of the services rendered, but in order simply that the corporation may meet operating expenses, pay the inter-

est on its obligations, and declare a dividend to stockholders.' Again, at page 547, 169 U. S., page 434, 18 Sup. Ct., 42 L. Ed. 819. 'What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience. On the other hand, what the public is entitled to demand is that no more be exacted for the use of a public highway than the services rendered by it are reasonably worth.' Of course, the same principles apply to the water rates as to railroad rates. *San Diego Land & Town Co.* v. *National City,* 174 U. S. 739, 19 Sup. Ct. 804, 43 L. Ed. 1154. In the case last cited it was claimed by the appellant, as bearing upon just or reasonable rates for water service, that the court should take into consideration the cost; the cost per annum of operating the plant, including interest paid on money borrowed, and reasonably necessary to be used in constructing the same; the annual depreciation of the plant from natural causes resulting from its use; and a fair net profit. The court said, at page 757, 174 U. S., page 811, 19 Sup. Ct., 43 L. Ed. 1154; 'Undoubtedly, all these matters ought to be taken into consideration, and such weight be given them, when rates are being fixed, as, under all the circumstances, will be just to the company and to the public. The basis of calculation suggested by the appellant is, however, defective, in not requiring the real value of the property, and the fair value in themselves of the services rendered, to be taken into consideration. What the company is entitled to demand, in order that it may have just compensation, is a fair return upon the reasonable value of the property at the time it is being used for the public.'

In *Covington & Lexington Turnpike Road Co.* v. *Sanford,* 164 U. S. 578, 17 Sup. Ct. 198, 41 L. Ed. 560, it was held that the nature and value of the service rendered by a turnpike company bear upon the reasonableness of rates charged. And in the same case it was held that other considerations were involved, such as 'the reasonable cost of maintaining the road in good condition for public use, and the amount that may have been really and necessarily invested in the enterprise.'

In *Cotting* v. *Kansas City Stockyards Company,* 183 U. S. 79, 22 Sup. Ct. 30, 46 L. Ed. 92, decided since these proceedings were begun, Mr. Justice Brewer declared (page 91, 183 U. S., page 35, 22 Sup. Ct. 46 L. Ed. 92), that the present value of the property is the basis by which the test of reasonableness is to be determined, although the actual cost is to be considered, and that the value of the services rendered to each individual is also to be considered.

In the same case, at page 96, 183 U. S. page 37, 22 Sup. Ct., 46 L. Ed. 92, the case of *Canada Southern Railway Co.* v. *International Bridge Co.,* 8 App. Cas. 723, was cited with approval to the point that the question is not what profit it may be reasonable for a company to make, but what it is reasonable to charge to the person who is charged. And Mr. Justice Brewer adds: 'The question is, always, not what does he make, as the aggregate of his profits? but, what is the value of the services which he renders to the one seeking and receiving such services?' Of course, it may sometimes be, as suggested in the opinion of Lord Chancellor Selborne, that the amount of the aggregate profits may be a factor in considering the question of the reasonableness of the charges; but it is only one factor, and it is not that which finally determines the question of reasonableness.

We deem the principles established by the supreme court of the United States as affecting the reasonableness of rates of public service corporations to be authoritative. The rates of such corporations are within the protection of the fourteenth amendment to the federal constitution. *Reagan* v. *Farmers' Loan & Trust Co.* 154 U. S. 362, 14 Sup. Ct. 1047, 38 L. Ed. 1014; *Covington* v. *Lexington Turnpike Road Co.* v. *Sanford, supra; Smyth* v. *Ames, supra; San Diego Land Co.* v. *National City, supra.* And the declarations of the highest federal court thereon are of controlling force.

The elemental principles thus far noted may be summarized as, on the one hand, the right of the company to derive a fair income, based upon the fair value of the property at the time it is being

> used for the public, taking into account the cost of maintenance or depreciation, and current operating expenses; and on the other hand, the right of the public to have no more exacted than the services in themselves are worth."

The foregoing quotation is given for the purpose, not only of showing the reasoning of the court, but as pointing to several authorities in the Supreme Court of the United States, which establish the same rule, and which should be consulted. Indeed, it will be found that the Supreme Cuort has without hesitation uniformly held that the two elements above referred to should be considered in determining what is reasonable for a Water Company to charge.

In view of the cases relied on by the defendant, to the effect that the court has no right to interfere with rates except when they appear unreasonable, and then only to set them aside. It is of the utmost importance that we do not lose sight of the way the problem became presented to the Court of Chancery.

The court's attention can with profit be directed in passing to the case of *Cedar Rapids Co.* v. *Cedar Rapids,* (Iowa) 91 N. W. Rep. 1081.

Here, in a similar dispute, the court said:

> "If then, as we have indicated, the plaintiff's franchise to furnish the defendant city with water was limited to 25 years, in what relation do the parties now stand to each other? We do not think it necessary to go to the extent of some of the cases we have cited, and say that upon the expiration of the granted franchise the plaintiff became a trespasser upon the streets. It has been engaged in the performance of a work of public utility. That service was of a nature which, of necessity, required the occupation of the streets with pipes buried in the soil, with connections therefrom of more or less permanent character to the buildings and premises of patrons. These improvements could not be removed, nor to any extent interfered with, during the term of the franchise, without interrupting the service the plaintiff was bound to render; and

it must be presumed it was contemplated by the parties that the company should remain in possession such reasonable length of time after the expiration of the term as might be necessary to negotiate an extension or renewal of the franchise, or, in default thereof, to close out its business without unnecessary sacrifice. Moreover, the city, by continued acceptance of the water service, and by assuming to regulate the rates thereof, gives implied consent to the present possession of the streets and operation of the works until such time as it shall by reasonable notice see fit to terminate the plaintiff's tenure of the privilege. So long, therefore, as the plaintiff continues to perform the service and defendant continues to accept it, so long the obligation will continue upon part of the city and other patrons to pay a reasonable compensation therefor; and if defendant assumes to exercise its right to prescribe the schedule, the rates so fixed by it must not be arbitrary or destructive of the property employed in its service. The right to regulate is not unlimited, and if the schedule be made so low that its adoption will operate as a confiscation of the Water Company's property, without due process of law, the courts will interfere to prevent its enforcement. *Turnpike Co.* v. *Sandford* 164 U. S. 578, 17 Sup. Ct. 198, 41 L. Ed. 560; *Reagan* v. *Trust Co.,* 154 U. S. 362, 14 Sup. Ct. 1047, 38 L. Ed. 1014; Railroad Commission Cases, 116 U. S. 307, 6 Sup. Ct. 334, 29 L. Ed. 636; *San Diego Land & Town Co.* v. *National City,* 19 Sup. Ct. 810, 174 U. S. 739, 43 L. Ed. 1154. But the conclusion that a schedule of rates duly adopted by proper authority will have such destructive effect is not to be lightly assumed, nor found from doubtful or uncertain premises. It is said by our highest judicial authority that the judiciary ought not to interfere with the colllection of rates established under legislative sanction, unless they are so plainly and palpably unreasonable as to make their enforcement equivalent to the taking of property for public use without such compensation as, under all the circumstances, is just to both the owner and the public; that is, judicial

interference should never occur unless the case presents clearly and beyond all doubt such a flagrant attack upon the rights of property under the guise of regulations as to compel the court to say that the rates prescribed will necessarily have the effect to deny just compensation for private property taken for public use.' *San Diego Land & Town Co.* v. *National City, supra.* Let us inquire, then, whether, in the case before us, it does appear 'clearly and beyond all doubt' that the water rates prescribed by the defendant's ordinance are of such a 'flagrant' character as to involve the destruction or confiscation of plaintiff's property. The decided cases furnish no definite rule for our guidance. To adopt the thought expressed by Mr. Freeman (*San Diego Water Co.* v. *City of San Diego* (Cal.) 50 Pac. 633, 38 L. R. A. 460, 62 Am. St. Rep. 297, note), the courts, 'in reaching the conclusion that the question or reasonableness is a judicial question, have discovered the threshold of the door through which they must necessarily pass, and thence wander in search of other landmarks to guide their future course. There are as yet no beacon lights by which to distinguish the reasonable from the unreasonable, or, if any there are, they are so dim that little aid can be given by them.' But we think a study of the cases we have cited and the manifest tendency of current decisions justify us in assuming that, while the original cost of the works, their present value, the cost of replacing them if destroyed, the amount of stocks and bonds outstanding, the gross and net income, the nature and extent of the services rendered, rates of interest, and other kindred matters, are all proper to be considered in arriving at a conclusion upon the reasonableness of the schedule, no one of them should be accorded controlling influence. The supreme court of the United States has stated the principle thus: 'It cannot be said that a corporation is entitled as of right and without reference to the interests of the public, to realize a given per cent. upon its capital stock. * * * Each case must depend upon its especial facts; and where a court, without assuming itself to prescribe

rates, is required to determine whether the rates prescribed by the legislature are, as an entirety, so unjust as to destroy the value of the property for all the purposes for which it was acquired, its duty is to take into consideration, the interests of both the public and the owner of the property, with all other circumstances that are fairly to be considered, in determining whether the legislature under the guise of regulating rates, exceeded its constitutional authority, and practically deprived an owner of his property without due process of law.' *Turnpike Co.* v. *Sandford,* 164 U. S. 578, 17 Sup. Ct. 198, 41 L. Ed. 560; *San Diego Land & Town Co.* v. *National City, supra.* We shall not attempt to go into any minute statement or analysis of the figures and computations relied upon by counsel. Some of the items by which plaintiff increases the alleged value of the works and reduces the showing of net earnings, as well as other items by which the defendant decreased the former and increased the latter, we think are unwarranted. The testimony, when taken as a whole, and considered in the light of all the proved and admitted circumstances, indicates the present fair value of the company's property to be somewhere from $400,000 to $500,000. The total earnings of the works, as charged upon plaintiff's books, for the year preceding the trial in the district court, were, in round numbers, $59,000, subject, however, to some discounts for advance payments. Of this income about one-third is charged to the city, and is not affected by the ordinance in controversy. The other two-thirds are collected from private consumers, and the charges for such service are reduced by the ordinance in varying proportions. Just the extent which this reduction will affect the company's earnings it is impossible to prove or predict with certainty, but we see no reason to believe that the total revenue, after making all due allowance for discounts, will be reduced below $50,000. The operating expenses charged for the year preceding the trial (being largely in excess of the average in its experience) were $23,000, or, including taxes, $28,000. On this basis the net earnings

are 5½ per cent. on a valuation of $400,000, or 4 2-5 per cent. on a valuation of $500,000, or 6½ per cent. on the total amount of capital stock and bonds. Stated otherwise, this will enable the company to pay its interest charge of $7,500, make a dividend of 5 per cent. on its capital stock (including stock issued as dividends), and leave a margin of over $3,000 for contingencies. This estimate of earnings may be very materially reduced, or the estimate of the value of the plant be very materially increased, before the court will be justified in saying that the plaintiff's property is being exposed to destruction or confiscation by an unprofitable schedule of rates. * * * * So, also, we may say we see no reason why plaintiff, in addition to operating expenses, repairs, and other ordinary charges, should be allowed to reduce the apparent profits by deductions for a restoration or rebuilding fund. The setting aside of such a fund may be good business policy, and, if the company sees fit to devote a portion of its profits to that purpose (though, as we understand the record, no such fund has yet been created), no one can complain; but it is in no just sense a charge affecting the net earnings of the works. To hold otherwise is to say that the public must not only pay the reasonable and fair value of the services rendered, but must, in addition, pay the company the full value of its works every 40 years—the average period estimated by plaintiff—for all time to come. We have pursued this subject far enough to demonstrate that, even taking the high estimate of value which plaintiff places upon its property, and its own showing of earnings, there is nothing in the ordinance sought to be nullified which calls for judicial interference. The net earnings upon the showing, if not large, are substantial. The court cannot undertake to guaranty the company any fixed or certain return upon its investment. The exercise of such a power would work an utter destruction of the legislative right to regulate rates of water companies and other corporations operating works of public utility. We think the decisions have already gone to the verge of safety

in nullifying legislative acts of this character; and to go farther, and say that the courts will not only preserve property from confiscation and destruction by legislative power, but will also assure to its owners a definite and fixed rate of profit upon their investment, would be an act of judicial usurpation."

See also *Spring Valley Water Works* v. *San Francisco* (Cal.) 22 Pac. Rep. 910.

Mr. *Farnham* in his recent work on waters and water rights, sec. 162d, says:

"The mere fact that the rate as fixed will produce some revenue to the owner of the plant does not of itself show that it is not too low. But a rate is not reasonable which yields enough to maintain the plant in a reasonable manner, provide a sinking fund for the payment of debts, and pay the legal rate of interest on capital judiciously expended in the construction of the plant. The company is entitled to a reasonable return, not on the capital actually invested, *but upon that which should have been invested in the exercise of prudent* management, as that is indicated by the value *of the property.* And in determining this amount the reasonable value of the property, rather than its original cost, is to be taken as a basis of calculation. In ascertaining the amount which the company is entitled to charge, it is not *to be given a return on property owned by it, but not in use in collecting or distributing water, however useful it may have been in the past or may be in the future. Nor are interest on indebtedness and annual depreciation in the value of the property to be considered.* The 'going value' of the concern is to be considered. Expenses of litigation in contesting an ordinance fixing rates will not be allowed. The current expenses which will be allowed consist of the money properly expended in each year in collecting and distributing the water. *No allowance will be made for losses sustained in distributing water to consumers outside the limits of the municipality.*"

This then, is the duty of the court in the premises, The fact that the Water Company is empowered and equipped to furnish water to other municipalities,

does not concern Long Branch. Nor does the cost of enabling the company to be so equipped, interest that town. The sole question is, what are the reaonable rates that Long Branch and its citizens should be compelled to pay, in view of the supply they are to get, and what that supply will be worth to them. It is perfectly obvious that such a rule involves a full consideration of the peculiar circumstances surrounding the particular town, its accessibility to natural water courses, and that, after all comparison with the rates prevailing in other towns, is only helpful in so far as conditions are similar.

A short consideration of the history of this Water Company is proper. The Long Branch Water Supply Company was incorporated under the Water Act, in 1882, claiming and possessing the power to carry on business in the "Town of Ocean, the seaside resorts of Long Branch, Monmouth Beach, and Seabright, and the places adjacent thereto" (p. 643). At that time the population of the entire township was a little over 6,027, and of Long Branch, approximately 4,000. The company gradually constructed a distribution system throughout the streets of Long Branch, so that at the present time about twenty-seven miles of streets out of sixty-five are piped. Pipes with a six and eight inch main were also run along Ocean avenue to accommodate Monmouth Beach and Seabright, the latter of which is about five miles from the north end of Long Branch. Water was obtained by pumping from a stream south of Long Branch into a standpipe, a small natural reservoir being created there, with an outlet dam, over which dam, according to the evidence of Mr. Lake, the engineer who remained there until very recently, water constantly ran, except on very rare occasions, when for ten days at a time, it would not so waste. They never, in his experience, however, were short of water (p. 85). Mr Lake further testifies, in accordance with the testimony of Mr. Conant (p. 358) who was for years connected with the old Long Branch

Company, to the effect that that supply would have been ample for years, so far as Long Branch is concerned, if Seabright and Monmouth Beach had not been added. This Company was well managed, and without, perhaps, a very systematic scheme of charges, it was enabled, out of its profits, and from $100,000. which it borrowed (there being no evidence to show how much capital was ever paid in), to construct this plant, meet the continuing emergencies, and pay a dividend to its stockholders, without cessation, from the second year of its existence to the time it was sold to the Tintern Manor Water Company, paying three per cent. in 1883 and 1884, six per cent. in 1885, four per cent. in 1886, five in 1887 and 1888, one and a half in 1889, four in 1890, and five in every year from 1891 to 1899 inclusive (p. 664). Senator Blodgett, who had been a director of the old Company since 1890, and is President of the defendant Company, tells us (p. 249) that during all this time the fire service in Long Branch has been admirable and adequate, and shows in his evidence on the following pages, that the inference of the court below to the contrary is a mistake. Takanasee Lake, from which the water is pumped, has its source in a natural stream arising several miles back from the shore. The water has always been filtered, and, as Senator Blodgett frankly concedes, its quality was good (p. 237). He does not pretend, either, that in quantity it was or is insufficient for Long Branch proper, but only claims, on p. 237, that it gradually became insufficient for the territory they were covering. He concedes, on p. 262, that there is no more trouble in keeping the old supply pure, than there would be with any other supply, and that in fact, it was kept pure and uncontaminated, and that until the present time, Takanasee (p. 265) has been sufficient for all demands, but that in view of the outside demands, in addition to Long Branch, it is now insufficient. Meantime Long Branch, Seabright and Ocean Township have increased in population, so that by the last census the permanent popu-

lation of the township was 14,391, that of Long Branch was 8,872, and that of Seabright 1,198 (p. 743).

To enable the company to meet the increasing demands occasioned by this increase of population, it is undoubted that a supplemental supply was necessary, and the old company had that matter properly under consideration before it sold out (Blodgett p. 239). It would have been better for Long Branch, Seabright, and their citizens, if the old company had not sold out, and it had carried into execution its plans for a supplemental supply. This, however, was not done.

Meantime, the Tintern Manor Water Company had been organized with foreign stockholders, and we may add, foreign morals, and the Long Branch Company sold out to it for $325,000 in cash, subject to $100,000 in bonds beside $500,000 in stock (p. 258). LAKE, who had been the engineer for years, CONANT, who had been the general manager for years, and all the old crowd under whom dividends had been made, with the exception of Senator Blodgett, disappear from the scenes, and articles of merger are entered into between Long Branch Water Supply Company, The Deal Water Company, The Tintern Manor Water Company, and others, (p. 678) and a plan previously adopted and partially executed by the Tintern Co., is consummated by the Amalgamated Company involving the construction of an enormous dam at Newman Springs, where a large reservoir was created, and a scheme outlined by which, instead of Long Branch, Seabright, and Monmouth Beach being supplied with water, the whole territory in that portion of the county should be supplied; and to that end the future for some fifty years, as Senator Blodgett frankly conceded (p. 245) is discounted, and some forty-five miles of additional pipe laid, of which about eight miles are 36-inch pipe, 1,456 feet are 24-inch pipe, 1,280 feet are 20-inch pipe, 36,354 feet are 18-inch

pipe, etc., etc. (p. 756). The projectors of this enterprise hoped to secure Red Bank, the only other town of any size in the territory beside Long Branch, as a customer, but that canny little town was satisfied, naturally enough, with its present supply, and refused to have anything to do with these people. The consequence is that the whole territory is permeated with pipes of unnecessary size and cost, and the company derives practically no additional revenue therefrom. Mr. La Monte's schedules (p. 731) show that on April 1st, 1904, there are 55 taps in Shrewsbury township, and 7 taps in Eatontown township. upon the new lines, or a total of 62 taps attributable to this new territory, out of a total number, including Long Branch, and the old Seabright, and Monmouth Beach supply, of 2,260. So far as appears, no public contracts have been made by the Tintern Company, with any of the other municipalities; so that this company, with a capital stock outstanding of $1,600,000, with a bonded indebtedness of $1,400,000 and mortgage bonds of the old Long Branch Water Supply Company of $100,000, has, with the exception of the small Deal plant, no new or additional sources of revenue, beside those which the Long Branch Water Supply Co. had, except the sixty-two taps above referred to. The capital of the Long Branch Company was $250,000 and its bonded indebtedness was $100,000. We can well understand how the old company could pay dividends, but the new company, in order to meet its obligations, must necessarily increase the rates that obtained in practically the only revenue-producing territory that it has.

To be sure, it did acquire the Deal Water Company plant for which it paid $71,805.50. Mr. La Monte tells us (p. 492) that this system had about six miles of pipe from 4 to 12 inches in diameter, and that the rest of the plant consisted of a pumping station, with a tub on top of a trestle of sixty or seventy thousand gallons capacity, deriving water from artesian wells.

There are 155 taps in Deal. We think we may infer that this plant about takes care of itself, and although the supply seems to have been quite adequate for the demands, and satisfactory in quality, it is proposed to ultimately abondon the Deal plant and furnish water to that locality from Newman Springs (p. 239). Indeed this has already been done.

As before stated, the Long Branch Supply Company was bought for $325,000 beside the bonds. The water supply remains today just as it always was, both as to quality and quantity. It has never cost either company a dollar to acquire the water rights. As soon as the Tintern Company acquired this valuable property, and constructed its Newman Springs plant, it at once abandoned the standpipe at Takanasee, moved one of the two pumps from that station to Newman Springs, and expects as soon as possible, to completely abandon the Takanasee supply, so that all that will remain of the plant for which $425,000. were paid, will be the distribution system in Long Branch, Seabright, etc. That it is the purpose thus to abandon this supply, and not to simply hold the same in reserve, appears from the evidence of Senator Blodgett, the President of the company, p. 239, where he is asked:

> "In this new plan which substituted the Newman Springs supply, is it the plan to run both of them, or abandon this one when the other is completed?
>
> A To abandon this one when the other is fully completed.
>
> Q And how about the little supply at Deal, which has been mentioned?
>
> A That certainly will be abandoned. We have been compelled to use that for the last two years because of the lack of water at the Takanasee supply.
>
> Q And now it is testified here that you turned on the water last May from Newman Springs. Why then, have you not already abandoned the supply at Takanasee?
>
> A Well, we are not completed."

What was then expected has now happened.

The only thing therefore that will be left and used by the Tintern Manor Water Company will be the distribution system in Long Branch, which Mr. Sherrerd, whose intelligence and fairness as a witness, I think were quite manifest, estimated to be worth $115,000. (p. 421). No effort was made to contradict this estimate.

The 36 inch main of the Tintern Company connects with the Long Branch system at Broadway, into a six inch pipe, and of course, in that condition of things, it is still necessary for the Company to pump from Takanasee. It is proposed however, by the company, to connect this 36 inch pipe with the Ocean Avenue main, and this is all that the evidence discloses it is proposed to do with the distribution system of Long Branch. On page 188 Mr. La Monte admits this, and says it would require about 7,000 feet of pipe to make the connection. On p. 240 Senator Blodgett says, in reply to the question "What remains to be done?" "A The plant is not completed; we should extend our "large main down so as to connect with the large "pipes near the works. We want to connect onto a "twenty inch, I think that is the size of the pipe at "our works, and we want to connect the Tintern "Manor onto the large twenty inch pipe; that gives a "circulation, an open circulation all through the "town." And he further says that that work has already been authorized to be done. With the standpipe at Takanasee abandoned, one of the pumps removed, and that beneficent supply of water also abandoned, this company will have nothing but its distribution system to represent the $425,000. which it paid the Long Branch Company for its plant, and yet it undertakes to raise from its only revenue producing territory a sufficient revenue to compensate it for over $300,000 worth of property which it ruthlessly throws away, not to speak of the ridiculously large plant it has elsewhere erected.

Can we wonder that after all this had occurred, and the new plant constructed, and the company's bonds outstanding, that the rates from the only income producing source should have been necessarily raised? We have given in the evidence some significant testimony of individuals in regard to such increases. Rothemberg's rate was increased from $10. to $32. for the same service. His apartments at the West End are charged $119., they being occupied about four months in the year. Another building with three fixtures is charged $25. a month, and only occupied for four months. There is no wonder that the court exclaimed (p. 112) after hearing this evidence, that the only way to do justice in such a case is to put in meters. Mr. Kahn (p. 115) for the same service, is raised in one case from $10. under the old system, to $27. under the new; and in the other from $10. to $19. (pp. 115 and 117). Mr. Hirshfield, (p. 121), was changed from $40. under the old system to $84. in 1902, and $81. in 1903. Mr. Hicks is raised from $20. to $30. These are but examples.

It is this inordinate increase that has occasioned this controversy.

An examination of the table of earnings etc. presented by Mr. La Monte, Ex. D. 8. C. (p. 732) shows that the old Long Branch Company had a steady and normal increase of revenue from $18,106. in 1882 to $49,730. in 1899, or an average increase of about $2,000. a year.

In 1899 the total earnings were $49,730.29.

In 1901 (the Deal Company being meantime acquired) the total earnings were $55,780.92.

In 1902, after the new schedule had gone into operation, and with only 50 additional taps in Long Branch, and a total increase of 74 taps, the income jumped to $65,810. without counting compensation for the public supply in Long Branch, which Mr. Corbin admits, at the old rate, amounted to $6,160. which should be added to make the comparison complete. In

other words, under the new rates, with only 74 additional taps, the income of this company assuming the old municipal rates, jumped to $71,970.

In 1903, with 45 new taps added in Long Branch, and a total of new taps of 310, the income was (adding the same public figure, and being $6,160. and $69, 848) $76,008.

In other words, with the addition of 384 taps, of which only 62 were in the new territory, out of a total of 2,260, the income jumped from $49,730.29 in 1899 to $76,008, in 1903. These figures demonstrate in no uncertain way, in view of the fact that there has been practically no revenue derived from outside sources, that the rates have been most materially raised in Long Branch, and that it is the purpose and object of this company to compel that municipality and its citizens to bear an undue and disappropriate part of the enormous debt with which the Tintern Manor Water Company is loaded, by reason of the absurd plant it has constructed, and the extravagant way in which it was done.

If the rates at Long Branch alone be looked at, exclusive of Seabright and Monmouth Beach, we have no method of distinguishing the figures applicable to it alone, previous to 1901. By Mr. La Monte's D. 8. Schedule B. however, (p. 731) it appears that the revenue in Long Branch alone in 1901, including some part, if not all, of the public revenue, was $37,346.14. In 1902, with an increase of only 50 taps, the revenue jumped to $43,707.34, or a difference of $6,361.20, without any public revenue at all. To make the comparision complete, $6,160. should be added, or a total of $49,867.34. The next year, 1903, with an increase in taps in Long Branch of 45, the revenue, exclusive of public supply, was $44,276.02, or, with public revenue added, $50,436.02. In other words, there is only about $700. difference between 1902 and 1903, being perhaps the normal increase, and indicating that the

large jump of $6,361.20 between 1901 and 1902 can only be attributed to the increase in rates.

It is claimed by the defendent that the minimum rate has in fact been decreased from $10. to $8. True, but La Monte's schedule E (p. 738) shows that there are 2,173 minimum charges. Assuming the same number of minimum charges under the old scheme, you would only have added $2. to each of the 2,173 or about $4,346. to the revenue. The trouble is, as the same schedule shows, there are 415 extra bath-tub charges, 764 additional water-closet charges, and so on through the list, showing how many houses are charged the unfair additional rates that we complain of. When you add to this the fact that, as the evidence shows, about fifty per cent. of all the houses are only open for half a year, (p. 379) or less, the hardship and unfairness is the more evident.

Now, the Supreme Court of Maine, in 1902, in the case of the *Rockland Water Co.* v. *Adams,* 24 Atl. 840, held that a regulation of a Water Company requiring takers to pay rent for the whole year, whether they actually use it for that length of time or not, and to make payment yearly in advance therefor, was unreasonable. A moment's reflection cannot but convince one of the propriety of that decision. Long Branch is a peculiar locality. The demand in the summer months, because of the great increase in population, of course, requires the company to have a supply equal thereto, but it is unfair and improper to charge temporary consumers, whose houses are absolutely closed for six months in the year, at the same schedule rate as other's are charged for a one year's service. In other words, I may occupy a house for six months, or I may occupy it and consume water for twelve months. My water rates will be the same. The schedule of rates which the company presents and asks this court to adopt, provides in Rule 7, "When the water is turned on and used any part of the year, the annual rate will be invariably charged." Mr.

SHERRERD adverts on p. 454 to the unfairness of this requirement, and says that he thinks there

> "ought to be some flat basis for a rate which "would cover the cost of maintenance of the plant "for a whole year. We find that the interest here " on the plant in the city (meaning Newark) ap- "proximates about $4. a tap. That ought to be a "flat basis that ought to be collected from each "connection, before you charge for the water, so I "should say that there ought to be some payment "for service that only takes water half the year "continually, but it does not seem to me that "that charge should be the full rate for the whole "year. I would think three-fourths of the whole "year rate would be fair, instead of a full rate for "half vacancy." In commenting upon that evi-

dence, the record shows that the court said: (p. 455) "I am not surprised at your answer, and I do not know as I am capable of criticising it."

In his opinion, however, (p. 627), the Vice Chancellor disposes of this matter by permitting a reduction of two-thirds of the rate upon unused fixtures during the winter season, but saddles the expense of disconnection and re-connection upon the water taker. In the decree (p. 635) he limits the right to any deduction, to those houses that are occupied for not more than six months, notwithstanding his opinion (p. 626, l. 19.) showed that the complaint was from those who occupy their cottages only three or four months. The result of this is that the decree requires a summer resident to pay full rates if he occupies his cottage for less than six months, and can only enjoy the benefit of the decrease by continuing his full rates for a period of at least six months. Few if any summer residents stay that long. This small and very disadvantageous variation in the price as against the summer residents, whom the Vice Chancellor characterizes as "probably rich," is practically entirely overcome by the added expense of connection and disconnection.

In the argument below, several suppositions were advanced by the learned counsel for the Water Co., to explain the above figures. Nothing, however, can be had from the evidence which will otherwise account for them. It was contended, however, that the old practice was so utterly without system that the company was bound to lose money. The old company, however, did not lose money, but on the contrary, taking 1899 as an example, earned $49,730.29, its total expenses were $16,263.72, or a net income of $33,466.-57. It paid in dividends that year $12,500., leaving $21,966.57 net profit to surplus. The same thing is true of practically all the preceding years. It was in that condition that the new management took hold of this enterprise. Mr. La Monte did not mean that the old charges varied all the way from $15. to $50. for the same service. The $50. minimum was, as Mr. Conant showed, for summer cottages. The $15. was for the same style of house owned by the permanent residents in the village. Mr. La Monte obviously did not want to know whether the rates had been increased. He would not say they had not been. The figures already referred to, demonstrate that they were. We are not bandying words, but complaining of a large increase in cost to water consumers in Long Branch, whether you call it an increase in rates, or a re-adjustment of rates. The result is the same to the consumer. Mr. Corbin's effort to show that these increased revenues only bring about three per cent. upon the investment is fallacious. He takes the total cost of the Long Branch Company, and the Sherrerd supplemental supply, or $647,500. He then says that "taking the above figures, without change, the present net earnings of $31,459. in Long Branch alleged to be exorbitant, would pay only 4.84 per cent. on the cost." The figures $31,459, net earnings for Long Branch, were obtained in this way. By La Monte's schedules it appears that the revenue in 1903 for Long Branch Commission was $44,276.02. The operating expenses,

however, of the company for 1903 were $28,464.39, as against $19,684.70 for 1902. In 1901 they were $17,-253., and in 1891 they were $13,000. In other words, as soon as the new plant was installed, the operating expenses immediately jumped about $10,000. with a decrease in taxation. These operating expenses are for the entire system. Mr. Corbin takes two-thirds of $28,464.39, or $18,976.26, and assumes that that proportion of the total expenses is properly attributable to Long Branch proper. He then takes the total revenue from private sources in Long Branch Commission for the year 1903, $44,276.02
and adds to it the assumed old public revenue, 6,160.

Making a total of $50,436.02
and deducts therefrom two-thirds of the total operating expenses (*supra*) 18,976.26

leaving what he calls a net revenue for Long Branch, of $31,459.76
which he says would only pay 4.84 per cent. on the $647,500. first cost of plant.

The fallacy in this argument is that the $647,500 first cost of plant, includes all of the Seabright and Monmouth Beach features of the plant, whereas the revenue is confined to Long Branch Commission alone. If the number of taps be examined, we find that the total number is 2,260. of which, as we have seen, 62 belong to the new territory, Shrewsbury township and Eatontown township, the new line, leaving 2,198. It further appears that in the Long Branch Commission there are 1,363 taps, leaving 835 taps outside, from which the 155 in Deal are to be deducted, so that 680 taps exist in Seabright and Monmouth Beach, etc. In other words, the 680 taps are about one-half of the taps in Long Branch Commission, or one-third of the total taps in both. We should, therefore, in order to get at the fair estimate of the relation which the revenue

bears to the investment, attribute to Long Branch two-thirds of the expense of the plant of the Long Branch Water Supply Company. Two-thirds of $647,500 is $431,666, upon which Mr. Corbin's net revenue from Long Branch, $31,459, is 7.3 per cent. instead of 4.84, as Mr. Corbin puts it. Now, when you consider that that revenue in this calculation, which is the only fair one, is to be derived the first year, when practically no revenue is derivable from the new territory, and that, as we have seen, has added about $10,000 to the operating expenses, we can readily see that the company, when the new territory is paying anything like its proportion of its expense, will make a handsome return.

Obviously, an experimental plant of this character cannot make a full return the first year of its existence. The experience of the old company between 1882 and 1891 shows that earnings steadily increase, with no corresponding increase in expenses, so that the company's revenue from its new plant may be properly and naturally expected to increase every year. Moreover, Mr. Corbin bases his revenue upon the most expensive year, when both plants were running with duplicate engineering charges and duplicate coal bills, whereas, as we know, after the pipe connection is made, it is proposed to abandon Takanassee, and upon a year which includes in its general expenses over $1,000 for legal expenses, and over $1,500 "miscellaneous expense" in the form of a gift to Senator Blodgett. Taking all these matters into consideration, and making a proper discount for the future, we can properly predict that in the normal growth of affairs, when the expenses of this company shall be reduced to their normal rate, and the revenue receives its normal accretion, a handsome income will be the result of the investment. Looking at the earnings of the old company (p. 733), we find that it made about $18,000 in 1882, and $49,000 in 1899. Its expense account was nearly $2,000 less in 1899 than in 1898, practically the

same in 1896 and 1897 as in 1899. We therefore insist that no such revenue as the present rates produce is necessary to insure a legitimate revenue in a legitimate way to this enterprise.

The court must remember that there is not one word of proof to show that the old supply was not entirely sufficient for Long Branch proper. The company had the undoubted right to supply other municipalities, and if its water was insufficient for that purpose, it is not proper to charge any of the expense of a supplemental supply thereby rendered necessary, to Long Branch, let alone all of it.

At page 448 *et seq.*, Mr. SHERRERD criticizes in detail many features of the new schedule, showing that its chief injustice lies in the duplication of all charges for additional fixtures, as well as in the effort to charge the customers for a few months the same price as if they consumed water throughout the year. He thinks the charge for additional faucets should be at some sliding scale, because, as he states, the fact that there are more faucets in the house, with the same number of people in the house, does not mean that more water is going to be used, but that people ought to pay something for the additional convenience of having additional faucets; that a water company would be justified in making some charge for the additional faucets, but to charge $2 for each one is out of proportion. All this must be taken in connection with the idea that no option exists with the consumer to have a meter. He likewise criticizes, on p. 452, the double charge for every additional water-closet, for the same reason. An examination of La Monte's schedule E (p. 738) will show how much these items amount to.

This criticism is entirely ignored by the Vice-Chancellor, and the schedule left unchanged in these particulars, and yet it is these unfair duplications of prices that constitute one of the main grounds of complaint against the company's schedule. No evidence

whatever is offered of any similar practice of duplication in other municipalities, and in view of the fact that the company's witness, Mr. Kellogg, had collected data on other subjects from almost every other municipality and water company in the state, we may safely conclude, as Mr. Sherrerd states, that no such practice exists. We strenuously object to a system of rates that is padded in this way in order to produce an income upon an improvident and extravagant expenditure.

The VICE CHANCELLOR inspects the *Kellogg* table of Rates (p. 697) produced by the defendant which is a collection of the rates prevailing in some 36 cities and towns, all but one of which are inland towns where the *water company has been compelled to compensate the owners for water taken,* and discovers that the rate for the so-called Kellogg standard—consisting of the following fixtures:

1 kitchen sink,
1 water closet,
1 bath tub,
1 wash stand in bath room,
3 laundry tubs.

is $18 in Long Branch and eleven other inland towns; in 14 other places it is less, and in 8 it is slightly higher. He therefore concludes not to change the Long Branch schedule.

The fallacy in this conclusion is three fold, (1) The comparison with inland towns, where lower owners on streams have to be reckoned with in taking water for purposes of supply is of course improper. The distinguishing characteristic of the defendant's position is that being located so near the ocean, there is no lower riparian owner to be consulted, and the water itself is to be had free. Think, on the other hand, of the millions of dollars Newark, Jersey City and the other municipalities included in Mr. KELLOG'S list, had to pay for the water, over and above the cost of erecting their works!

If, however, the comparison be made with towns similarly situated as Long Branch, we find the rates for the same service are, Belmar, $7.50; Freehold, $15; Atlantic Highlands, $16.50; and Asbury Park, $14.50; with Long Branch now $18.50! While most of these towns are supplied by a public supply, and not by a private company, *no charge is made in any of them for hydrants or sewer flushing.* In all of them they are now making a profit at these rates. The only town in that location that comes up to the Kellogg standard is Red Bank, where they make no charge whatever for their hydrants, of which they have over one hundred, and where they are making a large surplus, and steadily paying off their bonds. The defendant is to receive $25. for each hydrant. Nor must be forgotten that the old Long Branch Company was enabled under its so-called "systemless" scheme, to pay a five per cent. dividend for fifteen years. Can any one question that if a fair re-adjustment were made of the rates, that company would have been enabled to have enlarged these dividends, and at the same time supplemented its plant to meet the new additional requirements?

(2) Again the comparison utterly ignores the unfair feature of the Long Branch schedule already adverted to, viz., the duplication of charges for additional fixtures.

(3) None of Mr KELLOGG's localities are summer resorts, where at least one-half of the houses are closed, for a large part of the year as at Long Branch.

The defendant company, however, adverts to the great cost of its works, and demands that it be accorded a reasonable income to compensate therefor. It seems to us that the remarks of the Supreme Court of the United States in the case of *San Diego Land Co.* v. *Jasper,* 189 U. S., 442, upon a similar demand are pertinent:

> "The only evidence in favor of a higher value in the present case, is the original cost of the work seemingly inflated by improper charges to that account, and by injudicious expenditures (being the cost to another company which sold out on foreclosure to the appellant), coupled with a recurrence to testimony as to the rapid depreciation of the pipes. In this way the appellant makes the value over a million dollars."

In this connection, the opinion in this case in the court below (74 Fed. Rep., p. 79), is directly in point. There the court was appealed to to determine the proper rates as between a municipality and a water company for water supplied, and two important principles were adopted:

> (1) "The basis upon which in such cases reasonable and just rates are to be determined, is the present value of the plant, and not its original cost; having due regard to the cost of maintenance, depreciation by wear and tear, *and the rights of the public.*"
>
> (2) "In determining what are reasonable rates for supplying water to the inhabitants of a town, which includes but a part of the territory supplied by a water company through one general system, the charges should be fixed with a view to yielding a fair rate of interest on the value of that part of the plant referable to the territory embraced in the town, without attempting to make compensation for losses sustained in the distribution of water to consumers outside the town. Nor is it material that for the purpose of completing its plant, the Company borrowed money and issued bonds on which it is paying interest."

The claim is made in all earnestness, and with the expectation and hope that it will be duly considered by the court, that the evidence of the cost of the Tintern Manor plant is not satisfactory. It is most significant that the people who built the work, and knew how it was expended, were not called. Neither the engineer, the contractor, nor any of the members of the contracting company are produced, but notwith-

standing the fact that instead of 47,500 feet of 36-inch pipe being laid, only 42,609 were laid; that notwithstanding the contract called for 10,315 feet of 12-inch main, but 4,385 feet were laid; notwithstanding the fact that the contract called for 11,440 feet of 10-inch main, 558 feet only were laid; that notwithstanding the contract called for 13,070 feet of 8-inch main, only 2,910 feet were laid; notwithstanding the fact that instead of securing 1,000 acres of land, only about 600 acres were obtained; notwithstanding the fact that between twenty to thirty feet less in height of dam was built, resulting in the necessity of the installation and mainenance of pumps to filter, instead of having it done by gravity; notwithstanding the fact that the expense of a standpipe, one hundred feet by thirty, that would cost say $10,000, was saved; this company, having the members of the Board of Directors of the contracting company also on their board, settled the difference in regard to the sum to be paid to the contracting company for the construction of this big work, by agreeing to pay $1,400,000 in first mortgage bonds, and 5,465 shares of stock, instead of $1,200,000 of its bonds, and 7,965 shares of stock. Mr. Conant concedes that the stock has no value as yet, so that the slight difference in stock consideration between the two contracts may be ignored. No explanation whatever is offered for this remarkable settlement. No one who voted for it is here to sanction it, except Mr. La Monte, who evidently was utterly unaware of the changes and differences above noted. So far as appears, the Construction Company was amply able to carry out its contract, and no reason appears why, if performance of very much less than its requirements was agreed to, $200,000 more of compensation was paid. The whole thing has a mystery about it that casts suspicion upon it, and we claim that the effort to impress the court with such figures as a fair estimate of the cost of the plant, is unfair and futile. Moreover, the plant is grossly excessive, even for the extended territory for

which it is designed. It anticipates fifty years (p. 745), whereas, as Mr. SHERRERD shows (p. 446), thirty years is the outside limit for discount, and there is no contradiction of this, even by the court, and it is bad economy to construct a distribution system based on any such anticipated enlargement.

No socialistic ideas are entertained by the complainant, and the right to a fair revenue upon a proper basis is frankly conceded to the water company.

The situation at Long Branch is, however, peculiar. The old company has sold out to a new enterprise, which has included the almost virgin soil of a large part of Monmouth County in its scope. Fully one-half of its houses are vacant a large part of the year (much more than six months); many of them are of a character that need more numerous fixtures than the Kellogg standard, which is peculiarly apropropriate to an artisan's house in a manufacturing community. That any such unfair system of rates should be permitted to be foisted upon the citizens of Long Branch seems wrong, and in view of the whole situation, what does seem fair, so far as the private rates are concerned, is that meters should be introduced. The court from time to time threw out a suggestion during the progress of the case, as well as in the opinion (see pp. 112, 255 and 625). No other plan—adopting a minimum rate—seems proper in a community such as is this. The neighboring towns, such as Asbury Park and others, are adopting them, and this company has no right to enter into an extravagant settlement with its own officers, who are in a construction company, and then plead poverty when the question of supplying water arises. The Supreme Court of this State, in *Red Star Steamship Co.* v. *Jersey City,* 45 N. J. Law, 246, held that it was a reasonable regulation to require meters to be used and furnished. This company, as Mr. Blodgett shows, has had meters under consideration for some time (p. 255), and in the original contract expiring September 21st, 1901, appears a clause (p. 716,

l. 14), in which the company reserved the right "instead of furnishing water unmeasured at yearly rate, to supply water to any premises through a meter therefor, and charge therefor twenty cents per thousand gallons." The schedule of June 1, 1903 (p. 745), has also meter rates provided, but it is entirely optional with the company to use them, and the decree (p. 636, l. 29) expressly reserves to the company the right to insert meters whenever it desires. It is because the company knows full well that it could not recover any such inordinate revenue as its present outrageous fixed charges require it to meet, that they now seem unwilling to introduce meters, except in a few isolated cases of very large consumers.

We therefore suggest the adoption of meters as the fairest plan under the circumstances; that the company should be required, at least at the option of the consumers, to introduce meters, and to charge a rate not in excess of twenty cents, which certainly, if the old company was willing to agree to, this company can now well afford, with the increased consumption and larger revenues, derivable from increased population.

We claim, on the other hand, that this inordinate increase in rates, and particularly the increase in the rates for additional fixtures of all kinds, shown in La Monte's Schedule E, should be put down to a reasonable basis, so that the private consumer should be relieved from this grossly excessive increase in the price of water.

The question of the public supply still remains. It already appears from the letter of Senator Blodgett to this company, (p. 12a.) that on July 8th, 1903, the company was willing to "continue the old contract (p. 714) for a reasonable term of years, or to enter into the contract (p. 717) which was set aside by the courts." That letter expressed the view of the company as to the fairness of the prices for the public

supply, and we are willing to accede to that proposition. On the public rates, the ordinances which the Tintern Manor Water Company procured from Seabright, Exhibit D. A., (p. 691.) Eatontown Township, (p. 693) Exhibit D. C., and Shrewsbury Township, Exhibit D. B., (p. 692) all show that in those small territories, the company agreed to furnish hydrants at twenty-five dollars a year. In Shrewsbury Township this included water for sprinkling roads and streets, and in Seabright and Eatontown, the ordinances expressly required that the private rates should not exceed those paid by citizens of adjoining towns or townships. The court should have considered these matters and had no right to foist upon the city an unreasonable price for the public supply, because, forsooth, the company is not able to make a breakneck bargain with private consumers. The two are distinct. Under the new contract, which Senator Blodgett said they were willing to adopt, the company was to be paid $25. for each hydrant, and $1,600. for sprinkling, and was to pay back into the city $650. annually on account of taxes. We have felt that the public rates fixed along those lines, less perhaps the $650. payment to the city, would be fair and reasonable. In both of the old contracts, the fact that the public used a little water in the fountains and engine houses, was not overlooked. The quantity of streets sprinkled has in the meantime decreased by the assumption of control over several miles of roads by the county authorities.

The court however disregarded this view of the entire separateness between the public and private rates and increased the cost to the public for its supply beyond the sums of the company in the Blodgett letter and the two former contracts required or even expected. The opinion argues that if the company cannot make as much as it thinks it ought out of private consumers, it is justified in charging the public more.

We think this cannot be the true rule. Under the authorities quoted (*supra*) all that a company is justified in charging any consumer is what the service is reasonably worth, with a due regard to fair expenditure by the company. The value to a municipality of a water supply for fire purposes, street sprinkling etc., is and must necessarily be entirely distinct from the question of the income the company receives from its private customers. Every municipality has a right under the decisions to expect that a company will perform its duty to the public at fair rates. The company in three papers has demonstrated what it considers fair for such public service. If it now finds that some of its confiscatory prices to individuals are in danger, it is unjustified in charging the excessive cost of unnecessary investment to the public.

With this general discussion let us now turn to the decree.

It is insisted that the learned VICE CHANCELLOR in signing this decree fell into two sets of errors: First, he departed altogether from the issues or pleadings and adopted several provisions which the zealous counsel for the Water Company had inserted in the draft, which were not even considered in the elaborate opinion. For example (p. 634, l. 3) the provision for the payment of interest at four per cent., with monthly rests is utterly without propriety. The bill in this case was filed in September, 1903. The testimony was closed in June, 1904 (p. 395). In September, 1905, a year after argument, the VICE CHANCELLOR, on his motion, called for more proofs and the evidence from pp. 529 to 577 was taken. The opinion followed in November. High as the award was in favor of the defendant it did not come up to its extravagant demands. Meantime the complainant had paid the defendant the sum on account of arrears and on account of current charges that had been exacted by the court as a pre-condition to the

granting the preliminary injunction—why then if it took over two years to sift out the facts, and ascertain the proper sum to be paid, should the court have gone outside of the whole case and have awarded this outrageous interest sum?

For the same reason we criticise the voluntary requirements (p. 635, l. 40) that when the water is cut off the expense thereof and of turning on shall be charged to the owner and providing for notice; the provision (p. 636, l. 18) permitting the company to require all payments to be in advance; the clause (p. 636, l. 3) in reference to hose connection, sprinklers, etc, that charges for them shall be at full rates and subject to no reduction by reason of water being turned off; and the extraordinary provision (p. 633, l. 20) that the municipality shall bear the expense of all repairs to the hydrants.

These provisions could only have been inserted on the theory that the court was a kind of arbitrator acting under a general submission. The contrary was the fact. The issues were strictly framed and the function of the court was confined to a decision on them alone—not one of these matters was referred to before the decree was signed.

But the findings which were within the court's authority were, we contend, wholly unjustified, and indicate that the learned VICE CHANCELLOR was almost swept off his feet by the persuasions of the counsel for the Water Company, and decided question after question in favor of the company regardless of the fact that this enormous record discloses not a word of evidence in support of them. While the members of this court have not the knowledge of and experience in water matters and hydraulics that is possessed by the VICE CHANCELLOR, nevertheless the record is ample to enable any intelligent person to form a legal judgment based upon it, and the law applicable, without going outside of it. (See pp. 425, 433, 447, 448 and 449.)

Constantly during the protracted hearing of this case the municipality was met with the views of the court, "as a juryman," and in the formal opinion, justification for certain views there expressed, is claimed from the fact that the court is speaking as "an amateur engineer" (p. 620, l. 28). It must have been this learning 'that enabled him to write pages 609-611 of the opinion, for one will hunt through this record in vain for a single word to support what is there stated. The municipality employed Mr. MORRIS R. SHERRERD, whose capacity and learning were frankly recognized by both court (p. 420, l. 20) and the counsel for the company (p. 445, l. 31). No scientific witness was produced to support defendant's contentions or to combat Mr. SHERRERD'S views, yet Mr. SHERRERD'S evidence is discarded, with no other testimony even offered to supply a basis for the contrary views of the court.

The learned VICE CHANCELLOR is undoubtedly fascinated by questions of the character that are involved herein, and all unconsciously came often to the rescue of MR. LA MONTE the zealous secretary of the company, when under cross-examination; he not being an engineer was troubled to justify some of his positions and it is believed that the learned and respected judge in framing his opinion sometimes overlooked the fact that matters he assumed to be true did not exist.

For example:

Twice at least (pp. 605 and 625.) the opinion assumes that the municipality has the power of condemning the Water Company's plant

> "and may exercise that power as soon as by the in-
> "crease of population and demand, the investment
> "by the capitalists shall have become actually
> "profitable."

Reference is also made by the VICE CHANCELLOR to an opinion of the Supreme Court of Maine (p. 605, l. 30) which justifies its measure of damages by that risk which the Water Company is supposed to take.

Now the fact is that the complainant, the *Long Branch Commission* has no such power at all, nor does its successor, the *city* of *Long Branch.* The commission, complainant herein, was specially chartered and has very limited powers (see P. L. 1867, p. 976), among which is not the power to condemn a Water Company. Nor did the Company take its charter with any such right reserved by the Legislature (P. L. 1876, p. 318).

It is perfectly well settled that the power to condemn and take away that which the legislature has granted to a corporation in the way of a franchise, must clearly appear.

Long Island Water Supply Co. v. *Brooklyn* 166 U. S. 685.

Kennebec v. *Waterville,* (Me.) 58 Atl. 774.

N. J. Southern R. R. v. *Long Branch* 10 Vr. 28.

Van Reipen v. *Jersey City* 29 *id.* 262.

It is true that Long Branch since the commencement of this suit having availed itself of chapter 168, of the laws of 1903, is now a city, (P. L. 1903, p. 292; P. L. 1904, p. 346). But the previous act in section 13, sub-division XXXVIII gives it only the power to provide a water supply, and chapter 197 of the laws of 1876 (P. L. 1876, p. 366) authorizing cities to condemn water works, only applies when the works are within the limits of the city. This power, if available by a city like Long Branch, has no application to these works which are distant at least seven miles from its boundaries.

Twice or three times in the opinion the VICE CHANCELLOR speaks of "the Borough" of Long Branch, and he apparently though improperly assumed that it was in fact a borough with the condemnatory powers of that class of municipalities.

A conspicuous example of the assumption of facts by the court is the treatment of the suggestion of the complaintant that the company could have readily supplemented its Takanasee supply by some driven wells.

We showed that the city surveyor, Mr. SEAMAN, a special engineer, Mr. DE NYSE, and such prominent consulting engineers as RUDOLPH HERRING and GEORGE W. FULLER, united in a report (p. 687) in favor of such a scheme, not as witnesses in this suit, but as a practical measure for the municipality to adopt, before this litigation was dreamt of. Deal, Allenhurst, Asbury Park, Atlantic Highlands, Red Bank, Belmar, and Spring Lake all have abundant supplies of water from that source which are entirely satisfactory. Mr. Sherrerd (p. 447, l. 8) says:

> "The general opinion of engineers, and it "seems to borne out by the geological survey "work, that all along this portion of the Atlantic "coast, it is possible to get good water in large "quantities from deep wells, and it would seem "to me that it would be very feasible to supple- "ment the supply at the Takanasee plant from "such a source."

Not a witness testified for the company in opposition to this. No one says there is not this local source of supply, or that the other municipalities which have availed themselves of it have not a pure and entirely adequate supply.

Now how does the opinion treat this subject? After showing that our contention has also the backing of Prof. Cook, the Vice Chancellor simply concludes (p. 597, l. 5):

> "I am not able to say that I think this bed of "water- bearing gravel which seems to be a "continuous one has been so far tested or ex- "plored as to render it certain that its storage "capacity will stand unlimited draft upon it. For "it must be borne in mind that it is a mere "storage reservoir receiving its supply of water "falling on an outcrop in Monmouth County "some miles inland from the seashore, and its "storage capacity is undoubtedly limited. It ap- "pears that it has been tapped by a private indi- "vidual in the city of Long Branch, and water

"drawn therefrom. This, however, can hardly be "considered as a complete test of the reliability "of the storage at that point."

Does not the experience of all the surrounding municipalities in this regard count for anything? Is the opinion of all these scientific gentlemen to be brushed aside in this manner, with not a word of evidence in opposition? Moreover, it is not denied that a test of the sufficiency of this supply could have been made at comparatively small expense.

All that was needed was a supplemental supply, and Mr. De Nyse's figures of the cost of driven wells, about $200,000, or Mr. Sherrerd's plan for a supplemental supply for $221,000 give perhaps fair *indicia* of what should be charged to Long Braich for the necessary additional supply, assuming they had, as they ought to have, determined to retain the Takanasee system. If Asbury Park and Red Bank, large and flourishing towns, the one a permanent, and the other a summer population, got, as the proofs show they did, ample supply from such sources, why could not Long Branch supplement the Takanasee supply from a similar source? Asbury Park, with three times the permanent and summer population of Long Branch, including its excursionists, relies solely upon that source. So does Belmar. Why could not Long Branch rely upon the same source for its supplemental supply? Or, Mr. Sherrerd's supplement by a reservoir near Ocean Mills, is perfectly feasible, and no more amenable to the criticism of shallow flowage than is the Newman Springs reservoir, which the defendant has erected.

It is then suggested in the opinion that if this plan had been availed of, and a plant established "in the northerly part of Long Branch," the establishment and continuous maintenance of an additional pumping station would have been required. But why not drive the wells at Takanasee and use the old pumps, instead of abandoning that entire plant? Or even if that result was necessary, it could not have cost one

million dollars! The court then justifies the conclusion that was reached by saying (p. 597, l. 32), "the officers of the old company (meaning the Long Branch Water Supply Company, which as we have already seen was a successfully managed concern), looked elsewhere and fixed upon Swimming River." This is a great mistake. The Swimming River project was the idea of the defendant company, which was then composed of speculators from Pennsylvania, and finding the canny little Long Branch Company in their way, they purchased it outright, and then merged it with others into their own company (p. 678). Its contract with the Construction Company had been made long before then. Ignoring this fact the Vice-Chancellor (p. 600, l. 2) again vindicates his conclusion that the construction of the enormous Swimming River plant, and the abandonment of the Takanasee plant with the statement,

> "I am unable to believe that the business men "and capitalists who owned and controlled the "Long Branch supply deliberately abandoned "and, so to speak, threw away their pumping "plant and property and rights of diversion at "Takanasee without being thoroughly satisfied "that it was wise to do so."

The fact is the business men of the Long Branch Supply Company had nothing to do with it. The speculative projectors of the Tintern Company formulated the scheme of a large plant to supply Red Bank and the entire coast. Red Bank, the town with the largest permanent population, failed them, and as we have already seen the balance of the territory outside of the field supplied by the old company as yet amounts to nothing. Meantime the large plant at Swimming River makes it unnecessary to continue the entirely satisfactory Takanasee plant, and so that is ruthlessly thrown away, and yet we are charged with its full purchase price, less $100,000 of bonds outstanding, or $325,000, when the only thing of possible value left to-day is its distribution system valued

by Mr. Sherrerd at $115,000. This, the Vice-Chancellor declares (p. 606, l. 1), "was a very low estimate * * * the mains in fact probably cost twice the sum "mentioned." Here again the Judge must have drawn upon his own experience, for there is not a line in the record either to contradict Mr. Sherrerd or to justify the Vice-Chancellor, although the defendant had the opportunity to have done either if it had been possible!

Again the total cost of the Deal plant ($71,000) is allowed, although admittedly (p. 239) that is to be abandoned also, and the defendant carefully abstained from giving any estimate of the value of that distribution system which of course alone will be of any value whatever.

How unfair to compute in as a basis of investment upon which a return should be had; practically all the cost of these two plants, which are abandoned as soon as acquired.

The same unjust method obtained in the treatment of the cost of the new Swimming River plant.

It is admitted that very much more land was acquired for this plant than is or ever can be used as a reservoir site, and that a large part of the dam was built and then abandoned. The defendant claimed a right to charge the cost of all this. Now how did the learned Vice Chancellor treat this?

Mr. La Monte (p. 541) had admitted that this excessive area of land for reservoir was from one-third to one-half of the whole purchase, all of which had been cleared, and the total expense for which was included in his statement of first cost. From Exhibit B., p. 582, it appears that this cost of land was $40,043.53 and of clearing was $35,526.37 or a total of $75,569.90. The Vice Chancellor empirically (p. 608) throws off only $25,000 or one-third without a word of explanation.

So too, as to the dam.

Mr. La Monte "guessed" (p. 540, l. 10) that one-third of its cost was due to an excessively large base which is not to be used. We proved (p. 577) that one-half more was expended on the dam than was necessary because of this change in its construction. La Monte puts the cost of the dam at $89,764.11 (p. 531, l. 24; p. 582, l. 19.) The Vice Chancellor throws off $30,000 (p. 608, l. 21) or practically one-third the total, preferring Mr. La Monte's "guess" to our statement.

The Vice-Chancellor concludes that a 30 inch main would have been ample, instead of the 36 inch, and he only credits them with his own ascertained cost of such a pipe. Here again he availed himself of his own knowledge and experience, rather than the testimony. All that the evidence disclosed was that a main of from twenty to twenty-five inches would have been ample and no one contradicted this. If the case is to be tried on the evidence, then a pipe of ample sufficiency could have been laid for one-half the price and we should have been allowed (Ex. G. p. 585) ½ of $281,233.64 or $140,611.82, instead of $75,000 on this one item of cost.

Now these are all the deductions permitted by the Vice Chancellor. He allowed every other item, including an interest charge of $110,000. He did not require the best of proof of the cost, but accepted the result of La Monte's investigation. Here was this water company justifying its rates upon the theory that its works had cost a given sum, upon which it was entitled to a fair return, and yet it does not produce for cross examination a single voucher or person who spent the money, notwithstanding we showed that in the one item of pipe alone there had been a "rebate" of nearly $16,000 (p. 324).

Again the Vice Chancellor allows as a total first cost claimed $1,500,000 (p. 611, l. 32), whereas all that Mr. La Monte contended for was (p. 578, l. 35) $1,334,031, or as shown in the balance sheet (p. 753) of $1,339,411.83; and in neither of these latter sums

is any notice made of the credit of $50,000 which the water company realized on the settlement with its contractor (p. 725).

Having thus erroneously reached his figures, the Vice Chancellor then concludes that he will adopt the suggestion of the counsel for the defendant and throw off 1-3 the sum thus reached as not properly chargeable to Long Branch, stating (p. 612, l. 8) that he heard no serious objection to this proposition. The Vice Chancellor must have forgotten the very serious opposition that was orally made to the suggestion. On page 512, at line 30 of the record, this idea is characterized by complainant's counsel as "unfair and improper" and it is stated "that no equitable consideration exists that would justify it." The brief that was later submitted scorned the idea, and so it should be treated.

Correcting these errors we make a statement as follows:

Whole cost of works		$1,134,031.00
Loss on Takanasee	$210,000.00	
Over cost of 36-inch main	140,611.82	
Over cost of dam	44,882.05	
Over cost of reservoir	37,784.95	
Loss on Deal plant (1-3 at least)	25,000.00	
Rebate under contract (p. 225)	50,000.00	
		508,278.82
Corrected first cost		$625,752.18

No wonder the Vice-Chancellor is compelled to admit in the opinion (p. 612, l. 14) that his figures seem "a large sum!"

The impropriety of attributing two-thirds of the cost of this great plant to the municipality of Long Branch when it has no interest whatever in Monmouth Beach, Seabright or the new virgin territory gridironed by the Tintern Company is apparent. Too

much stress cannot be laid upon the fact *that the old supply was and is entirely ample for Long Branch alone.*

It was the additional draught created by the rapidly growing Monmouth Beach and Sea Bright that alone made some additional or supplemental supply necessary. This supplemental supply, if driven wells should have been adopted, could readily have been obtained at an expense of less than $200,000, for the De Nyse and Herring report for that sum was based upon a total (and not supplemental) supply for Long Branch, when the project of abandoning the company and starting a municipal plant was before the people, and included an entire new distribution system, new pumps, etc., etc. (p. 690), all of which would have been unnecessary if the scheme had been to adopt the driven wells as auxiliary to the old Takanasee plant. When it is remembered that Mr. Sherrerd estimates the value of that distribution system at $115,000, and this as we have already seen was characterized by the Vice-Chancellor (p. 606, l. 1) as "a very low estimate," when you also credit the estimate of De Nyse with pumps, stand pipe, &c., the real cost of any such supplemental supply will be seen to be substantially below $100,000. The Vice-Chancellor allows 2-3 of $844,700, or $564,666!

De Nyse's report of a brand new supply from a running stream was $241,651 (p. 691).

Sherrerd's estimate of a supplemental supply from Ocean Mills was $250,000, and he estimated this to be entirely adequate for ten years not for Long Branch alone, but for Seabright and Monmouth Beach also, his estimate being made up from the pump records (p. 431), and he demonstrates that if meters were gradually introduced, the consumption would be so reduced that it would be an entirely adequate supply (p. 439) for 20 or 30 years.

The estimate of Mr. Sherrerd of the cost of such a plant is $222,500 (p. 439)!

It would therefore seem plain that instead of adopting the "claim" of the company (mistakingly assumed to have been practically acquiesced in by the municipality) and allowing 2-3 of the first cost, the proportion of actual first cost attributable to Long Branch should not have exceeded one quarter, or $156,438.04. This suggestion corresponds more accurately, too, with the relative areas and revenues from the respective territories, and is, we believe, entirely fair.

A similar change, too, must be made in the estimate of the Vice-Chancellor for depreciation. He (p. 616) thinks that one per cent. on $600,000 (of the $847,000) should be allowed. Adopting his percentage, and also his ratio of amount of plant liable to depreciation to total cost of plant (and being practically three-quarters), we would have one per cent. on three-quarters of $625,743.18 (corrected first cost *supra*) or $4,693.00.

The Vice-Chancellor concludes that the company should receive a "net income of 5 per cent. from Long Branch from the start." The managers of the old company in whom the Vice Chancellor imposed so much confidence, did not enjoy any dividend their first year, and were content to receive 3 per cent. for two years thereafter (p. 664), and it is submitted that a new enterprise of this character must not necessarily expect to immediately reap 5 per cent. upon its investment.

But adopting the view of the Vice-Chancellor, and conceding for the sake of argument the company is entitled to an immediate return of 5 per cent., the situation then would be:

5% or ¼ of first cost, $156,438.79 =	$7,821.90
1% or ¾ of first cost for depreciation,	4,693.00
¼ of cost of maintenance ($20,000)	5,000.00
Income to be derived from Long Branch,	$17,514.90

Of course, this is for the Swimming River plant alone, and a proper credit should be added for the $115,000 distribution system in Long Branch.

The Vice Chancellor (p. 616, l. 38) in estimating the income to which he claims the company is entitled, again characterizes the result as "a large sum" and so it is as the foregoing estimate which is sought to be entirely fair, demonstrates.

It thus turns out that in the estimates of cost and of proper income the figures which the Vice Chancellor has reached are entirely inaccurate and too high, and that he has in assuming they are correct argued himself into the belief that the company is entitled to a very much larger return from Long Branch than is proper.

The evidence offered by the complainant, and the arguments adduced by it have failed utterly, if they have not shown that the City of Long Branch and its citizens had a supply of water that was entirely adequate for its and their purposes, and that the old company had been enabled, under contracts theretofore existing, to not only enlarge their distribution system to a size sufficient to keep pace with the demands of Long Branch, but also to stretch their pipes to Monmouth Beach and Seabright, and from the income derived from both sources, make a handsome revenue over and above dividends it paid. At the expiration of the contract, Long Branch is confronted with the necessity for a new arrangement. The company was confronted with the fact that Seabright and Monmouth Beach, and other outlying demands, were such as to make a supplemental supply desirable. Long Branch was not interested in those outside districts, nor in the new territory exploited by the Tintern Manor Water Company. The new managers of a new company to which the old company had sold its Long Branch plant at once launched out into spec-

ulation and a brand new supply, including a determination to abandon the old supply. Long Branch insists that in settling the public and private rates for itself and its citizens, the court will not be carried away by the increase in expenses arising from such speculation and exploitation. These latter, in no way concern Long Branch, and the company has no right to make Long Branch pay more than it is reasonable it should pay, in view of the old circumstances, and the fact that for years the old company successfully supplied the municipality and its citizens at reasonable rates, and at the same time made a good income. The reasonableness of the rates must be ascertained in connection with these facts. The Court must consider the fact that a good supply was at the very doors of Long Branch. A good system of pipes was laid. They were practically sufficient for Long Branch, and in fixing new rates these important facts must not be overlooked.

In conclusion we urge that the public rates should be such as the company itself fixed as fair and proper in the contract of Nov. 24, 1902 (p. 717. second para.) and that the public should not be charged more for the service it is to receive than past experience and the views of the company unite in demonstrating they are worth.

For private rates, in view of the peculiarities of the situation at Long Branch, a metre rate should be optional with the consumer and when not availed of, the unjust duplication permitted by the schedule for more than one fixture should be corrected.

The decree should also be modified to correct the errors pointed out wherein it departs from both the record and the opinion.

The decree should be reversed.

CLARENCE VAN NOTE,
ROBERT H. McCARTER,
Of Counsel with Appellant.

Newark, N. J., July 9, 1906.

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In Chancery of New Jersey.

To the Honorable William J. Magie, Chancellor of the State of New Jersey:

Complaining shows unto your Honor, your orator, The Long Branch Commission, a body corporate of the State of New Jersey:

I. That it is a municipality having full and ample power, under and by virtue of the laws of the State of New Jersey, to enter into contracts with Water Companies for the furnishing of water to it and its citizens for public and private purposes, and that pursuant to such power and authority, on or about the twenty-first day of September, eighteen hundred and ninety-one, an agreement was entered into by and between your orator, whose corporate name was then The Long Branch Police, Sanitary and Improvement Commission, and The Long Branch Water Supply Company, a true copy of which agreement is hereto annexed, marked Schedule 1, and made a part of this bill, under and by virtue of which your orator did grant to the said Long Branch Water Supply Company the sole and exclusive privilege of supplying to to your orator, water for all municipal purposes, and all other purposes, for ten years from the date thereof, and no longer, and did also bestow upon said Water Company the right to extend its mains and make all necessary excavations in any streets or public places subject to such reasonable rules,

regulations or ordinances as your orator had then made, or might thereafter make or prescribe, as by reference to said agreement will more fully appear.

II. Pursuant to said agreement, said Long Branch Water Supply Company did, during the ten years in which said contract was operative, solely enjoy the privilege of supplying water to public and private consumers, and did also build and extend its water mains throughout many of the streets and highways of your orator, and enjoyed during all of said time all the privileges belonging to it under and by virtue of said contract.

III. Said Long Branch Water Supply Company was duly organized on or about the third day of November, eighteen hundred and eighty-two, by filing in the office of the Secretary of State of the State of New Jersey, its certificate of incorporation, pursuant to the provisions of an act entitled "An Act for the construction, maintenance, and operation of water works for the purpose of supplying cities, towns, and villages of this State with water," approved April twenty-first, eighteen hundred and seventy-six, and its several supplements and amendments, and that it was impossible and illegal for said Company to lay or extend any water mains throughout the streets of any municipality, including those of your orator, without the municipal consent first had and obtained; that said Company at the time of entering into said contract, and until about the period of its expiration continued to carry out the purposes of its organization, namely, the supplying of water to the public and private citizens of Long Branch and its immediate vicinity, and had the supply of water adequate for that purpose, and that at the time of the making of said contract the population of the territory known as Long Branch, and

supplied by said Company, was about one third of the present population, and the territory intended to be covered by said Company was less than one-sixth in area of that of the Tintern Manor Water Company, the defendant herein. During the continuance of said contract the business of said Water Company gradually expanded, and was conducted profitably and successfully.

IV. On or about the second day of July, nineteen hundred and one, said Long Branch Water Supply Company, by articles of merger between it, Tintern Manor Water Company, The Middletown Water Company, The Deal Water Company, and the Seabright Water Supply Company (which said articles were, on or about said last mentioned date, duly filed in the office of the Secretary of State), undertook to become merged into the Tintern Manor Water Company, and by virtue thereof it is claimed by said Long Branch Water Supply Company and the Tintern Manor Water Company that said last named Company succeeded to all the rights, privileges and franchises of said Long Branch Water Supply Company, which claim your orator is advised is untrue, but, nevertheless, said Tintern Manor Water Company became immediately possessed of, and is now operating the property and franchises formerly owned and controlled and operated by said Long Branch Water Supply Company, including the mains through the streets of your orator, permission for laying which was contained in said contract.

V. About the time that said contract would terminate and being the twenty-first day of September, ninteen hundred and one, negotiations were entered into between said Tintern Manor Water Company and your orator, for the purpose of renewing the same, or making a new contract for

the supplying of water by said Company to your orator, and for private purposes, and to secure the permission to continue the use of the mains already laid, and the right to extend and lay other mains throughout the streets of your orator. These negotiations were entered into in entire good faith by your orator, and were, so far as your orator is concerned, designed to secure a decrease in the rates to both public and private consumers in any new contract, the contention being, which your orator alleges to be the fact, that the increased population of Long Branch and the larger territory enjoyed by the Water Company, enable them to substantially reduce the rates to the consumer. Your orator shows, however, that said Water Company, believing that it had a practical monopoly of the situation, and that no other source of supply existed, or that no other company could or would offer a supply, insisted upon harsh and burdensome terms, with the result that a long time elapsed without the reaching of any conclusion. Meantime said Company continued to supply your orator with water for municipal purposes, and on or about the day of , nineteen hundred and three, a resolution of which the following is a copy, was passed by your orator:

"Whereas, the voters of this municipality are of the opinion, as expressed by them in the last municipal election, that the rates charged by the Tintern Manor Company to this municipality and to individuals are excessive, and

Whereas, it appears to be impossible for this Commission and the said Water Company to agree upon a schedule of rates applicable to the municipality and to private consumers, and

Whereas, the said Water Company has

notified this Commission that unless it accedes to its demands that it will shut off the supply of municipal water on the first day of August, and

Whereas, it is the wish of this Board to carry into effect the desire of the voters and property owners, and it being uncertain as to whether it has the power to establish water works to be owned by this municipality under existing laws,

Therefore, be it resolved that the solicitor of this Board in conjunction with special counsel, to be approved by the Mayor, shall advise this Board forthwith what legal steps, if any, it shall take to prevent the said Water Company from carrying into effect its threat to shut off city water on August 1st; that said counsel as soon as possible advise this Board in writing whether there is any authority under existing laws whereby this municipality can acquire water works for the purpose of supplying the municipality and private consumers.

Resolved, that if said counsel report that there is at present sufficient law for such purpose that a public meeting of voters and tax payers be called in order to obtain an expression of sentiment upon the question of acquiring water works, and if said counsel advise that there is no such existing law, then that said counsel shall, if said public meeting shall so decide, draw a proper and suitable law to present to the next Legislature which will enable this municipality to acquire a system of water works for the purpose aforesaid."

And until the month of November, nineteen hundred and two, this situation continued, your orator

vainly endeavoring to make a favorable contract with said Water Company. In the meantime said Water Company has made further extensions of its mains throughout the streets of your orator, particularly through Westwood Avenue and the new streets in the neighborhood of the Hollywood Hotel, and has likewise continued to enjoy the privilege of supplying private consumers through these new mains, as well as the old mains, and has reaped, and is now reaping a large profit and reward from the private consumers throught its entire territory by reason thereof, and by means of an exorbitant increase in the rates, as hereinafter shown. Inasmuch as no agreement had been reached, the said Company, on or about the second day of September, nineteen hundred and two, commenced an action on contract in the Supreme Court of New Jersey, against your orator to recover the money claimed to be due it from your orator for the continued use by your orator of the water for public purposes, since the expiration of said contract, claiming in said suit that your orator was compelled to pay, and indeed had agred to pay at a similar rate to the terms of the old contract, which had expired. Your orator interposed in due time its plea to said action, and issue is joined therein, and the same is now pending, and in due course will come on for trial at the October Term of said Supreme Court at the Monmouth Circuit thereof. Negotiations still continued, with the result that on or about the seventeenth day of November, Nineteen hundred and two, a resolution purported to be passed by the Long Branch Commission, authorizing the execution of a new contract with said Tintern Manor Water Company, for the period of ten years, a true copy of which proposed new contract is hereto annexed and marked Schedule B, to which your orator begs leave to refer, and which is made a part of this bill of complaint. Your orator shows.

however, that said contract so pretended to be authorized, was in fact never executed by your orator, and never went into effect. The terms of said proposed contract were generally considered oppressive, burdensome and unfair, and the means adopted to secure its alleged passage were claimed to be illegal, with the result that proceedings were immediately taken in the Supreme Court of the State of New Jersey by Alfred O. Hicks, a taxpayer, to set aside said resolution, which proceedings resulted in a judgment of the Court of Errors and Appeals, entered in the June Term, Nineteen hundred and three, directing that said proceedings should be annulled and set aside. Your orator shows that while it was technically a party defendant to said proceedings, its solicitor participated therein in favor of said application, took part in all proceedings and arguments, and believed, as the public generally believed, that not only had said resolutions not been legally passed, but that the said proposed contract was unfair, oppressive, and provided exorbitant terms and rates; that said proposed contract, while undertaking to grant the exclusive privilege to the Company to supply water to the public and private consumers, and also granted permission to said Company to extend its water mains throughout the streets of your orator, yet made no provision whatever concerning the rates to be charged for the use of the water to property owners, residents, and consumers, beyond that contained in the fifth clause thereof to the effect that the same should not be increased during the term of said contract, but your orator shows and charges that just prior to the passage of said resolution, said Water Company had issued a schedule of rates, a true copy whereof is hereto annexed and marked Schedule C, which increased the rates in some cases to private consumers as much as two hundred per cent., and if said

contract had been permitted to be carried into effect, the rates therein authorized to private consumers would have been exorbitant and oppressive. Your orator also charges that the requirement therein of twenty-five dollars per hydrant in connection with an additional charge of sixteen hundred dollars for street sprinkling purposes, was also exorbitant and oppressive, and so great was the public popular outcry and objection to the making of any such contract, that notwithstanding the fact that proceedings were at once taken to set aside said resolution, which proceedings stayed the execution of said contract, in a popular election for members of the Long Branch Commission, which followed shortly after the time when said resolution purported to go into effect, all of the Commissioners who had voted in favor of said resolution, except one, failed of reelection although all were candidates, the issue being directly upon that question, and the two members of said Commission who voted against the passage thereof, were elected by an overwhelming majority. Your orator shows that in the said *certiorari* proceedings it was made to appear that said proposed contract was authorized and said resolution pretended to be passed in great haste, against strenuous objection, without having submitted the contract to the City Solicitor for approval, or without his ever having examined the same, and the haste and apparent impropriety with which said proposed contract was thus attempted to be authorized was the ground of much criticism.

VI. A short time after the decision of the Court of Errors and Appeals setting aside said resolution, and in the latter part of the month of June, Walter S. Reed, one of said Commissioners, and the Mayor of your orator, called upon the Honorable Rufus Blodgett, President of said Company, for the purpose of negotiating a fair contract for the sup-

ply of water, but said Blodgett informed him that no other or different contract could, or would, be entertained than the said proposed contract hereinabove referred to, claiming that your orator had no right whatever to concern itself with the rates proposed to be charged to private consumers. Your orator has been ready and willing, and is ready and willing to make a fair and equitable contract with said Company, and is anxious to bring the matter to a satisfactory conclusion.

VII. On or about the eighth day of July, Nineteen hundred and three, your orator received from said Tintern Manor Water Company a communication, a copy whereof marked Schedule A is hereto annexed, and made a part of this bill of complaint, signed by the said Rufus Blodgett, President of Tintern Manor Water Company, which letter ends as follows:

"Unless the matter is settled during the present month, we shall cease supplying Long Branch with water for municipal purposes on the first day of August next."

VIII. Your orator shows that the water which comes through the mains of the defendant Company is the sole protection that your orator has upon which to rely for the prevention of fire.

Your orator supports a sufficient Fire Department, including three steam fire engines, one chemical fire engine, and three hose companies, and a hook and ladder, all of which are dependent upon said water for their effectiveness. The buildings in a large part of the territory of your orator are closely built, mostly constructed of wood, and many of them are very handsome private residences. By reason of the contiguity of Long Branch to the ocean, fierce winds frequently prevail, so that a conflagration once started and not controlled would be disastrous. The very threat contained in the let-

ter last referred to has caused alarm among the citizens and the Fire Insurance Companies have already threatened to increase the rates, and withdraw their risks, if the proposed action of the Water Company is permitted to go into effect. The high winds that prevail in this locality also create considerable dust, and the prosperity of Long Branch depends largely upon the fact that it is a summer resort, and that can never be successfully continued unless the streets and highways and drives through which the summer residents travel, shall be kept as far as possible free from dust. For that purpose your orator owns and maintains some sixteen wagons, whose sole use during the summer months is to sprinkle the streets of Long Branch, and to pay therefor your orator assesses and collects a special tax. The citizens have been taxed during the current year for that purpose, and have a right to expect that it shall be continued during the balance of the present season.

IX. Your orator shows and hereby tenders itself ready and willing to pay any sum that may be found by the tribunal which the said Water Company has itself selected, and which is the only proper tribunal to determine what it should pay for the privileges it has enjoyed since the expiration of the said contract on the twenty-first day of September, nineteen hundred and one, and it charges that it would be inequitable and productive of irreparable damage to your orator and its citizens at large, if the said Water Company, under this condition of affairs, should be permitted to cut off the public supply, while it continues to enjoy the privileges of serving private consumers, and through mains which occupy the public streets, alleys, and roads of Long Branch, some of which were laid under the contract which has expired, and others

since that time, and during the negotiations aforesaid.

To the end, therefore, that the said Tintern Manor Water Company, may, without oath, an answer under oath being hereby waived, true, full and perfect answer make to all and singular the premises, and that by the order and decree of this Honorable Court it may be enjoined and restrained from ceasing to supply Long Branch, or the private consumers therein, with water for municipal purposes, or from in any way interfering with the use by your orator of the water which comes through the mains and into the hydrants for municipal purposes, and from disconnecting or disabling any of said hydrants until the further order and direction of the Court, and that your orator may have such other and further relief as to your Honor shall seem meet and shall be agreeable to equity and good conscience.

May it please your Honor, the premises considered, to grant unto your orator, not only the State's writ of injunction, issuing out of and under the seal of this Honorable Court, to be directed to the said Tintern Manor Water Company, its officers, agents, employees and servants, enjoining and restraining them and each of them as hereinbefore prayed, but also the State's writ of subpoena, issuing out of and under the seal of this Honorable Court, to be directed to the said Tintern Manor Water Company, commanding it by a certain day and under a certain penalty therein to be expressed, to be and appear before your Honor in this Honorable Court, then and there to answer all and singular the said premises, and to stand to abide by, and perform such order and decree therein as

to your Honor shall seem meet, and shall be agreeable to equity and good conscience.

And your orator, as in duty bound, will ever pray, etc.

THOMAS P. FAY,
Solicitor for, and of Counsel with Complainant.
ROBERT H. McCARTER,
Of Counsel.

IN CHANCERY OF NEW JERSEY.

Between THE LONG BRANCH COMMISSION, Complainant, and TINTERN MANOR WATER COMPANY, Defendant.	On Bill, etc., Order.

Application being made to amend the bill of complaint filed herein by the complainant, and the defendant consenting thereto, and the said bill being sworn, and both parties waiving the re-engrossing thereof,

It is ordered that the said bill be, and it is hereby amended by inserting in lieu of Paragraph Nine therein, the following, namely:

"IX. Your orator shows, and hereby tenders itself ready and willing to pay any sum that may be found by this Honorable Court, for the privilege it has enjoyed of the use of water for municipal purposes, through the mains of the said defendant since the expiration of said contract, on the twenty-first day of September, nineteen hundred

SCHEDULE A.

TINTERN-MANOR WATER COMPANY.

General Office,
Long Branch, N. J.

Successor to
Long Branch Water Supply Co.
Middletown Water Company.
Deal Water Company.
Sea Bright Water Supply Co.

Long Branch, N. J., July 8, 1903.

To the Long Branch Commission:

Gentlemen: The ten years' term of the contract of the Long Branch Water Supply Company (now the Consolidated Tintern-Manor Water Company), with your honorable body for a supply of water to Long Branch for municipal purposes, expired on September 21, 1901. Prior to that date the company called the matter to your attention, and in a number of conferences tried to come to an understanding for the future, but without success. On September 7th, 1901, your Board sent us a communication to the effect that you intended to continue to use our water but not to renew the contract, and therefore you would pay for the water what it might be considered to be reasonably worth; you specified no time or manner of payment. The company answered on September 18, 1901, notifying you that if you continued to use the water after September 21, the rates provided by the old contract would continue to be charged. To this you made no reply; you continued to use the water after September 21, and have continued until the present time, using more water for fire and sprinkling purposes than ever before. You have never paid anything whatever since that time. You owe the company under the old contract for water supplied prior to September 21, 1901, four hundred and ninety-two dollars and eighty cents

($492.80), and for water since supplied, at same rates, up to July 1, 1903, a total sum of eleven thousand, four hundred and twenty-six dollars and three cents ($11,426.03). After the expiration of the old contract the company made diligent efforts to come to an understanding with your board, and on November 24, 1902, after protracted negotiations, the board adopted an agreement for a supply for ten years, reducing the hydrant rate from $40 to $25 per year, and in other respects making more favorable terms for the municipality. The company executed the agreement. A taxpayer immediately attacked the contract in the Supreme Court, in which attack the municipal counsel joined by direction of the board, alleging the unfairness and extravagance of the agreement; that the Commission had not appropriated the necessary money to carry it out; that only two of the seven members of the board had voted for it; that Commissioner Parker had usurped the rights of the Chairman in putting the motion; that Parker was interested, being employed by the Company, and finally that the roll had not been called on the passage of the motion. All these allegations failed, both in the Supreme Court and the Court of Errors, except the last one. The Court of Errors decided that the roll-call was necessary, and set aside the contract because of the failure to observe that technical requirement. All the complaints touching the merits of the agreement completely failed. The decision was rendered at the beginning of the June term, and although your Board has met three times since then, no action has been taken in the matter.

From the great delay that has occurred, now nearly two years, and the persistent neglect of your Board to pay us anything for the water, and from the nature of the claims set up by your Board in the litigation, and from your present continued inaction, we are forced to the belief that you do not intend to pay us for the water at all, unless compelled by the courts. We have no desire for litigation, nor for any contro-

versy that we can avoid. We are willing, as we have always been, to supply water to the town on fair terms, and now offer, if the arrearages are paid, to continue the old contract for a reasonable term of years, or to enter into the contract which was set aside by the courts upon the technicality above mentioned, or to make any other fair contract.

We are not willing, however, to allow the present state of affairs to continue. We are pumping water at heavy cost, which your town is using in a very lavish and wasteful manner, apparently with the intention of avoiding payment if possible. We have submitted to this for nearly two years, but cannot afford to do so longer.

Unless the matter is settled during the present month we shall cease supplying Long Branch with water for municipal purposes on the first day of August next.

TINTERN-MANOR WATER COMPANY.

R. BLODGETT, *President.*

and one, and it charges that it would be inequitable and productive of irreparable damage to your orator and its citizens at large if the said Water Company, under this condition of affairs, should be permitted to cut off the public supply while it continues to enjoy the privilege of serving private consumers through mains which occupy the public streets, alleys and roads of Long Branch, some of which were laid under the contract which has expired, and others since the time, and during the negotiations aforesaid." And also by amending the prayer of said bill by inserting therein, before the prayer for general relief the words: "and that the proper and fair rates for water heretofore furnished and hereafter to be furnished to the complainant by the defendant, and to be hereafter rnished to private consumers in Long Branch ay be ascertained and determined by this Court."

W. J. MAGIE,
C.

Respectfully advised,

. C. Pitney,
V. C.

A true copy.

E. C. STOKES,
Clerk.

IN CHANCERY OF NEW JERSEY.

Between THE LONG BRANCH COMMISSION, Complainant, and TINTERN MANOR WATER COMPANY, Defendant.	On Bill, etc., Answer. (Filed Sept. 25, 1903).

The answer of the Tintern Manor Water Company, defendant, to the bill of complaint of The Long Branch Commission, complainant.

This defendant answering says:

1. It admits that the complainant is a municipality having full power to enter into contracts with water companies for the furnishing of water to it and its citizens for public and private uses, and that on or about the twenty-first day of September, eighteen hundred and ninety-one, an agreement was entered into, as stated in the First paragraph of the bill, for the furnishing of water for ten years, but as to the tenor and effect of said agreement, this defendant prays that reference may be had to the agreement itself.

2. It admits that The Long Branch Water Supply Company did, during said ten years, supply water to public and private consumers in Long Branch, and did build and extend its water mains through many of the streets and highways thereof, and enjoy the other privileges given by said contract.

3. It admits the organization of the Long Branch Water Supply Company on November third, eigh-

teen hundred and eighty-two, and begs leave to refer to the certificate of organization for certainty. It admits that it supplied water to Long Branch and vicinity under its contract, and that the business of the Company gradually expanded, and admits that its business was conducted successfully, but says that it was conducted without much profit.

4. It admits the formation of the Tintern Manor Water Company by the consolidation on July second, nineteen hundred and one, of the companies named in the Fourth paragraph of the bill, and begs leave to refer to the articles of consolidation and incorporation for greater certainty, and it admits that it is now operating the property and franchises formerly owned and controlled by the Long Branch Water Supply Company, and says that it has, in fact, succeeded to all the franchises, rights, powers, privileges and property of that Company.

5. It admits that negotiations were conducted in September, nineteen hundred and one, between the defendant and the complainant for making a new contract for a water supply, but denies that any negotiations were made to secure the permission to continue the use of the mains already laid, and the right to extend and lay other mains throughout the streets of the complainant, and this defendant is advised that it has that right without any further permission.

6. It does not know with what design the complainant entered into said negotiations, and denies that the complainant conducted the same with good faith, and denies that the increased population of Long Branch and other territory enabled these defendants to substantially reduce the rates to the consumer without unreasonable loss. It denies that it insisted upon harsh or burdensome terms, but, on the contrary, says that it at all times was

ready and willing, and repeatedly offered fair and reasonable terms, for the continued use of the water for public and private purposes, and has always been ready and is ready to supply the same upon reasonable terms.

This defendant believes it is true that the Council of the complainant passed resolutions such as are set forth in Paragraph Five of the bill, but says that the same are not pertinent to the issue in this suit and require no answer.

7. It admits that it has made extensions through the streets of complainant from time to time, as demand required, and has continued to supply water to private consumers, but says that such supply is in accordance with its right and its duty, but it denies that it is reaping a large profit and reward from its consumers throughout its entire territory by reason thereof, and denies that it has made any exorbitant increase in rates.

8. It admits that it brought action in the Supreme Court on or about September second, nineteen hundred and two, for the recovery from the complainant of the moneys due for water furnished, and in said suit demanded the same rates as in the former contract between the parties. It admits that the suit is at issue. It admits negotiations, which resulted in the resolution of November seventeenth, nineteen hundred and two, mentioned in the bill. It denies that the terms of the contract, therein provided for, were generally considered, or were, in fact, oppressive, burdensome or unfair; it admits that the resolutions were taken to the Supreme Court, and says that they were there confirmed, and it admits that they were afterwards, by the Court of Errors and Appeals, upon writ of error, at the June Term, 1903, set aside, and says that they were set aside on the sole technical ground that in adopting the resolutions the roll of the

Council had not been called. It says that the complainant was not a technical party to said proceedings, but was an active party, and while being named as defendant, in fact took part as prosecutor from beginning to end of the proceedings, and was the real prosecutor of the proceedings to set aside its own resolutions.

It denies that in said proceedings anything was made to appear against the said resolutions, except that the roll had not been called, upon its final adoption.

9. It denies that since the decision of the Court of Errors and Appeals, the complainant has ever shown itself ready and willing to make a fair and equitable contract with the defendant, or to bring the matter to a conclusion, but, on the contrary, says that it avoided the subject, treated the defendant's bills for water supply with contempt, and showed an obvious disposition never to pay for the water at all, unless compelled by law.

10. It admits that on or about July eighth, Nineteen hundred and three, it delivered to the complainant a communication such as mentioned in Paragraph Seven of the bill, and begs leave to refer to the original for certainty.

11. It denies that the water furnished by defendant is the sole, but admits it is the principal, protection that the complainant has to rely on for the prevention of fire. It admits that the complainant has a fire department, but does not know and therefore neither admits nor denies whether the same is sufficient and effective; it does not know and therefore neither admits nor denies what effect its said letter had upon insurance companies and others. It denies that the winds at Long Branch are fiercer or higher than at other places situated upon the Atlantic coast; it admits that the com-

New Jersey State Library

plainant maintains a large number of wagons for sprinkling streets, and collects a special tax for the purpose, and that the citizens have been taxed during the current year for that purpose, and says, in fact the complainant has made a free and lavish and wasteful use of the water of the defendant through its wagons and sprinkling carts, using, for the purpose of sprinkling, quantities of water greater than are commonly used by towns of similar population for such purposes.

12. Inasmuch as the complainant has, by its amended bill, prayed that the rates for water heretofore furnished by the defendant to complainant and hereafter to be furnished to the complainant by the defendant, and future water rates for private consumers, shall be fixed by this Court, this defendant therefore consents that such jurisdiction be taken by this Court, and joins in the prayer of the bill that the rates for water heretofore furnished and hereafter to be furnished to the complainant by the defendant, and future water rates for private consumers, may be fixed by this Court.

13. This defendant, further answering, says:

That the rates fixed in the former contract, which prevailed for ten years, between the complainant and the Long Branch Water Supply Company for the use of water for public purposes were moderate and entirely reasonable. It further says that the contract which was made in November, Nineteen hundred and two, and which was set aside by the Court of Errors and Appeals, as above mentioned, also contained rates moderate and reasonable. It further says that the rates now prevailing for the use of water in the territory of the complainant for private consumers are moderate, reasonable anr uniform, lawful and very low, and that they should not be reduced, but in some cases increased,

and that it is not equitable that the rates for water for public purposes should be any lower than those provided by said contract of November, Nineteen hundred and two.

14. This defendant says that because of the growing population of Long Branch and vicinity, its supply had become inadequate, and the Company was compelled to look out for a supply which should be sufficient, not only for the present, but for a reasonable number of years in the future, and has consequently, during the past three years, been constructing a dam and new mains and pumping stations and other works for the taking of a supply of water from the Swimming River, which should be adequate for the growing needs of Long Branch and vicinity. These works have been built at a very great cost, which has been necessary to enable the defendant to maintain a proper and sufficient supply of water which should be good and wholesome for Long Branch.

15. This defendant shows that it is entitled to charge such reasonable and sufficient prices for the use of water for public and private purposes as may afford a fair return upon the necessary cost of providing and maintaining such water supply, and prays this Court to fix the rates which may be charged by this defendant, with a view to these facts and all the circumstances of the case.

16. This defendant says that at the time of the filing the bill of complaint in this suit the complainant had used the water supplied by this defendant for fire purposes and for the public buildings, and for sprinkling the streets, in the same manner as complainant had before used it under the ten-year contract, but even more copiously than before, and had not paid anything for the water for almost two years, and refused to pay for the

same, although bills had been rendered therefor monthly, and complainant had annually levied and collected taxes for the purpose of paying for said water, and that at the time of filing the bill the complainant was indebted to defendant for such water in the sum of about eleven thousand dollars.

COLLINS & CORBIN,
Solicitors for and of
Counsel with Defendant.

The foregoing answer of the Tintern Manor Water Company, a body corporate, is taken under its corporate seal and the hand of its Secretary this twenty-fourth day of September, Nineteen hundred and three, at Long Branch, before me.

JOHN W. SLOCUM,
[SEAL.]
Master in Chancery of New Jersey.

Wellington LaMonte,
Secretary.

Replication in common form.

Between

LONG BRANCH COMMISSION,
Complainant,

and

TINTERN MANOR WATER COMPANY,
Defendant.

April 28, 1904.

Transcript of shorthand notes of testimony taken in the above entitled cause on April 28, 1904, at the Town Hall, Long Branch, New Jersey, before Hon. Henry C. Pitney, Vice-Chancellor, in the presence of ROBERT H. MCCARTER, Counsel, and CLARENCE G. VAN NOTE, Solicitor for the Complainant, and WILLIAM H. CORBIN, Counsel for Defendant.

DR. WALTER REED, sworn on behalf of the complainant.

Direct-examination by Mr. McCarter:

Q. You are a doctor of medicine?

A. Yes, sir.

Q. How long were you connected with the Commission of Long Branch as a member?

A. Ten years.

Q. And during how long a time did you serve in the position of what is called Mayor?

A. Two years and ten months.

Q. When did you retire from the Board?

A. Last December.

Q. You were, therefore familiar during your in-

cumbency with the water question in Long Branch?

A. Yes, sir.

Q. Prior to the organization by consolidation of the Tintern Manor Water Company, speaking generally, what territory did the old Long Branch Water Supply Company supply?

A. I am not entirely familiar with very much territory outside of that part over which Long Branch, that is, the town itself, we had any jurisdiction; I don't think that there is very much territory outside of Long Branch they supplied?

By the Court:

Q. They supplied all of Long Branch?

A. They supplied all of Long Branch.

Q. Have you the certificate of the incorporation of the Long Branch Supply Company (addressing Mr. Corbin)?

Mr. Corbin handed Mr. McCarter certified copy of certificate of incorporation of the Long Branch Water Supply Company.

Mr. McCarter offered in evidence certified copy of the certificate of incorporation of the Long Branch Water Supply Company, dated September 20, 1892, and directed the Court's attention to the fact that the amount of capital stock is stated therein to be $250,000, and that the names of the town, village and sea side resorts in or for which such works are to be constructed, and the business of the Company carried on, are stated therein to be the Town of Ocean, the seaside resorts of Long Branch, Monmouth Beach and Seabright, and the places adjacent thereto.

The Court: Town of Ocean? The townships I see here are Shrewsbury Town-

ship—oh, yes, Ocean Township that includes.

Mr. Corbin: I might say at that time, at the time this Company was incorporated, Ocean Township included Long Branch. The Long Branch Commission had certain special powers.

By the Court:

Q. Ocean Township naturally included everything east of the Pleasant River, &c., didn't it?
A. Yes, sir.

By the Court:

Q. It did not take in Eatontown?
A. No.

The Court: That was Ocean Township at the time of the incorporation?

Mr. Corbin: Yes, sir; and until very recently.

Mr. McCarter: The certificate continues "Said town," meaning the Town of Ocean, including said seaside resorts and the places adjacent thereto having a population of not more than fifteen thousand and not less than five hundred," and that the persons who signed the certificate and were named therein as its first directors, were E. A. , T. A. Potts, C. T. Jones, George F. Baker, Garret A. Hobart, Charles G. Franklyn and Frank G. Brown.

The Court: That is 1882?

Mr. McCarter: 1882.

Certificate of incorporation marked Exhibit C1.

Q. I don't know, Dr. Reed, whether you are familiar with the growth in the population of Long Branch, Seabright and Monmouth Beach?

A. Only approximately.

Q. Well, what is the approximate population, permanent population of Long Branch, and approximate summer population?

A. Well, our population, I think, the last census was 8,500 in Long Branch, permanent population.

By the Court:

Q. Census of 1900?

A. Yes, sir.

By the Court:

Q. Can you tell how much it varies summer and winter?

A. It is estimated we have a population of between seventy-five and a hundred thousand in the summer.

By the Court:

Q. In the limits of Long Branch?

A. In the limits of Long Branch; yes, sir.

Q. Now, in regard to Monmouth Beach and Seabright,—are you able to estimate the permanent population of those two sections of this town or township?

A. That is, between winter and summer?

Q. Yes. Take permanent first, and then summer?

A. The permanent population of Monmouth Beach is very small during the winter, I don't think more than three or four hundred; during the summer possibly four or five thousand.

Q. And the population of Seabright, permanent and summer, roughly?

A. You mean just Seabright, or what is generally spoke—Seabright runs to the north.

Q. I don't think the pipes of the Company ex-

tended across the river; so we will take in Seabright.

A. I don't think they did previous to the consolidation.

Q. I mean old times, the original; confine yourself, therefore to the strip of land—

A. Well, we have at Seabright during the winter a permanent population of about five hundred people, and during the summer it is variously estimated between twenty-five and thirty thousand.

Q. Now, where was the source of supply, the original source of supply, and down until the changes the constant source of supply of the Long Branch Water Supply Company?

A. In Long Branch, you say?

Q. Yes.

The Court: Where did they get their water?

A. They got it at Takanassee Lake.

By the Court:

Q. Got it right down there in the town, eh?

A. Yes, sir.

Q. (Geological map is now produced, showing the original water shed of the Long Branch Water Supply Company, appearing to be marked thereon four and nine-tenths square miles) What brook or stream was the source of that Takanassee Lake?

The Court: Called Cranbury Brook here on the map?

A. I think that is what it has always been called; I have really forgotten.

The Court: That map that is produced, is produced by the defendant, geological map comes from the State, and is one of those that is recognized, I believe, now universally

by the Courts without proof, and the water sheds, however, I suppose marked herein are the work of the defendants' engineers, and Mr. McCarter puts it in supposing it may be right, subject to the right to correct it, but it is substantially right, no doubt.

Q. How was any pressure given to the water? Did they pump it?

The Court: Had a stand pipe?

A. Had stand pipe; yes, sir.

Q. Pump at Takanassee Lake?

A. Yes, sir.

Q. Who was the engineer down there, a man named Lake?

A. Yes, sir.

Mr. McCarter: Now, have you gentlemen a map showing the position of the pipes in the town itself?

Mr. Corbin: The big one shows all the pipes.

The Court: Now, the first map that was produced here, as I understand, shows the piping of the present Company as far as it goes, and those are represented by red lines?

Mr. Corbin: Yes, sir; and the dots represent hydrants, one hundred and forty-six hydrants; the hydrants are in Long Branch only, and the size of the pipe I think is indicated by figures.

The Court: You go into the old system at the point near Milford Avenue, the western part of the City?

Mr. La Monte: Yes, sir.

The Court: From that on you haven't enlarged your mains any?

Mr. La Monte: No.

Q. Dr. Reed, do you remember when it was that the old contract expired?

A. September 21, 1901, if I remember right.

Q. Were you in the Board at that time?

A. Yes, sir.

Q. Did you enter into any negotiations with the Water Company in regard to a new contract?

A. We did not.

Q. Will you describe generally the characteristics of the territory shown on this map outside of Long Branch through which the pipes of the Water Company as at present constituted extend? For instance, if you will come to the map you see that a main comes over from the Swimming River to a point near Little Silver. Are you familiar where the position of Little Silver is, you are familiar with that locality?

A. Yes, sir.

Q. Is there much population there?

A. No.

Q. Very small, is it not?

A. Yes, sir.

Q. Now, following the location of the pipe, the eighteen inch main pipe, you see it traverses through the territory shown on the map, including Fairhaven, Oceanic, East Oceanic, around to Rumsen Bluff. Have you any idea of the total population of Little Silver, Fairhaven, Oceanic and East Oceanic and Rumsen Bluff?

A. Well, I wouldn't think, approximately estimating it, that there was a population of more than twenty-five hundred in all the towns.

By the Court:

Q. You mean winter or summer?

A. I mean winter.

Q. And does that increase materially in summer?

A. Yes, sir; it does, down around Rumsen, but

not a great deal around Fairhaven and Oceanic, not generally known as summer resorts.

Q. Now, we will take this main that comes down through Oceanport. Do you know how large a hamlet Oceanport is?

A. A small one.

Q. Now, there is a main comes off from Oceanport appearently into Eatontown, said to be a ten inch main. Have you any idea of the population of Eatontown?

A. I don't know exactly; I suppose Eatontown has got about two thousand.

Q. Very little summer population to that town, is there not?

A. Very little; yes, sir.

Q. Permanent place?

A. Yes.

Q. What have you got to say then generally, as to the country through which the new pipes that we have been speaking of of this new Company extend, as to its being sparsely settled or otherwise?

A. I would consider it a sparsely settled country.

Q. Now, what kind of pressure and what kind of a supply as to quantity and quality did you apparently have under the old regime in Long Branch here, satisfactory?

A. Well, it was hard work to satisfy everybody; I heard a great many complaints.

Q. Do you know whether or not the pumping gave all the pressure you needed under the old supply?

A. Not under all circumstances it didn't.

By the Court:

Q. Was it ever tested at a heavy fire, large fire?

A. Yes, sir.

By the Court:

Q. It didn't come up to the mark then, eh?

A. It pumped the water all out of the pipes, and couldn't get any water.

Q. When was that?

A. That was previous to consolidation.

By the Court:

Q. Previous to the new Company?

A. Yes, sir. I don't know whether that condition of affairs exists now or not; I haven't heard of it.

Q. Was that on more than one occasion, or more than that one time?

A. I heard of it on more than one occasion.

Q. For ordinary domestic uses the supply was sufficient, was it not?

A. I don't think it was into buildings where there was more than two stories, and a great many complained in buildings with two stories even.

Q. Under the old plan?

A. Under the present plan too.

Q. I am talking now of the old plan first?

A. Yes, sir.

Q. Have you seen or witnessed or heard of any improvement in that line under the new plan as to pressure?

A. Yes, sir.

Q. There is some improvement?

A. Yes, sir.

Q. Is it satisfactory?

A. No; not according to my belief, and what complaints I have heard.

Q. What is your own view about it?

A. I can tell you my personal experience in a second story where I live, my residence, if the man is drawing water at the barn we can't get any water up stairs.

By the Court:

Q. How large is your service pipe?

A. The service pipe is ordinary service pipe that plumbers lay.

By the Court:

Q. Don't you know the size of it?

A. I think at the time the Company had regulation size, wouldn't allow but a certain size to go in.

The Court: I will just interrupt you to say, it may depend entirely on the sufficiency of your service pipe. It is not an unusual thing to have water stop flowing upstairs when it is drawn downstairs if the service pipe is small, and this is to the knowledge of the Court as a juryman, so you may as well have it. The old fashioned plan was to put in a small service pipe because you didn't have any check by way of meters, anything of that kind,—if you didn't have a small service pipe—it was supposed a small service pipe would prevent waste, and your service pipe may be altogether too small, you will find, sir, if you examine. I know of a great many instances of it where they have needed a larger service pjipe put in in order to get any kind of satisfactory pressure; even if you had five hundred feet head you can't drive but a certain quantity of water.

A. I understand that feature.

Q. I want to direct your attention to one thing now, doctor. At or about the time that the contract expired in September, 1901, what was done by Long Branch in regard to the question of water, what effort did they make?

A. We tried to enter into a contract with the Water Supply Company at that time, and we could not come to terms of agreement with them; they thought that the price of water which they asked for, it was worth that to them, and the town au-

thorities didn't think it was; we felt that the contract had been existing here for a long while, and with the increase in population, increase in their revenues, that we should get a lower price for the supply of water. They submitted figures to us which practically made the price the same as it previously was, because they included in that estimate a Hundred dollars each for sprinkling wagons, which made the contract pretty near the same as what the old one was.

Q. Then there were negotiations on—for how long a time did these negotiations extend?

A. Nearly two years.

By the Court:

Q. I will ask you here, how many sprinkling wagons do you have to have?

A. We use twenty I think.

Mr. McCarter We will give you the exact figures on that.

Q. Now, without going into the rediscussion of the Hicks case, I want to ask you one thing, whether or not there was or was not, satisfaction generally with the contract that was made and which was set aside by the Hicks proceedings?

Objected to as incompetent.

The Court: I think it is incompetent, but I shall admit it with that observation. Whether it is satisfactory or not may justify the Common Council, but it does not at all show what the people required was reasonable, and I suppose counsel may recollect, whether I expressed myself before or not. I have recently in writing, that on these questions it is a question of what is reasonable. It is a very broad question, Mr. McCarter, very broad

question indeed. You cannot apply the facts of one case to another. It may cost a great deal more to supply Long Branch than it does, for instance, Morristown, or it may cost a great deal loss to supply it satisfactorily; the conditions vary. The gentlemen who put their money to it are entitled simply to reasonable compensation from the town, and the town must pay a reasonable compensation; that is the trouble.

Mr. McCarter: I may say to the Court that my associate, Mr. Van Note, and I are approaching this controversy in an entire frank and candid way.

The Court: I think you are.

Mr. McCarter: The only object I had in the question I put was to show that there was objection to the contract. The contract was not merely objected to on technicality; it was founded upon an outburst of indignation; that was the idea.

The Court: I made the remark I did, because I thought the evidence was incompetent, and I gave the reasons; but it justified, undoubtedly justified the officers in refusing to affirm the contract; that may be quite a different thing.

A. It was generally considered as unsatisfactory.

Q. Did or did not the Company, the predecessor of the Tintern Manor, or that itself, ever make any less rates, any offer of less rates, than those that were finally obtained in the contract.

Objected to as incompetent.

The Court: I will admit it.

A. I don't quite understand that question.

By the Court:

Q. Did they ever make any better offer to you

in the way of negotiation? That is the question, isn't it?

Mr. McCarter: Yes, sir.

A. The old Company?

Q. Yes, or the Company with which the Tintern Manor was associated?

A. No; they never made any better offer.

Q. Did anybody, any substantial Water Company?

A. No; oh, yes; I don't know about the substantialability of any other Water Company; there was a better contract offered by another company.

Cross-examination by Mr. Corbin:

Q. You first said that the town entered into negotiations with the Water Company after September, 1901, when the old contract expired, but the town did go on using the water, didn't it?

A. Yes, sir.

Q. And has up to the present time?

A. Yes, sir.

Q. In about one hundred and forty-six plugs?

A. Yes, sir.

Q. And through seven engine houses?

A. Yes, sir.

Q. And through three troughs in the street?

The Court: Water troughs?

A. Yes, sir.

Q. And through twenty, more or less, sprinkling wagons in the summer?

Mr. McCarter: We will prove that by the exact number.

The Court: You say there were no negotiations entered into? I didn't quite get the force of that, Mr. Mayor.

Q. There was some kind of a contract hatched up by somebody?

A. What I meant by saying that, there were no negotiations completed; we did talk about it, but there was nothing—

By the Court:

Q. There was a contract signed by somebody, wasn't there?

A. There finally was one; yes, sir.

Q. When you speak of the Hicks contract you refer to that contract of November 24th, 1902, which was taken to the Supreme Court by Mr. Hicks?

A. Yes, sir.

Q. And was ultimately set aside by the Court of Appeals because the roll wasn't called?

Mr. McCarter: I don't think that is a fair question.

The Court: You want to identify it?

Q. You spoke of the Hicks contract; that is what you mean?

A. Yes, sir.

Mr. McCarter: He said "Hicks suit," not "Hicks contract."

Q. You say the Company at that time would only allow a certain size of supply pipes or taps. Aren't you mistaken?

The Court: That is when they started; when they first commenced to pipe the town in 1882 they only allowed a small pipe; he didn't know the size of it.

Q. Are you clear about that, there was ever a time when the Company limited the size of the taps?

A. I am telling you on general information,

what I have been told; I don't know from personal knowledge that that was their rule; I never asked them.

Q. Was the size of supply pipes ever limited, or attempted to be, as far as you know?

A. I only know on general information.

By the Court:

Q. There was kind of impression about it?

A. Yes, sir.

Q. How long has your service pipe been in at your house where you had the trouble?

A. Well, I built my house seven years ago, and there was a house on it before that, and I am not sure at the present time whether that same supply pipe is serving me of that house that was erected there before.

Q. It may be the old supply pipe?

A. It may be; yes, sir.

Q. You said a better contract was offered by another company. You refer to the Monmouth Water Company incident, don't you?

A. Yes, sir.

Q. But after you had awarded that better contract to the Monmouth Company, the Company fell down and didn't carry out the terms, didn't it?

A. I don't know about that.

Q. They didn't fulfill them. Your council, of which you were a member, rescinded the resolution, didn't it?

A. Yes.

Q. And then this contrat of November, 1902, was attempted to be made?

A. Yes, sir.

Redirect-examination:

Q. In you negotiations, you personally ne-

gotiated with Senator Blodgett, President of the Company, did you not?

A. Yes, sir.

Q. What progress could you make with him in regard to the question of rates to private consumers?

A. I couldn't make any.

Q. What was his view about it as expressed?

A. The view as expressed to me was that they had offered the best possible figure they could offer to the town for their supplyl of water; said they couldn't do any better.

Q. What about the private consumers?

A. Private consumers he said he didn't think the Council had any jurisdiction over whatever; he said the Water Company, that was absolutely under their control.

By Mr. Corbin:

Q. How long ago was that, doctor?

A. That was previous to the Hicks suit, I think possibly three or four months it may have been, that I finally went to see him to see if there was any possible way at all of arbitrating or making a contract so as to report to the Council, but he said he didn't feel they could possibly do any better than what terms had been submitted.

WELLINGTON LA MONTE, sworn.

Direct-examination by Mr. McCarter:

Q. What position do you hold in the Tintern Manor Water Company?

A. I am secretary; superintendent.

Q. Do you have custody as such of the books and records of the old Long Branch Water Supply Company which is now merged into the Tintern Manor Water Company?

A. I have some of them.

Q. Where are the others?

A. There are some in Scranton in the office of the Treasurer, and the Long Branch Water Supply Company, when the sold out they reserved the right to collect their outstanding bills after we bought them out, and of course I don't know what records the former superintendent has.

Q. Well, referring now to the old Long Branch Water Supply Company, from what shed did it obtain its supply?

A. Well, from the stream coming in at the West End known as Cranberry Brook, or the Well Pond Brook.

Q. How was that collected?

A. It was small reservoirs there at the west end and pumped from a well right at the pumping station.

Q. And distributed through the mains of Long Branch, Monmouth Beach and Seabright to Seabright?

A. Yes, sir.

Q. Can you tell us how much increase in mains, if any, has been made in Long Branch proper, or in Seabright or Monmouth Beach, since the consolidation?

Mr. Corbin: That was July, 1901.

Q. July, 1901?

A. Yes; there have been quite a few mains laid in that territory.

Q. Just describe what those mains are, where they are located and what their size is, those increased mains?

A. Well, we have laid several thousand feet of eight inch main on Westwood Avenue, Long Branch.

By the Court:

Q. Right in the heart of the town, eh?

A. Right there (indicating on the map) Westwood Avenue, Brighton Avenue, and some on Norwood Avenue.

By the Court:

Q. There were mains there before, were there?

A. No.

By the Court:

Q. Then on Brighton Avenue is an addition?

A. Yes, sir.

By the Court:

Q. Running through—and Westwood Avenue is also an addition?

A. Also an addition; yes, sir.

By the Court:

Q. Westwood Avenue taps a main, an eight inch main? Well, I will take Brighton Avenue.

A. Westwood Avenue through here (indicating) we laid; we laid Brighton Avenue from here (indicating) through, then we connected a piece on Norwood from here (indicating) through.

By the Court:

Q. You run through to Norwood?

A. To Norwood; yes, sir.

By the Court:

Q. That was intended to increase the pressure at West End?

A. And supply this territory that was building up.

Q. Can't you, by scaling the map, tell us exactly

the length of the new mains that have been laid to which you have just referred?

A. I have schedule of all the pipes in Long Branch.

By the Court:

Q. No, but the new ones you have laid, how much increase; what is the scale of this map?

A. Two thousand to the inch.

By the Court:

Q. Norwood Avenue would be about three thousand feet?

A. We laid about three thousand feet on Norwood Avenue, about five thousand on Westwood Avenue, and I think about twenty-five hundred on Brighton.

By the Court:

Q. That would be nearly two miles, or a mile and a half?

A. Yes, sir.

By the Court:

Q. And they were all what?

A. Eight inch mains; then we laid twelve hundred feet on Belmont Avenue.

By Mr. Corbin:

Q. What size?

A. Six inch.

By the Court:

Q. Crossing over?

A. Yes, sir.

By the Court:

Q. That is a concrete iron?

A. Yes; we laid about five hundred feet on Garfield Avenue, six inch.

By the Court:

Q. That is concrete iron too?

A. We have laid about a thousand feet of six inch pipe on Pavilion Avenue.

By the Court:

Q. Running clear through to the ocean?

A. Yes, sir. Then we laid, I should say, probably two thousand feet on Simpson Street.

By the Court:

Q. Of what size?

A. Of eight inch; then we laid about eight or ten hundred feet six inch in that same territory.

Q. On what street?

A. In Salsbury Court I think is the name of it.

The Court: Blocking in and blocking out, Mr. McCarter.

A. Then we have laid a great deal of pipe in the territory just south of Elberon, that was included in our old Long Branch franchise territory and partially occupied by the old Long Branch Company; we have laid probably twenty thousand feet six inch pipe down there.

By the Court:

Q. Twenty thousand?

A. Probably; yes, sir.

Q. Where is that now?

A. In South Elberon; we piped Jerome Avenue, Pearl Street and Parker Avenue, Runyon Avenue, and I believe what is called Brighton Avenue.

By the Court:

Q. Now, the avenue running parallel to the ocean at Ocean Beach is piped with eight inch, is it?

A. Yes, sir; and then we also laid about five

thousand eight inch on Ocean Avenue in South Elberon.

By the Court:

Q. That is this running west of Long Branch down to Elberon. What is that?

A. Eight inch.

By the Court:

Q. What street is that?

A. Norwood Avenue.

By the Court:

Q. Norwood Avenue, on the west line of Long Branch City.

A. Then we have laid twenty-five hundred feet on Cedar Avenue, running from Norwood Avenue to West Long Branch.

By the Court:

Q. Along the edge of Norwood Park?

A. We also laid about three hundred feet on Sea View Avenue; then we have laid about twenty-eight hundred feet on Branchport Avenue and West Street in Monmouth Beach.

By the Court:

Q. That is outside of Long Branch, Branchport?

A. Yes, sir.

Q. I am asking you about the increase in the old territory?

A. That is just what I am giving you.

The Court: He means the increase in the old territory within the limits of Long Branch.

Q. Long Branch, Monmouth Beach and Seabright?

A. That is what I am giving you, and Ocean Township you mean.

Q. Did I say so?

The Court: He didn't include in his question the part marked here Branchport, nor did he include in his question the part marked here as South Elberon.

Q. I was trying to find out how much the demands of Long Branch proper, which were taken care of by the old Company, have been increased since the new Company.

Mr Corbin: You included Seabright and Monmouth Beach in your question.

Q. South Elberon is in an entirely new territory, isn't it?

A. It was partially occupied by the old Long Branch Water Company.

Q. South Elberon is an entirely new territory, isn't it?

A. No, sir.

Q. Did your pipe extend below the road leading down to the station then?

A. It did.

Q. How far?

A. I think at least two thousand feet.

Q. To the cottage?

A. It went down beyond the Horace White cottage and beyond Jerome Avenue.

Q. Now, since then the locality known as South Elberon has entirely sprung up and grown up, has it not?

A. Yes, sir.

Q. Roads opened?

A. Yes, sir.

Q. Developed?

A. Yes, sir.

Q. All those cross streets you have mentioned have been opened since the old regime?

A. Part of them; part of them were old roads.

Q. Practically South Elberon is an entirely new territory, south of the southern end of the old Elberon settlement?

A. Yes, sir.

Q. The Horace White house was the extreme south house, wasn't it?

A. I believe it was; yes, sir.

Q. And there was a couple of miles or more perfectly vacant territory except one or two old fish houses?

A. Yes, sir.

Q. That has all grown up since then?

A. Yes, sir.

Q. Now, we will go over to the Westwood Avenue and Brighton Avenue district.

The Court: That is in Long Branch proper?

Mr. McCarter: Yes, sir; that is in Long Branch proper?

Q. That has all been opened up since the Hoey property was sold, has it not?

A. I think so; that was opened before I came here.

Q. And that is a comparatively new and somewhat sparsely settled district?

A. Yes, sir.

Q. Nothing like in population or thickness of houses like the main Long Branch?

A. No, the lots are much larger, and nicer houses.

By the Court:

Q. Fewer houses, larger houses, villas?

A. Yes, sir.

Q. Does the map before you show the size of each one of the pipes through the several streets?

A. Yes; intended to.

Q. How many fire plugs or hydrants were there

in Long Branch under the old Company previous to July, 1901?

A. Well, now, I think it was about one hundred and thirty-five, one hundred and thirty to one hundred and thirty-five.

Q. How many are there now?

A. One hundred and forty- six.

By the Court:

Q. I see at old Takanassee Lake you had a standpipe?

A. Yes, sir.

By the Court:

Q. What was the size of that standpipe?

A. Eighteen feet in diameter, I think, and eighty feet high.

By the Court:

Q. Is that still in use, or is it entirely abandoned?

A. It is entirely abandoned.

By the Court:

Q. You couldn't start it if you wanted to?

A. Well, no; our pressure is too great.

By the Court:

Q. Your pressure would run over the top of that—two hundred feet, is it?

A. Yes, sir.

By the Court:

Q. What does the pressure gauge, should be your pressure at the pumping station now?

A. We carry full sixty pounds.

By the Court:

Q. How many feet does that raise the water?

A. That would raise it a little more than two feet to a pound, about 130 or 140 feet.

By the Court:

Q. Well, that isn't 200; that wouldn't run over a 200 foot standpipe.

Mr. Corbin: Eighty feet is the standpipe?

A. The old one is eighty feet.

Q. What has become of the pumping plant at Takanassee Lake?

A. There has been one pump removed; two pumps there.

Q. Are they in operation?

A. Yes, sir.

By the Court:

Q. Pump right into the system from there?

A. Yes, sir.

By the Court:

Q. You haven't given it up then?

A. No.

By the Court:

Q. Your supply is at each end of the system then?

A. Yes, sir.

By the Court:

Q. Takanassee is at the south end, and where the Swimming River comes in is what may be said to be the north end?

A. Yes, sir.

By the Court:

Q. Do you keep a man pumping there, down there at Takanassee?

A. Yes, sir; day and night, every minute.

By the Court:

Q. And steam is kept up?

A. Yes, sir.

By the Court:

Q. Do you mean to say that you have such a pumping arrangement there that whenever there is an increased pressure, whenever there is an increased draft the pressure falls off you can put that pressure right up by putting on more steam?

A. It works automatically.

Q. Explain how that is?

A. It is a Holly pump our principal pump is Holly pump six million gallons capacity and it is adjusted automatically so the minute the pipes are opened that pump starts right off and then the minute the draft ceases it slows right down.

By the Court:

Q. Yes; but you have got to keep your steam up?

A. Yes; we have to keep our steam up constantly.

By the Court:

Q. The larger the supply the larger the consumption?

A. Yes, sir.

By the Court:

Q. The more fuel you have to burn to keep that steam up?

A. Yes, sir.

By the Court:

Q. That is what I want to learn about. The other is very simple.

A. Yes sir; in case of fire the fireman has to get right in and fire; of course if we have a break of course it will hurry him.

Q. Now, in the meantime you have gone into the Deal district, have you not, which is still below South Elberon?

A. Yes, sir.

Q. And extended your pipes down there?
A. Yes, sir; we connected up.
Q. Connected up down there?
A. Yes.
Q. How much have you added, in miles, to your pipes in the Deal district?
A. You mean—let me understand you.

The Court: How much mileage have you added?

Q. Either in your own pipes or those of the Deal Company which you bought?
A. Oh, we have added, I think, about ten miles that way, also of this we bought.

By the Court:

Q. You bought out a company?
A. Yes, sir; Deal Water Company.
Q. That was one of the consolidated companies?
A. Yes, sir.

By the Court:

Q. Did the Deal Water Company have a standpipe arrangement there too?
A. Yes, sir.

By the Court:

Q. Do you keep that still going?
A. We have to run it in the summer.
Q. In the winter what is done with that?
A. It is shut down.
Q. Where do they pump from, wells?
A. From wells; yes, sir.
Q. Right in the ground there?
A. Yes. sir.

By the Court:

Q. How deep?
A. One is about 450 feet, the other about 600 feet deep.

By the Court:

Q. The water rises to the surface?

A. Yes, sir.

By the Court:

Q. Professor Cook's underlying slant of water-bearing gravel?

A. Yes, sir.

By the Court:

Q. The same as they use down to Atlantic City?

A. Yes, and Asbury Park.

By the Court:

Q. You say the reason you have to use it in summer is, I suppose, that you haven't got water enough in Swimming River because the consumption is so great?

A. That is it, and the mains in the Swimming River don't supply the main arteries of the system.

Q. How many hydrants are down there at Deal?

A. Thirty-eight.

By the Court:

Q. And how many in the intermediate space?

A. That includes all the space south of the Long Branch line.

By the Court:

Q. Got thirty-eight hydrants down there?

A. Yes, sir.

Q. South Elberon that we have spoken of is in the Borough of Deal, is it not?

A. Yes, sir.

Q. There have been thirty-eight hydrants put in all south of the old line?

A. With those we bought; yes, sir.

Q. Now, go on north. Has there been any enlargement either in Monmouth Beach or Seabright?

A. Yes, sir.

Q. How much?

A. Well, now, do you call this territory north of Long Branch Monmouth Beach in Ocean Township? Now, for instance, we laid a good many hundred feet of pipe on this street right in front of us here (indicating), going out into Ocean Township; also Branchport goes out into Ocean Township, and Sixth Avenue goes out into Ocean Township.

By the Court:

Q. Better confine yourself to the region properly speaking according to his question, that is that narrow strip?

A. Monmouth Beach is part of Ocean Township.

Q. Monmouth Beach is part of America?

A. Yes, sir, but I don't know just what the limits of Monmouth Beach are.

By the Court:

Q. You can't distinguish then in your mind?

A. No; I can't tell you.

Q. You don't know whether Monmouth Beach extends back here or not?

Mr. Corbin: It is all marked here, if you will distinguish the line.

The Court: I will say this, on this map that is in common use there is nothing to distinguish between Monmouth Beach, Galilea and Seabright.

Mr. Corbin: Seabright is a borough.

The Court: Yes, Galilea, Monmouth Beach and Pleasure Bay region, what used to be called Pleasure Bay, which is here called Ocean Township, there is nothing to distinguish it here.

Q. Now, the mains that went down north from Long Branch of the old Long Branch Water Supply Company went down Ocean Avenue, didn't they, north?

A. Yes, sir.

Q. And they came through what is known as Atlanticville, or North Long Branch?

A. Yes, sir.

Q. And then they went down through Monmouth Beach and along Ocean Avenue?

A. Yes, sir.

Q. Right down by the cottages there—you remember the old line of cottages, Judge Depue's and the rest?

A. Yes, sir.

Q. Then they went to Seabright?

A. Yes, sir.

Q. What addition has been made to that?

A. The only addition, I think of,is about fourteen hundred feet right in near that Club House circle.

Q. In the Club House circle?

A. Yes, sir.

The Court: Where is that?

Q. Show that to the Vice-Chancellor.

A. (Witness indicated to the Court on the map.)

By the Court:

Q. Oh, yes, but in order to supply that region you run a pipe way around on the south side of the Nevisink River and have to cross the Shrewsbury Inlet into Seabright?

A. Yes, sir.

By the Court:

Q. What was the size of that pipe running up there, what was the size of the old pipe?

A. An eight and a six, eight part way, and then one of them was reduced to a six when it went north into Seabright.

By the Court:

Q. You didn't find that sufficient?

A. No; we had very poor pressure there at Seabright.

Q. How about Monmouth Beach?

A. Well, of course, it is better.

By the Court:

Q. It was better under the old system?

A. Yes, sir.

The Court: Because it was nearer to the head, and less friction.

Q. Your statement is that at Seabright the pressure was unsatisfactory under the old system?

A. Yes, sir.

Q. Now, what is the length, the distance from the Swimming River, of your main pipe to Long Branch?

A. I have those figures in the schedule.

The Court: Get your schedule and take it on the stand with you.

(Witness referring to paper handed him.)

Mr. Corbin: Any particular point in Long Branch?

Mr. McCarter: To adjoin the old system.

A. About from the pumping station?

Mr. Corbin: From the reservoir, all the way from the reservoir?

A. 42,675 feet.

By the Court:

Q. A little short of eight miles?

A. Yes, sir.

Q. Now, that is a thirty-six inch pipe?

A. Yes, sir, all except a little strip about seven hundred feet.

Q. Is that altogether on the highways, or does it go across some private property?

A. Through some private property.

Q. It is not a direct line from one to the other, is it?

A. Oh, no; no.

Q. Now, how long is the Eatontown branch—take the whole of the Eatontown branch, with all its spurs?

A. Approximately 14,700 feet.

Q. You haven't these figures exact anywhere?

A. No.

The Court: He is taking them by a rough scale from the map.

Q. Where do you go off from your thirty-six inch main to tap that beautiful territory known as Fairhaven, &c.?

A. At Little Silver.

Q. Well, you don't go the way a bird flies there, do you?

A. No, sir.

Q. What was the object of that circuitous route?

A. I didn't have anything to do with laying out the system, but I suppose it was to get along the shore of the Nevisink River where the most of the population lives, into the towns of Fairhaven and Oceanic, and the shore was pretty well built up.

Q. Were you here when the Company proposed to put a standpipe on the top of Lovett's Hill?

A. Yes, sir.

Q. Well, now, in the cost of construction which your Company has, and which I suppose you will give us before you get through, you include, do you not the money that was expended for that and abandoned?

A. Yes, sir.

Q. You did intend then at one time to have a

standpipe at a point somewhere near where my lead pencil points, near Little Silver?

A. Yes, sir.

Q. What was the design and scheme of that?

A. Well, the Company bought about nine acres of land on top of Lovett's Hill on the side expecting to put a standpipe up there a hundred feet high.

Q. You didn't do that?

A. We paid the money for the land, and it was afterwards, four acres of it on top of the hill taken away from us by the Court of Chancery.

Q. (By the Court) That is, your title wasn't good?

A. No.

Q. What is the size of the pipe that goes around through, touching near Red Bank and Fairhaven and Little Silver?

A. 18 inches.

Q. Do you know the length of that Little Silver tap down to Seabright?

A. I think it is 36,354 feet.

The Court: About seven miles.

Q. Now, how many taps or consumers have you on the Eatontown and what we will call the Fairhaven branches?

A. Well, now, that I couldn't tell you exactly.

By the Court:

Q. Haven't got them figured up, eh?

A. No; I have figured for the case the total number of taps, and total number of taps in the Long Branch Commission, but I haven't them separated.

Mr. Corbin: We have everything in Long Branch and everything outside of it. We can give you that.

Q. There are very few in the Eatontown tap, are there not?

A. Yes, sir.

Q. And there are very few in the other tap, we will call that the Fairhaven going around to Seabright?

A. Yes; I suppose we put in a dozen taps in that territory within the last ten days.

By the Court:

How many altogether?

A. I suppose perhaps forty or fifty would cover it.

Q. In both? A. Yes, sir; on that new system.

By Mr. Corbin:

Q. That is Fairhaven system? A. Yes, sir.

Q. And how many in Eatontown would cover it?

A. Well, I suppose about only three or four there.

Q. Have you in your figures the population of your territory, exclusive of Long Branch?

A. No; not including the Shrewsbury-Eatontown township, I could not

By the Court:

Q. You have what is south and north of Long Branch along the shore, I suppose?

A. Yes, sir.

Q. Well, what have you? What figures have you got?

A. I have the population of Ocean Township.

Q. At what census?

The Court: That runs up to—

Mr. Corbin: Takes in the whole of Ocean Township.

The Court: That don't take in Seabright, does it?

Mr. Corbin: Yes.

The Court: Takes in Seabright, Lohmore, Galilea, and all that country?

A. Yes, sir.

Q. Now, give us the population of Ocean Township since 1880 and including 1900?

A. In 1880 it was in 6027; in 1885, 7540; in 1890, 10,209; in 1895, 10,933, and in 1900, including Seabright borough and Deal borough, 14,391.

By the Court:

Q. Including Long Branch?

A. Including Long Branch; yes, sir.

By the Court:

Q. That is in 1900?

A. In 1900.

By the Court:

Q. Now, then, do you suppose as a matter of public information that included only the winter population or the summer?

A. Winter population.

By the Court:

Q. Fourteen thousand?

A. Yes, sir.

Q. Give the component parts of that fourteen thousand as you sub-divided them there?

A. In Ocean Township, 4,251; Long Branch Commission, 8,872; in Seabright Borough, 1,198, and in Deal Borough, 70.

Q. Now, give us the population of Long Branch proper during the same time?

A. In 1880, 3,833; in 1885, 5,140; in 1890, 7,231; in 1895, 7,333; in 1900, 8,872.

The Court: I suppose, Mr. McCarter, you mean to ask him by and by what their rec-

ords show the consumption of water was at different seasons of the year?

Mr. McCarter: Yes, sir.

Q. Now, can you from the records in your possession or under your control—and they are all with the other side, there are none of them with us—give us the consumption of water in Long Branch, Seabright,—or rather in the territory supplied by the Long Branch Water Supply Company, normal, and in summer?

A. Yes, sir. Now, I will tell you, these are taken from the number of strokes of the pump; we have no metres supplying it; I have a schedule here the approximate number of gallons of water pumped, the amount being taken from the number of strokes of the pump, and does not include the water pumped at the Deal Station; that is pump that isn't marked. I have that for the year 1891, each month during the year; the average per day during each one of those months, and the largest amount pumped in one day.

By the Court:

Q. Take the average per day?

A. January, five hundred thousand gallons—I am not putting in the small figures; February, 532,000; March, 497,000; April, 632,000; May, 942,000; June, 1,361,000; July, 1,659,000, August, 1,610,000; September, 1,271,000; October, 672,000; November, 515,000, and December, 673,000 each.

The Court: Now, I should say as a juryman that that is a very credible story, very credible, I say; the variations of the months quite credible.

A. Then we go over ten years.

By the Court:

Q. To 1901?

A. Now, January, 1,297,000.

Q. Now, that is over twice what it was ten years ago.

A. February, 1,469,000; March, 1,301,000; April, 1,195,000; May, 1,503,000; June, 2,674,000; July, 3,177,000; August, 3,378,000; September, 2,766,000; October, 1,527,000; November, 1,298,000, and December, 1,387,000; that is 1901.

By the Court:

Q. At the bottom of those columns you meant to put the average; you didn't put it there?

A. No.

By the Court:

Q. 905,000 a month in 1891, and in 1901, 1,913,000, a little over twice as much?

A. Yes, sir.

Mr. Corbin: That is the daily average for the month?

The Court: Daily average the year around.

By the Court:

Q. We come now to 1902, and the variations are about the same, but the total average is 2,093,000, that is about ten per cent. more, not quite ten per cent. more. And 1903 the increase is greater, I think that the winter increase is greater in the last years. The difference, Mr. McCarter, in 1902 and 1903 shows the comparative winter consumption is increasing and comparative summer consumption is decreasing. That is so, isn't it.

A. Yes, sir.

By the Court:

Q. The average for the year 1903, is 2,737,000 gallons, but the difference between the winter and summer is much less than it was.

A. You notice the pumpage was three times in 1903 what it was in 1901, the total pumpage.

The Court: Just three times in three years.

Q. You haven't given us anything earlier than 1891?

A. No sir.

Q. Haven't you any record of anything to show what your water consumption was previous to 1891?

A. Yes, sir, I have, but I only took this because that was the year the ten-year contract was made, I just put that in, but I can give you any year you want.

Q. I want to know what the consumption of water, average consumption per year in gallons was from the formation of the old Company to the consolidation.

Mr. Corbin: Pretty big question, Mr. McCarter.

A. Now, I tell you I can get that; I think I have it; of course if I have it, it is very old records in the office; I will hunt that up.

Mr. McCarter: I won't take time now.

The Court: Do you think it is important?

Mr. McCarter: I want to show how much this consumption has increased since 1882.

Mr. Corbin: I ought to say to the Court, the witness took such years as I told him to take.

The Court: If he had been requested by Mr. McCarter to do this and had not done it

it would be a different thing. I do not understand he has failed to do anything you requested him?

Mr. McCarter: Not at all. I haven't the slightest criticism.

The Court: This has been taken, of course, from what is called the registered capacity of the pump. Everybody knows, Mr. McCarter, and I am going to take it for granted unless I am corrected by some engineer, that the pump don't deliver that much water; there is a slip and slide, and it don't always make its full stroke, unless it is a remarkable pump. Is it a pump without a crank, is it an alterating pump?

A. The Holly pump is a fly wheel pump.

The Court: When you use the Worthington, you never know you get the full stroke. If you use a fly wheel pump you get the stroke every time; but there is a slip, a certain amount of slip in the valves, and it is one of those cases where the promise don't always carry out the performance?

A. The actual consumption is less. In July, 1903, the difference between the average pumpage and the greatest amount pumped in one day was over a million two hundred thousand gallons.

Q. Now, I want you to go back to the old times and tell us, if you can, from your records, the cost of the Long Branch Water Supply Company's plant.

The Court: The old one?

Mr. McCarter: Yes.

A. I have never seen any records.

Q. How many taps did you have?

A. Well, I have given this Schedule B, I have

given this for the last three years, because there is no record whatever going back showing that.

Q. Well, how did the Tintern Manor Water Company buy out the Long Branch Water Company if they didn't know anything about them at all? Was there nothing to show what they were doing?

Mr. Corbin: Didn't buy them out; consolidated.

Mr. McCarter: I have used the language of the witness; he said, "buy out."

Q. There is nothing among your archives to show what business you were doing, what your net receipts were, what your profits were?

A. Oh, yes.

Q. But nothing to show how many taps you had?

A. No.

Q. What was the total income of the Long Branch Water Supply Company, gross and net, from the time of the earliest records down to the present time, down to the time of the consolidation?

A. Now, I can give that to you if you will give me five minutes to send and get it.

Mr. McCarter: Make a memorandum of that, too; we will not stop now.

Q. Can you give us the total income?

A. I can send for that and have it here in five minutes.

Q. Total income that the Company would receive under the present schedule of rates from private consumers in the same territory that the old Long Branch Water Supply Company used to accommodate?

A. For the present year?

Q. Yes, under the present—

A. Well, for the fiscal year beginning June 1st, 1903, to June 1st, 1904, the revenue in the Long Branch Commission, outside of the bill for municipal purposes, is $44,276.02.

Q. Now, how about Seabright and Monmouth Beach, and all that?

A. The total revenue in all of the territory is $69,848.04.

By the Court:

Q. What is your fiscal year?

A. June first of one year to June first of the next year.

By the Court:

Q. Now, then, I am going to ask you that question over again to see if I understand it. The revenue from the Long Branch Commission from taps from private takers was $44,276.02?

A. Yes, sir.

By Mr. Corbin:

Q. Including railroads?

A. Yes, sir.

By Mr. Corbin:

Q. Everything except public uses?

A. Yes, sir.

Q. Are all the bills paid? I want to know whether all the bills are paid, or whether this is all the revenue you will get from the fiscal year?

A. I have figured the unpaid bills.

By the Court:

Q. You included in unpaid bills?

A. Yes, sir.

By the Court:

Q. Then from that you must take the average loss each year?

A. Well, of course, I will tell you how I did that; I took the total charges on the books for this fiscal year. Of course while we will probably meet

some losses, why, we may put on a few taps between this and the first of June that will give us a little revenue, and I thought probably one would offset the other.

By the Court:

Q. That isn't the right way. The right way is to find out how much you charge each year, and then put in another year how much you collect.

A. I call the year 1903, from June 1st, 1903, to June 1st, 1904, the fiscal year.

By the Court:

Q. That is estimated then?

A. Well, yes.

By the Court:

Q. Now, this memorandum from which you are swearing, and of which I have got a copy, the year 1901—

A. Is from June 1st, 1901 to June 1st, 1902.

By the Court:

Q. And the year 1903, is partly estimated?

A. Yes, sir.

By the Court:

Q. Now, then is that actual receipts now? I will go back to the year 1901, total number of taps?

A. Yes, sir; that was the actual revenue derived during that fiscal year.

By the Court:

Q. All the way down to the present year?

A. Yes, sir.

By the Court:

Q. And that is estimated?

A. Yes, sir; that is estimated, the two previous

ones, 1901 and 1902, were actually derived during that fiscal year, no matter when collected.

Q. Now, can you give us the number of taps in Deal?

A. No, I cannot.

Q. Can you give us the number of taps in the territory which we will call Seabright and Monmouth Beach?

A. No; I haven't it now.

Q. Will you try to ascertain that? Can't you tell us how many taps you got in the Deal district?

A. No; I can't tell you.

Q. Have you any record of it?

A. No; I have to go through the books and take each individual account to separate these out, and it took quite a long time.

Q. Well, excluding Deal, Seabright and Monmouth Beach, there is almost nothing in the way of taps, comparatively speaking, is there?

The Court: He has already shown that—very little.

Q. What revenue did the Long Branch Water Supply Company derive for the five years of its existence previous to its consolidation?

The Court: What is the date of the consolidation?

Mr. Corbin: July 2, 1901.

A. Well, I can give you that. You mean the revenue of the Long Branch Water Supply Company?

Q. Yes. For five years?

A. Previous?

Q. I also want, if you will, the expense of operation within the same period?

A. I can give you that in five minutes if you will let me send and get it.

The Court: I think it will be well for you

to put in writing things you want, because the witness is trying to recollect all this.

Mr. McCarter: We understood the witness understood it.

A. We submitted this schedule to Mr. Van Note last night, so that he knew it.

Mr. McCarter: What I want is this: Cost of operation of the old Long Branch Water Supply Company for the ten years previous to its consolidation with the Tintern Manor Water Company—the revenue, gross revenue; the amount of its capital stock, the amount of dividends it paid, and the amount of surplus during each of those years from 1880 to 1891—take fifteen years previous to the consolidation.

A. I think I can give you that. I give it to you back in 1891, the earnings, in Schedule C.

Q. Will you please explain to the Vice-Chancellor the location of Allenhurst?

A. Allenhurst lies directly south of Deal Borough and was formerly in Ocean Township, when this Company was incorporated.

By the Court:

Q. You don't supply it at all?

A. No.

Q. They have their own water supply there?

A. Yes, sir.

Q. That is still in Ocean Township, is it not?

A. Yes; separate municipality, taken out of Ocean Township, and I believe it is all surrounded by the township.

By Mr. Corbin:

Q. Borough, is it?

A. Yes, sir.

Witness temporarily withdrawn to get the information asked for.

GEORGE G. TITUS, sworn.

Direct-examination by Mr. McCarter:

Q. Where do you live?
A. Belmar.
Q. And that is where?
A. About eight or nine miles below here.
Q. Sea shore resort?
A. Yes.

By the Court:

Q. Whereabouts?
A. South of Asbury Park.

Mr. McCarter: It is the old Ocean Beach track they had so much litigation about.

Q. How large a permanent population have you?
A. I think, the last census was in the neighborhood of nine hundred in the winter.
Q. And have you any conception or estimate in your mind of your summer population? A. No; not sure; I imagine ten thousand, something of that sort.
Q. Is there a water supply down there?
A. Yes, sir.
Q. What have you, if anything, to do with the water works?
A. I am superintendent of it.
Q. Have you a schedule of rates?
A. Yes, sir, I brought them.
Q. How do you get your water?
A. From artesian wells.
Q. Will you produce the schedule? Is this the copy of the ordinance fixing it?
A. Yes, sir; that is the copy.

By the Court:

Q. Is the supply owned by the town?
A. Yes, sir.

Q. Have you any little schedule like this so that it is tabulated?

A. Well, we have one, but that isn't in existence; that is an old ordinance.

Q. It has been changed?

A. Yes, sir.

Q. The municipality owns the works there?

A. Yes, sir.

Q. You have a standpipe?

A. We have a tank on; that is the same as a standpipe; yes, sir.

Q. You pump to this tank?

A. Pump to the tank.

By the Court:

Q. What elevation above, at the level, is your tank?

A. It is eighty feet in the air.

By Mr. Corbin:

Q. The top is eighty feet?

A. The bottom of the tank.

Ordinance, showing the rates, offered in evidence and marked Exhibit C2.

Q. Does this include all the rates?

A. Yes, sir.

Q. Everything is here?

A. Yes, sir; we only have the one rate.

By the Court:

Q. Where is the rate found here?

A. Sections 14 and 15.

Q. Just tell us what the rate is, briefly? You supply by meter do you?

A. Yes, sir.

Q. How long have you done that?

A. Just the past year.

By the Court:

Q. You have a minimum of $7.50?
A. Yes, sir.

The Court: You put a lien on the property, you think you do, for it.

Q. Previous to the adoption of the meter plan did you have a schedule of rates?
A. Yes, sir.
Q. Will you look at that and see if it shows what it was?
A. That is one of them; yes, sir.
Q. Is this the last one previous—
A. Yes; it is the one we work under.

Mr. McCarter: I am going to offer in evidence this schedule of rates that appertained before the adoption of the meter rates.

By the Court:

Q. These are rates by the faucet?
A. Yes, regulated by the number of rooms.

Marked Exhibit C3.

By the Court:

Q. How near by is your pumping station?
A. It is right in the borough.

By the Court:

Q. You don't have to bring your water any great distance?
A. No; we pump it from wells six hundred feet deep.

By the Court:

Q. The water rises to the surface; you can't pump it but twenty-five feet— you don't sink your pumps below the level at all?
A. No.

By the Court:

Q. The water rises then?

A. Yes, sir.

By the Court:

Q. I understand this is substantially like Asbury Park and Ocean Grove supply?

A. Very near the same, I guess.

By the Court:

Q. You drove a well down?

A. Yes; we have five wells.

By the Court:

Q. What is your total income, about?

A. I don't just remember; I think in the neighborhood of Seven thousand dollars.

By the Court:

Q. What did your work cost you?

A. Thirty-six thousand dollars.

By the Court:

Q. I will ask this gentleman another question, subject to your objection, just for general information—you are next below Ocean Grove?

A. No.

By the Court:

Q. How far below Ocean Grove are you?

A. Two miles south; Shark River partly surrounds Belmar.

By the Court:

Q. You are immediately south of Shark River?

A. Yes, sir.

By the Court:

Q. Has it been discovered that the more wells

that are being sunk into that water-bearing gravel the less water there is, is there any failure of water? Didn't they have trouble at Ocean Grove and Asbury Park?

A. I don't know about that; I haven't heard of it.

Q. Now, how old is the water supply company down at Belmar?

A. About eight years, I think.

Q. After the thing got well under way and your rates were established what have you to say as to whether the rates that were established down to the change to the meter system made the concern pay?

Mr. Corbin: I object to that. We ought to see the figures; we can judge whether it paid if we know the figures.

By the Court:

Q. It was always owned by the City, wasn't it?

A. Yes, sir; put in by the City.

By the Court:

Q. And they kept an account of receipts and expenses, the cost of running it, and receipts?

A. Yes, sir.

By the Court:

Q. At these rates by the tap, $7.50 minimum, and then you run up with extras on it?

A. Yes, sir.

By the Court:

Q. Well did it pay expenses and interest on the cost, or not?

A. Just about paid running expenses, and does yet.

By the Court:

Q. And did not pay interest on the cost?

A. Yes, paid the interest on the bonds.

Q. How about the sinking fund for the redemption of the bonds? Do you know anything about that?

A. There has no sinking fund been created that way.

By the Court:

Q. It was built on bonds then?

A. Yes, sir.

By the Court:

Q. And how much bonds were issued?

A. I think thirty-six thousand.

By the Court:

Q. Since you put in this meter system—when was that?

A. Last year was our first.

By the Court:

Q. You can't tell about it yet?

A. No.

By the Court:

Q. Can't tell whether you are going to come out better or not?

A. We run it one year; we come out about square; of course, cut the revenue down, saving in it.

By the Court:

Q. Didn't you have to pump so much water?

A. No.

Q. About as broad as it is long?

A. Yes, sir.

Cross-examination by Mr. Corbin:

Q. You issued $36,000 bonds in the first place, and there are still $36,000 bonds out?

A. I don't think any of the bonds have been paid off yet.

Q. What interest do they bear?

A. Five per cent., I think.

Q. You have some hotels at Belmar?

A. Quite a few.

Q. They have always paid you by the meter rate?

A. Yes, sir.

Q. And that is the principal source of your incomes isn't it,—they pay you most of this $7,000 you get in, don't they?

A. No; I don't think so.

Q. Don't you get more than half of all your revenue from those hotels?

A. Oh, no.

Q. What do you get it from?

A. Different consumers; private families.

Q. Do you know about what an ordinary house pays down there, about what it figures up to?

A. They run about $7.50; some will run over.

Q. Your minimum is $7.50, that is the lowest you charge anybody?

A. Yes, sir.

Q. It is a pretty small cottage that will pay that?

A. No; a great many of them don't run over it.

By the Court:

Q. Good many complain of the little $7.50, could get along with less if you didn't have that limit, couldn't they?

A. Yes, sir.

Q. How many miles of mains have you got?

A. That I don't know.

Q. Your pump is right there in the town.

A. Yes, sir.

Q. No long main to fetch the water?
A. No.
Q. What capacity?
A. One is a thirty-gallon pump; the other ten.
Q. Per minute, you think?
A. To the stroke.
Q. What are they—Worthington?
A. One is Worthington, and the other is Davidson.

FRANK E. PRICE, sworn.

Direct-Examination by Mr. McCarter:

Q. Where do you live?
A. Atlantic Highlands.
Q. And what position do you have there?
A. Superintendent of the Water Works.
Q. Who owns the water works in Atlantic Highlands?
A. The Town.
Q. Will you point out on the map to the Vice Chancellor where Atlantic Highlands is?

The Court: I have it here.

Q. How long has the supply been there?
A. Twelve years.
Q. And constantly maintained by the town?
A. Yes, sir.
Q. How many miles of pipe have you got?
A. Well, we have about nine miles.
Q. And where do you get your supply?
A. Artesian wells.
Q. Where are they located?
A. Near the pumping station.
Q. And where is that?
A. Well, right in the town.
Q. In the town?
A. Yes.

Q. High up or low down? Q. You are on a side hill, are you not?

A. Yes, sir.

Q. Your houses go up to the top of the hill also?

A. Yes, sir.

By the Court:

Q. How near are your wells to the ocean?

A. About quarter of a mile.

By the Court:

Q. And how much higher are your pumps located than the ocean? A. About six feet.

By the Court:

Q. How deep did your wells go before you got water?

A. Four hundred feet, lowest four hundred and forty-five feet.

By the Court:

Q. Do you discover any salt in the water?

A. No.

Q. Now, how high do you have to pump?

A. We pump against a pressure of 120 pounds, that is about 288 feet.

Q. 288 feet, about?

A. About; yes, sir.

Q. What is your poplation there?

A. Fifteen hundred.

Q. Permanent?

A. Permanent.

Q. Does that increase much in summer?

A. Yes, sir; about twelve thousand in the summer.

Q. You have hotels and you have a great many cottages, have you not?

A. Yes, sir, private cottages

Q. What rate do you charge—do you meter or have a schedule?

A. We have both.

Q. I wish you would produce your schedules.

A. (Witness produces papers) Here are the ordinance books covering the metre rate.

Q. Do you run both at once?

The Court: Give them their choice?

A. They have their choice.

Papers offered marked Exhibit C 6 and Exhibit C 7.

Q. Where do we find the rates now?

A. The rates per meter are page 15.

Q. How much of your service is high service?

The Court: Yours is all high service, one service?

A. Yes, sir.

Q. I mean practically what part of it? You pump to some parts of the town that is very much higher than the rest?

A. Yes, we pump with a standpipe on top of the hill.

Q. What have you to say as to the occasion of putting that standpipe way up on that hill?

A. To get the pressure.

Q. For the people on the high ground?

A. Yes, sir.

Q. What have you to say as to whether or not that concern paid?

A. Well, it paid—I don't understand that question.

By the Court:

Q. Does it pay the interest and cost and repairs, or do you have to put something in from general taxation?

A. Have to put something in from general taxation.

Q. Just tell us how that is?

A. We have twenty-five flush tanks for the sewer, connected with the sewer system now, and then we have seventy-five fire hydrants, and the deficiency, we figure that in as the expense.

By the Court:

Q. That is, unless you charge something for fire hydrants and something for sewer flushing, it would not pay?

A. It would not pay.

By the Court:

Q. And you add enough from general taxation to pay in that way indirectly for fire plug service and for sewer service?

A. Yes, sir.

Q. Have you any way of estimating the quantity of water you use for the sewer flushing?

A. Yes.

By the Court:

Q. It is very small?

A. We have 25 flush tanks continually running all the time; the faucets are entirely open all the time. Those flush tanks—I measured them several times, and they are using over a half a gallon to a minute, each faucet.

By the Court:

Q. How many are there?

A. There are twenty-five of them. Last night I just figured out,—well, it amounts to, that alone amounts to—we have always figured this in with the fire hydrants—that alone for the sewers would amount to sixteen dollars for each fire hydrant according to the deficiency.

By the Court:

Q. To each fire hydrant. How many fire hydrants?

A. We have seventy-five.

By the Court:

Q. Sixteen dollars each?

A. Well, twelve hundred dollars is what I allowed for the water going down the sewers.

By the Court:

Q. Twelve hundred dollars a year?

A. Yes, sir. The fire hydrants then would be the difference between that and the other deficiency, then we figure twelve hundred dollars for sewer, and then the difference between that, if there was more than twelve hundred dollars, the difference between that and,—well, the deficiency then was what the fire hydrants cost.

Q. Made your fire hydrants cost you sixteen dollars apiece per year?

A. No; well, some years they cost sixteen; they varied.

Q. Well, give us the last year, allowing Twelve hundred dollars for your flushing of your sewers, how much does that give to each fire hydrant?

A. $8.80.

Q. Now, where do you get the Twelve hundred? What theory do you base that on?

The Court: Amount of water used.

Q. Charging meter rates for that, or regular rates?

A. Meter rates; $1.25 lowest price.

Q. Lowest priced meter rates, quantity estimated, that would give you then about $8.50 for fire hydrants?

A. Yes, sir.

Q. Charging those at that rate your water supply would be self-supporting?

A. Yes, sir.

By the Court:

Q. Pay interest on the cost?

A. Yes, sir; $70,000 cost.

By the Court:

Q. Only cost $70,000?

A. Yes, sir.

Q. Do you supply any railroad down there?

A. Yes, sir; Central Railroad.

Q. At regular rates?

A. $1.25 a thousand.

By the Court:

Q. That is half?

A. That is special rate.

By the Court:

Q. Your lowest here is two dollars.

A. These ordinances are old, but that is the only addition that has been made to the railroad there. the only large consumer we have.

By the Court:

Q. All the rest, the lowest is two dollars?

A. Yes, sir; they are small consumers.

Q. Do you know the number of taps you have there?

A. 395 taps.

Q. Is the business growing?

A. Yes; we are making fifteen to twenty taps a year.

Q. Is there much variation in the amount between summer and winter?

A. Yes, sir; big variation, more than double.

Cross-examination by Mr. Corbin:

Q. Your works cost $70,000? ?

A. $70,000.

Q. And are there bonds outstanding for that entire $70,000?

A. Outstanding.

Q. None of them been retired by any sinking fund?

A. There was one, when they changed the interest—when they changed the interest four or five years ago they retired one of the bonds.

Q. The rest are all still outstanding?

A. Yes, sir.

Q. There is no provision for sinking fund?

A. No.

Q. How much interest do you pay on that?

A. Four per cent.

Q. And to make both ends meet you have to charge Twelve hundred dollars a year for what you use for sewer flushing, and then there is another deficit which last year was $8.80, but sometimes as much as $16 on each fire plug, to make it up—is that right?

A. Yes; that is right.

Q. How much do you get out of the Central Railroad?

A. I couldn't give that.

Q. Several thousand dollars a year?

A. No.

Q. It is only several hundred?

A. Yes, sir; four or five.

Q. Let me ask you one more question. Take these flat rates you have got here. I will ask you to figure up from them what an ordinary dwelling-house will cost a year at that rate. I will call it Kellogg's standard dwelling-house, for I am going to show a lot of rates from Kellogg's standard. One kitchen sink with hot and cold water, one

water-closet, one bath tub, one washstand in bath room, and three laundry tubs, see if that don't come to $16.50 under your rate?

A. $16.50.

By the Court:

Q. Then what you call a standard house, the cost there, charges of non-metered water, comes to $16.50?

Mr. Corbin: Yes, sir.

Recess.

JOSEPH LAKE, sworn:

Direct-examination by Mr. McCarter:

Q. Where do you live?

A. I live at Ocean Grove at present.

Q. You were formerly connected with the Long Branch Water Supply Company?

A. Yes, sir.

Q. In what capacity?

A. Pumping engineer.

Q. How long did you remain pumping engineer?

A. I went there in 1877 and remained there until the Tintern Manor people took hold.

Q. And you were in charge of the pumping down here at Takanassee Lake?

A. Yes, sir.

Q. How much of the time were you there personally?

A. I was there most of the time; the fore part of the time I was there all the time, and the latter part I was there part of the time and part of the time on the street.

By the Court:

Q. You don't mean night and day, I suppose?

A. No, sir; well, I was there night and day, but didn't stand watch.

Q. Did you live near there?

A. Lived right by the works.

Q. Right by the works in that house?

A. Yes, sir.

Q. Did you keep any kind of a record or estimate of the quantity of water they pumped there?

A. Yes, sir.

Q. How was that kept?

A. It was kept by the stroke of the pump.

Q. In a book?

A. Yes, sir.

Q. And that was left down there at the works?

A. Yes, sir.

Q. When you left?

A. Yes, sir.

Mr. McCarter: Mr. La Monte, will you try and find that book?

Q. That was kept all the time you were there, was it?

A. From the commencement, as long as I was there.

By the Court:

Q. You had a register on the pump showing the number of strokes, did you?

A. Yes, sir.

By the Court:

Q. You took the number of strokes in the morning and at night?

A. Took them at twelve o'clock every night.

Q. Now, how long, about, after you had gotten your plant in operation was it, speaking roughly,

before you added on Monmouth Beach and Seabright?

A. I don't know exactly how long, but that was after the Monmouth Beach people took charge, after Jesse W. Starr gave it up.

Q. That was when Mr. Hobart and Mr. Baker and that crowd came in?

A. Yes, sir.

Q. Well, now, up until the time that Monmouth Beach and Seabright were added, what have you to say as to whether or not your supply was adequate for Long Branch?

A. Yes, sir; never heard any complaints until there was new pipe added to.

Q. And that new pipe was the pipe down at Seabright and Monmouth Beach you speak of?

A. Yes, sir.

Q. Did you have any estimate of the quantity of water you had there in the reservoir?

A. No, sir; first off, you know, it was only a stream; then we connected that to the reservoir, we took suction, the suction chamber, and afterwards there was a lake dug there and banked up; then we held it back, but I don't know how many gallons it held; the small one belonged to the Water Company and the big one to Mr. Hoey, and so out into Takanassee into the sea.

By the Court:

Q. You had the benefit of a reservoir created by Mr. Hoey?

A. Yes, sir; something that way.

By the Court:

Q. People living along this lake?

A. Yes, sir, there was some lived—not very close to it, though.

By the Court:

Q. Keep stables?

A. Not that we knowed of.

Q. You tried to keep the pollution all away, didn't you?

A. Yes, we did; we had men clean that brook and men to look after it to see if it was in good shape.

By the Court:

Q. Privys anywhere near it?

A. No, sir, not that I know of.

Q. How many houses were there on that lake? There was the Catholic Church on the north?

A. Yes, sir, but we didn't take in then that.

Q. Was there any house on the lake above you right on the edge?

A. Captain Mount's, I think, was the closest—not Captain Mount's, Mr. Woolley's was the first; that was the closest.

Q. How far was that off?

A. I should think it was two hundred feet.

Q. Away from the lake?

A. Yes, sir

Q. And that was an old farmhouse?

A. Yes, sir.

Cross-examination by Mr. Corbin:

Q. You were there before the Long Branch Water Supply Company was formed, weren't you?

A. Yes, sir; I went there when they commenced.

Q. What was it called then?

A. I don't know what they called it; we only know it by the Long Branch Water Works, that is all.

Q. Some individual owned it?

A. Jesse W. Starr & Son.

Q. You never heard of any complaint of quantity until after further pipes were laid? There were

new pipes being laid in Long Branch almost every year, weren't there?

A. Not many, no, sir; there was some few branches, I think, laid; not much of any account.

Q. What time are you referring to?

A. That was before the Long Branch Water Supply—

Q. Before 1882?

A. Yes, sir.

By the Court:

Q. You worked for them after 1882?

A. Yes, sir; I worked for them until the Tintern Manor took hold of it.

Q. After Hobard and his people came in and formed the Long Branch Supply Company, then the pipes increased, do you recollect?

A. Yes, they increased them then.

Q. I see the population in 1880 was set down at 3,800, and is now 8,800?

A. Yes, sir.

Q. Have not the pipes in Long Branch increased in at least as rapid ratio, or even more rapid?

A. Since then?

Q. Yes; in those twenty years?

A. Yes, sir; the latter part of it.

By the Court:

Q. How was your supply before consolidation, the bringing in of Swimming River?

A. How was it?

By the Court:

Q. Yes; did you have enough in very dry weather?

A. We had plenty, never was short; some time in summer drought we would stop the stream from overflowing in Takanassee; we had plenty of water, never was short, never had to stop on account of shortness of water.

Q. This time when you stopped the stream overflowing there would be no water flowing over your spillway for several days at a time?

A. I have knowed it to go ten days and never overflow.

Q. Gradually you would draw it down a few inches every day?

A. Yes, sir.

Q. Then you got pretty near to the limit?

A. We had plenty when it raised up and overflowed again; we never was short.

Redirect-examination:

Q. Just tell us about that. On the left hand side as you were going around, is that the Hoey Lake?

A. The first one going west is Hoey's, yes, sir.

Q. Then came your lake?

A. First little one going south is ours, then further up is big one, that is Hoey's, then go into the stream.

Q. Then what kind of a place did you have where your pipe went by suction basis, as you call it?

A. We had a well there, I think, fourteen feet deep, about fourteen feet of water into it, something like that.

Q. Was there a lake there, collection of water?

A. We connected the lake and well together with 16 inch pipe.

Q. Now, then, there was a dam or overflow from that lake going out into the Takanassee Lake which emptied into the ocean?

A. Yes, sir.

By the Court:

Q. Then you took it out of the upper end of Takanassee?

A. Yes, sir, we never took out of Takanassee, it never backed up that way.

By the Court:

Q. Did the railroad run near your pumping station?

A. Right to the eastward of it.

By the Court:

Q. Right toward the ocean?

A. Yes, sir.

By the Court:

Q. You had a little lake of your own there, then?

A. Yes, sir.

Q. How much of the year, dry and wet, lean and fat, everything else, how much of the year was the water running over the dam or the spillway into Lake Takanassee?

A. Well, it run over always, except in a summer when these droughts come, you know; then we had, of course, we slacked it down then.

By the Court:

Q. How slacken down?

A. We stopped the current from going over.

By the Court:

Q. You took all the water?

A. Yes, sir; but it had to be pretty dry to do it.

Q. That wasn't always so every summer?

A. Oh, no.

Q. Only in particularly dry times in certain summers?

A. Yes, sir.

Q. Then you had plenty of water yet, didn't you?

A. Yes, sir.

Q. Was there ever a time when you were short of water?

A. Oh, no, sir, never.

Q. You are speaking now of a time when you had Monmouth Beach and Seabright?

A. Yes, sir.

Recross-examination:

Q. How much acreage in your ponds that you could draw on?

A. I couldn't tell you that.

Q. How far could you draw these down?

A. Could draw them down within two feet of the bottom.

Q. How deep are they, that is, the very bottom?

The Court: How deep did you draw them down?

A. I think about four feet.

By the Court:

Q. Used to draw them down about four feet?

A. Yes, sir.

Q. How deep are they?

A. I think ours was eight feet in the center, made egg shape.

By the Court:

Q. Used to draw them down four feet below the overflow?

A. Yes, sir.

By the Court:

Q. And in a dry time they would stay that way?

A. I don't know as they stayed that way more than once or twice, not full four feet down; catch up a little in the night time, when we slowed up.

By the Court:

Q. How long would that go in the dryest time you know before 1890 that the water would not overflow?

A. I think the longest in my recollection is about ten days.

The Court: Of course, there would be more water the deeper you go to run in from the soakage. I want to stop right here to say: Nobody knows anything about the formation there. You would want an engineer who made borings all around there to see what the soil was, to see whether there was any gravel around there for the water to stand in. In one place you would pump down and would not increase the flow at all; another place every time you went down a foot would increase the flow. In other words, you would have a reservoir underground; can't tell anything about it, only by inference. The inference is that as you pump down you would get a little more water, but it might be entirely unreliable.

Q. The watershed of this brook you used was originally covered with cedar and pine timber?

A. Way up at the head of it.

Q. That is being gradually cut off, isn't it?

A. Yes, some; quite some.

Q. And the buildings are gradually—the occupation of the land and putting up of buildings are gradually working out that way?

A. Some; not many, though.

Q. Isn't there a stable right there close to the reservoir now?

A. That has been put there since I have been there; I don't know anything about that.

Redirect-examination:

Q. Where is that stable?

A. Just south of the works.

The Court: I thought it was north.

A. That connects with Mr. Hoey's lake or the one that belonged to the Hoey estate.

Q. Not Jerome?

A. No.

Q. Mr. Corbin says that water supply is being cut off; where is it being cut off that old brook?

The Court: No, not supply; he says the timber is being cut off.

Q. Where is that?

A. That is way up to the head of the brook very near.

Q. How far up?

A. I think it is two miles up that brook.

By the Court:

Q. Part of the drainage area, I suppose?

Mr. Corbin: That is it.

Q. There hasn't been any building along that brook at all, has there?

A. Not to my knowledge; no, sir.

Q. Didn't the company take particular pains to guard and protect that brook?

A. Yes, sir; I went up myself many times.

The Court: Mr. Corbin's idea is that as you cut the timber off it destroys what is called equalizing effect.

Mr. McCarter: I understand.

Q. Do you remember when Mr. Parker, attorney of the company, enjoined a pig-sty from working along that stream? That was after your time, I guess?

A. Yes, sir.

Q. You spoke of that stable running in Hoey's pond, Hoey's pond run—that is up in the watershed, Hoey's pond?

A. Yes; I don't know nothing about it; I have never been there since.

WILLIAM CULLINGTON, sworn:

Direct-examination by Mr. McCarter:

Q. You live where?
A. Red Bank.
Q. In this County?
A. Red Bank, Monmouth County.
Q. What is the population of Red Bank?
A. Close to six thousand.

By the Court:

Q. Summer or winter, or does it increase in summer?

A. Summer and winter, that is the permanent population.

Q. About what increase do you get in summer time?

A. Very little; the surrounding country outside of the town limits of Red Bank are increased considerably, but in the Town itself there is hardly any material difference in the number of population.

Q. Said to be very near the center of the earth there?

A. Very close to it.

Q. Have you any connection with the water supply of Red Bank?

A. I am secretary of the Board of Water Commissioners and collector of the water rates.

Q. Is that supply owned by the Town?
A. It is.
Q. When was it built?
A. In 1880.
Q. Where do you get your supply?
A. Artesian wells.

By the Court:

Q. Right by the City, close by?
A. Yes, sir; in the City limits.

Q. Near the station?
A. Near the station.

By the Court:

Q. How deep do you go for it?
A. To the water stratum, 165 to 185 feet; that is, at that section.
Q. Do you know how much your supply amounts to in gallons per day, roughly?
A. We pump about five hundred thousand gallons per day.
Q. How many hydrants have you?
A. 133.
Q. Do you flush your sewers?
A. Yes, sir.

By the Court:

Q. How much population?
A. Six thousand; and the boundary lines of Red Bank is one mile from a point on the Shrewsbury River, in the form of a half circle.

By the Court:

Q. 133 hydrants?
A. 133 hydrants.

By Mr. Corbin:

Q. How many miles of main?
A. About twelve miles of main.

By the Court:

Q. It is a half circle?
A. Half circle; yes.
Q. Twelve miles of main?
A. Yes, sir.
Q. Do you know how many taps you have got?
A. Yes, sir; 781.
Q. And you have a schedule of rates?
A. Yes, sir.
Q. Have you got them with you?
A. I would explain that we have at the present

time nothing but meter service, compulsory meter service.

Q. When did you introduce that?

A. For a number of years, twelve years, there has been a double system, schedule and meter system, under 1902 when we went to compulsory meter service. That is our schedule rates, and on the last page you will see our meter rates (producing schedule). We don't use the schedule rates at all.

Papers produced marked Exhibits C7 and C8.

By the Court:

Q. Your consumption summer and winter is about the same, then?

A. Yes, sir, no difference much, except the street sprinkling, that is the only thing.

By the Court:

Q. Charged in meter rent?

A. No, sir. The consumers own their meters.

By the Court:

Q. Do you own your own meters?

A. No, sir; we do not.

By the Court:

Q. You make a mistake. We do, and when the meters get out of order we repair them.

A. We repair them and the consumers pay for the repairing.

By the Court:

Q. Five dollars is the minimum?

A. Five dollars is the minimum rate.

Q. You say you do flush your sewers?

A. Yes, sir.

Q. Do you make any charge to yourselves for that?

A. No, we do not; it is an unknown quantity; the

flush tank system is a failure in regard to our sewer system, we have to use the hose besides to flush the sewers; whether it is the fault of the sewers or not, I don't know.

By the Court:

Q. What did your works cost?

A. We are bonded for $95,000.

By the Court:

Q. How much did they cost?

A. Well, that money is all spent.

By the Court:

Q. It didn't cost anything more than that?

A. A few insignificant extensions have been paid by the earnings of the works.

By the Court:

Q. Did you borrow the money on bond?

Q. Borrowed the money on bonds.

By the Court:

Q. What is your total cost of running, including your interest on your bonds?

A. Did you look at our last report, Judge?

(The Court read report referred to by the witness.)

Q. There were uncollected accounts the year before, weren't there?

A. Yes, sir; just about the same. I would like to say, with your permission, our interest is $4,400 per year, but through the failure of the National Bank we had to pay over Six hundred dollars more interest, so that really should be added to our surplus this year.

By the Court:

Q. You have been saving a little something?

A. Yes, sir; we paid the July interest and the bank went up the following year, and some of the cash was not spent on redeeming the coupons, that is all.

By the Court:

Q. You have then saved a little something every year?

A. Yes, sir.

By the Court:

Q. How much, about Five hundred dollars, about?

A. Our increase last year was nearly Two thousand from water rates alone.

By the Court:

Q. Your water rents are increasing?

A. Our water rents are increasing every year.

By the Court:

Q. Your expenses increase?

A. Correspondingly, but not so much.

By the Court:

Q. Have you got an abundant supply?

A. We think we have.

By the Court:

Q. Any indications of the supply running short?

A. The only time when there is an indication of a short supply is when we know our strainers need renewing; after renewing we find the supply just the same as at the commencement; it seems to be inexhaustible.

Q. How many wells have you got?

A. We are operating four artesian wells; that is all.

By the Court:

Q. How many have you got?
A. Six.

By the Court:

Q. Two you are not using?
A. Two we are not using at all.

By the Court:

Q. How near together are your wells?
A. All of them within twelve hundred feet, the farthest from one to the other.

By the Court:

Q. Strung along?
A. Yes, sir; and I put them as far away from each other as possible.

By the Court:

Q. Please repeat, in this connection, how far you went down before you struck water?
A. We put in our strainer from 165 feet to 185.

By the Court:

Q. How high did the water raise?
A. Within about six feet of the surface.

By the Court:

Q. Didn't get any higher than that, eh?
A. No, not from that water-boring stratum, wouldn't do it.

By the Court:

Q. Did the engineer tell you what the pressure indicator shows, how far you draw down in pumping, how much the suction pressure is?
A. No; I can't answer that question.

By the Court:

Q. The water rises high enough to supply your pumps?

A. Yes, sir.

Q. See if I understand you. Notwithstanding the fact that you make no charge there for your hydrants or your sewer flushing apparatus, you a little bit more than make both ends meet every year?

The Court: Yes; they are gaining. As their water takers are increasing their expenses do not increase as fast as their water takers.

By the Court:

Q. How long has this work been in?

A. Since 1881.

By the Court:

Q. Is the Town growing, or are the old residents taking water?

A. They are gradually coming in; the Town is probably two-thirds supplied with water.

By the Court:

Q. Then still one-third of the population has never taken water?

A. No, sir.

By the Court:

Q. And your increase is partly from the old population and partly from the new population?

A. Yes, sir.

By the Court:

Q. Is your population increasing?

A. Red Bank has had a steady but not spasmodic growth; steady growth.

Mr. Corbin: After twenty years they are just getting to a paying point.

The Court: They are at a paying point now.

Q. How long ago is it since you raised anything by taxation?

A. 1900 is the last year.

By the Court:

Q. That is, before 1900 you did not pay expenses?

A. We didn't pay all of the interest on the bonds; a tax had to be levied.

By the Court:

Q. But since 1900 you have got up to the even point, and going ahead?

A. That is right.

By the Court:

Q. By the increase of water takers?

A. Yes, sir; we are hopeful of being able to pay off considerable of the bonds every year in the future; that is simply a hope.

By the Court:

Q. Until the Commissioners begin suing for more salary?

A. It is pretty near time, I think.

Newspaper clipping annual report Board of Water Commissioners of the Town of Red Bank offered in evidence and marked Exhibit C10.

Cross-examination by Mr. Corbin:

Q. You say you have ninety thousand bonds out?

A. $95,000.

Q. Does that represent all that has ever been put into your water works in capital?

A. Yes, sir; as I say, with the exception of a few

what I may say trivial extensions paid by the earnings of the plant.

Q. How do you pay for your extensions now?

A. By the earnings.

Q. You expect to from this time on?

A. Yes.

Q. Still, as a matter of fact, you have levied a tax to keep up your water works from 1881 to 1890?

A. Yes, sir; for a number of years we paid from $1,500 to $1,800 a year toward the Four thousand dollars interest, up to 1900.

Q. Now, this flat rate list which has gone out of date now, but I don't see anything down here for laundry tubs. What do you charge if you had three laundry tubs in the cellar of those?

A. Three laundry tubs added to the regular washtubs, Three dollars each.

Q. That would be added to them?

A. Yes, sir.

Q. Then take this schedule and tell me what would be your flat rate for Kellogg's standard house, which would contain kitchen sink with hot and cold water, one water-closet, one bath tub, one washstand in bath room, three laundry tubs. Figure that up and tell me what that would amount to?

A. Eighteen dollars.

Q. And a half, wouldn't it, or just even eighteen?

A. Eighteen dollars.

The Court: The charges are not cheap, gentlemen; they are higher than we charge in Morristown.

CHARLES K. SEAMAN, sworn:

Direct-examination by Mr. McCarter:

Q. You are, I think, the Mayor of Perth Amboy?

A. I am.

Q. How long have you been connected with the public service there?

A. On my third year.

Q. And before you were Mayor did you have any public position of any kind?

A. Not of recent years.

Q. Do you know anything about the schedule—what kind of water supply have you got in Perth Amboy?

A. We have a stream, supplemented by artesian wells.

By the Court:

Q. You get your water in various ways? The last pond you made was over in Monmouth County, wasn't it, across the river?

A. We get our water supply from Runyon Station, in Middlesex County, about seven miles from Perth Amboy.

By the Court:

Q. That is north, but didn't you go across the Raritan over into—

A. We bring it seven miles, within about three-quarters of a mile, by submerged main under the Raritan River.

Q. Do you have to pump it?

A. Yes, sir.

Q. Where is your pump?

A. The pump is at the source of supply.

Q. Which is about seven miles off?

A. Yes, sir.

By the Court:

Q. You had a supply by private company near by?

A. Yes, sir.

By the Court:

Q. Is that entirely abandoned?
A. Not entirely.

By the Court:

Q. Did you take that over, buy them out?
A. Bought them out.

By the Court:

Q. That was entirely insufficient, and you went south in Middlesex?
A. Insufficient in quality and quantity.
Q. Do you know how many taps you have?
A. My subpœna read that I was to furnish you with the rates for the private and public consumers. Now, if you wanted all the statistical information of the department if you had subpœnaed one of the officers of the department he could give you that accurately; I can give it to you approximately.

The Court: I will make this suggestion to save time, if both agree to it: Get one of the officers to make out a statement and send it to you, unless you require it to be put under oath.

A. I can mail these gentlemen as many as you wish, of our printed financial statements up to the first of March.

By the Court:

Q. Financial statement for several years you have got?
A. Yes, sir.

The Court: Just send those. Then if you want anything else—there is no use of bringing witnesses on these topics.

Q. Now, how many taps, approximately, have you got?
A. About thirty-four hundred.

Q. How many hydrants?
A. In the neighborhood of 155.

By the Court:

Q. What is your population?
A. Twenty-two thousand; that is estimated at the present time.
Q. Do you do any flushing of your sewers?
A. The street commissioner is authorized to flush the sewers when necessary.

By the Court:

Q. Do you take surface water into your sewers?
A. Yes, sir.

The Court: That is a different thing, flushing surface water sewers; these sewers when they flush I understand are closed sewers.

Mr. McCarter: I imagine so.

The Court: Those are the ones; that hasn't been stated; nobody ever flushes sewers that take surface water.

Mr. McCarter: I suppose not.

The Court: Except as he says, may get some dirt in there and want to wash out.

Q. Now, what rates have you got, schedule rates?
A. I have for private consumers.

By the Court:

Q. How many have you got of those with you?
A. I only brought one with me.

The Court: Let me have that and take a memorandum and send them to these gentlemen.

By the Court:

Q. Do you use meters at all?
A. Mixed system as to that.

By the Court:

Q. Some you do and some you don't?
A. Yes, sir.

The Court: "Meter rates per gallons; first 25 cents per thousand gallons; then 20 cents a thousand gallons, and so on running down to 13 cents.

A. Running down to seven cents.

The Court: Down to seven according to the quantity used.

Mr. Corbin: That is big factories, I suppose?

A. Yes, sir, and Borough of South Amboy.

By the Court:

Q. You have a branch to them?
A. That is on our main line, comes through South Amboy.

The Court: "Dwelling houses occupied by one family, six dollars; dwelling houses occupied by two or more families, each family six dollars; dwelling houses when all are supplied through one faucet, for each family four dollars; stationary tubs for private dwellings, each tub one dollar; for boarding houses and hotel tubs, each two dollars; bath tubs for hotel or other public baths, each tub ten dollars; for boarding house, each tub eight dollars; for private dwelling, one family, four dollars; for private dwelling, each additional tub two dollars; for private dwelling, two or more families, four dollars. Water closet pan, self-acting. For hotel, restaurant and saloon, first, ten dollars for hotel, additional, each, five dollars; for boarding house, first, eight dollars; for

boarding house, each additional, two dollars for private house, one family, one closet, three dollars; for private house, each additional, two dollars; for private house, two or more families each closet three dollars. Urinal self-acting bowls, for public houses, each three dollars; for private houses, each two dollars. Stores and offices. For hotels and boarding-houses, eight dollars; stores and offices, each six dollars; drug stores, ten dollars; bakeries, nine dollars; meat markets, eight dollars; fish market, ten dollars; for saloon or hotel bar, eight dollars; photograph gallery, ten dollars; barber shops, first chair, five dollars; barber shops, additional chairs, each one dollar. Stables. For first horse, each two dollars; for each additional horse, $1.50; for each cow or ox, $1.50. The above rates for stables include water for washing carriages without hose. Yard hydrants. For one family, ten dollars; for each additional family, four dollars."

I will say, gentlemen, I think they are full high-priced.

Mr. Corbin: Yard hydrant; that is higher than they usually are.

Q. Do you know the expense of maintenance?

A. No; I can't give you that.

Q. That you will send us also?

A. That I will send you.

By the Court:

Q. How much did the works cost you?

A. I know how much it cost by the interest on the bonds.

Q. All right; let us have that.

The Court: How much is your bonded debt?

A. $45,000 a year it costs us to pay our interest and maintain the plant.

By the Court:

Q. How near do you get that out of your consumers?

A. We have a profit of fourteen or fifteen thousand dollars a year for the last three years, of which we expend a portion in improvements and lay aside about ten thousand dollars in the sinking fund.

Q. What do you charge yourselves, or what charge do you make for the hydrants and other public uses?

A. Until this year there has never been any charge. We appointed a Water Commission the first of January, and they have put it on a somewhat business-like basis, and have levied a hydrant tax of Ten dollars a year for each hydrants, and Twenty-five dollars each for each public building, including schools, public library, fire houses, &c.

Q. What public use, other than hydrants, does the City have for the water?

A. Well, they might maintain fountains; they haven't opened any as yet—public fountains.

Q. They haven't opened any yet?

A. Not this year.

Q. Are the fire engine houses all supplied with water?

A. Yes, sir.

Q. How many are there of them?

A. There are four.

Q. Are the public schools all supplied?

A. Yes, sir.

Q. Water closets, &c.?

A. Yes, sir.

Q. No charge has been made for that up to this time?

A. Not to this time.

Q. How many public schools are there?

A. Seven.

Q. Are there any other public uses that you think of?

A. Nothing else.

By the Court:

Q. You haven't got it here; what is your cost of pumping, fuel and repairs?

A. I can't give you that.

By the Court:

Q. You have got that all in these printed statements?

A. Printed form, which I can send you; I would rather do it that way.

Cross-examination by Mr. Corbin:

Q. You sell water to South Amboy, they got their supply from you?

A. Yes, sir.

Q. About how much revenue do you get out of that a year?

A. Our contract with South Amboy is seven cents a thousand gallons, but they have agreed to take a hundred thousand a day.

Q. How much do you get out of that a year in money, how much do they take?

A. A hundred thousand.

Q. That is their minimum; don't they take more than that?

A. No; they haven't taken up to that.

Q. They take how much?

A. We charge them for a hundred thousand a day.

By the Court:

Q. Nearly three thousand dollars?

A. Yes, sir.

Q. You also have some very large customers in these recent years in the shape of the factories along the shore, haven't you?

A. Yes, sir.

Q. Guggenheimer Smelting Works, and others?

A. Yes, sir.

Q. Some of them each pay you several thousand dollars, don't they?

A. Yes, sir.

Q. And a very large portion of your revenue comes from those very large factories, doesn't it?

A. They pay considerable of it; yes, sir.

Q. You get twenty thousand at least from that sort of revenue, including South Amboy?

A. I should judge we would.

By the Court:

Q. There is no difference much in summer and winter?

A. Very little difference there; it is a little more in the winter than summer.

By the Court:

Q. How large a main have you got for those seven miles?

A. That has been our difficulty; we are now practically rebuilding our system of mains; we had a sixteen inch main, which was not sufficient to bring to the town what we needed, and we are now laying a twenty-four inch main alongside of it.

By the Court:

Q. You don't think the engineer who advised that used very good judgment, do you?

A. He did; yes, sir.

By the Court:

Q. You thought so at the time, but you don't now?

A. Yes; I think so yet.

By the Court:

Q. Because it is cheaper to lay another main when you needed it? A. No; that main provided for what we in Perth Amboy considered would be the growth of the town for twenty-five years ahead, and we grew more rapidly than we anticipated; that is nothing derogatory to the engineer.

Q. Your town in the last five years has grown very rapidly?

A. Yes, sir.

Q. Much more so than recently?

A. Yes, sir.

Q. Your twenty-two thousand people—your town —are on comparatively small area, quite dense?

A. Yes, sir.

Q. The whole of them are on an area of less than two miles square, that is four square miles?

A. Yes, about.

Q. That is about the area of your city, isn't it?

A. Little under four square miles.

Q. Do you supply the Lehigh Valley, which has its freight terminus there?

A. Yes, sir.

Q. And the Central Railroad some water?

A. They use very little.

Q. And the Pennsylvania some water?

A. Very little.

Q. The Lehigh Valley are the best takers?

A. Yes, sir.

Q. In other words, you don't have to carry your water very far in distributing pipes in order to get customers?

A. No; we have to pipe pretty near every street in the place.

By the Court:

Q. You don't have to carry it over unprofitable space?

A. Except across the river.

Q. Do you supply the Raritan Copper Works?

A. We do.

Q. That is the largest customer you have got?

A. That is the largest customer.

Q. Several thousand dollars a year they pay you?

A. Yes,sir.

Q. How many thousand?

A. I should think six thousand dollars a year.

Q. Don't the railroads and the town of South Amboy and the great factories together pay you, in these few large sums, considerably more than half of your entire income?

A. About half, I should judge.

Q. And your gross income is how much?

A. Between fifty and sixty thousand dollars—$55,000.

Q. What is the total cost of your works up to the present time, if you know?

A. I would much prefer to send you these figures accurately.

Q. Roughly, can you tell?

A. Well, four hundred thousand dollars.

LOUIS ROTHENBERG, sworn.

Direct-examination by Mr. McCarter:

Q. How long have you lived in Long Branch?

A. Twenty-six years.

Q. And what kind of a place have you got here?

A. I have a drug store.

Q. You have water in your store?

A. Yes, sir.

Q. Do you have a house as well as a store?

A. We live over the store.

Q. What rate did you used to pay previous to the raise here?

A. Ten dollars a year.

By the Court:

Q. For the whole thing?

A. Yes, sir.

By the Court:

Q. Dwelling and store?

A. Yes, sir.

By the Court:

Q. Use bath tub or water closet at that time?

A. Yes, sir.

Q. Now did you have a stable also?

A. Yes, sir.

By the Court:

Q. And that included in the ten dollars too?

A. It did.

Q. How many fixtures did you have all told, if you can remember?

A. I had one bath tub and one toilet washstand upstairs, one faucet in the kitchen and two faucets down stairs in the store.

By the Court:

Q. And one for your stable, I suppose?

A. No; we have no way—don't use—we have no faucet in the stable.

By the Court:

Q. Carry the water out?

A. Yes, sir.

Q. Mr. Corbin seems very anxious to know if you have a soda fountain?

A. Yes, sir; we have one; that is where one faucet is I am talking about.

Q. That then makes the total; how many different fixtures in the house where water was drawn, store and all?

A. That makes about five, I guess.

Q. Where is this?

A. 169 Broadway.

Q. Was any increase made under these increased rates?

A. Twenty-two dollars, just double what it was, Twenty-two dollars more this year than we have paid before.

Q. Twenty-two dollars more?

A. It is Thirty-two dollars this year.

By the Court:

Q. Put the price up. Have you got the bill rendered you? Have you got the bill here?

A. I have; we have another place at the West End where they tripled the price in three years.

Q. Take that next?

A. They are both included in this bill.

Q. Now, describe this other place at West End; what is that?

A. Three story bulding.

The Court: This bill is this way: Louis Rotherberg to the Tintern Manor Water Company, June 1st, 1903, to June 1st, 1904, Broadway, 32; west side of Ocean, southwest corner West End Court, $119; North Street Court, near ocean, $25. But this says, "as per bill rendered;" I suppose the bill that had been rendered contained the items more fully.

Q. Have you got that here?

A. No; I haven't the other bill here; that is the amount for one year, $40; that is higher at the West End than the year before.

Q. From June 1st, 1903, to June 1st, 1904, the north side of Broadway, $32?

A. That is right.

The Court: That was rendered in items; that does not show the items, and he says he hasn't got that bill here. That is the bill we want; we ought to have that bill in items here.

A. I wasn't asked to bring any bill here; I was simply asked to come here.

Q. Now, the Thirty-two dollar item is for the property you described, the drug store with your residence over?

A. Yes, sir.

Q. West side of Ocean, southwest corner West End Court, $119, what building is that?

A. Three story building, drug store downstairs, office building and dwelling upstairs.

Q. How many faucets in it?

A. In the drug store there is a faucet on the soda fountain, and sink in the back, which is two; there is toilet in the basement, which is three, and the back room there is a washstand, which is four. On the second floor there are three bathrooms, three washstands and five toilets.

Q. What do you mean by that, urinals?

A. No; I mean regular closets; and third floor there are four bathrooms and about the same number of toilets.

Q. What is that? Is that an apartment house?

A. Yes, sir.

By the Court:

Q. How many families does it contain—will it contain?

A. It is rented out in summer; with every two rooms there is a bath.

By the Court:

Q. I know, but how many families do you put in there in summer?

A. We have some gentlemen take two rooms single; it is bachelor apartments, not for housekeeping.

By the Court:

Q. How many different sets of apartments are there?

A. There is twelve.

Q. No families, all for bachelors?

A. Yes, sir.

Q. No housekeeping?

A. No housekeeping at all.

Q. Just for lodging?

A. That is all.

Q. How long during the year is this open?

A. Four months.

Q. Closed for eight?

A. Yes, sir.

Q. How about the drug store?

A. The drug store is open about five months.

Q. Is the drug store to which we first referred open the year around?

A. Yes, sir.

Q. That is on Broadway, that is open the year around?

A. Yes, sir.

Q. So that the building on the west side of Ocean down at West End is only used from four to five months out of the year?

A. That is all.

Q. Now, I notice that there is another charge here, "West End Court, near Ocean, $25?"

A. That is small building adjoining.

Q. What does that consist of?

A. It consists of two stores downstairs, one is

a laundry and the other used to be a barber shop but last year we used it as a restaurant.

Q. Are they occupied the year around?

A. No, sir.

Q. Only the summer months?

A. That is all.

Q. Four or five?

A. Yes, sir.

Q. And closed up the balance of the year?

A. Yes, sir.

Q. How many fixtures in there?

A. There is only one toilet and one closet, that is all, and one down stairs in the back of the laundry, one tap, nothing else.

Bill marked Exhibit C11.

The Court: This case shows the importance of putting in meters. If you fix your rates by water closets, no matter how little that water closet is used you have got to charge the same as if it was used by a dozen people; it is impossible to make what are called schedule rates that will work anything like justice. I am speaking for the benefit of all. This gentleman if he complains of that ought to have the privilege of putting in a meter and be a metered rate so he pays for what he uses and no more. The Company will find that the only way to do justice to their patrons.

Mr. Corbin: This man can have a meter if he wants it.

The Court: I am just using this as an illustration, I think, of what I said up at Morristown, I am not sure; it is the only way to do business.

Q. What have you to say as to whether or not the rates you have given there have been uniform for the past three years?

A. They have not, sir; they have been raised every year.

Q. Have you ever asked for a meter?

A. I asked last year Mr. La Monte if I could have a meter?

Q. What did he say?

A. As near as I could understand, he said the time was so short it didn't pay to put out meters; I am pretty sure if I had a meter I would pay about one-fourth what they are charging me now.

Cross-examination by Mr. Corbin:

Q. You say in the house 169 Broadway, which is a drug store, and you live over it and have certain fixtures, and a stable, bath room, water closet, soda fountain, shower bath, that previous to a year or two ago you paid Ten dollars?

A. Yes, sir.

Q. Explain the nature of the pull you had with the old company by which you got that rate.

The Court: Don't ask that question.

A. I don't know any members of the Company. That is all the rate was; it has never been changed until this Company took hold of it.

The Court: I will tell you what it was. He started at Ten dollars; he put all these things in from time to time, never observed by anybody, and it ran on at the old rate.

Q. And you were once reduced from Twenty dollars to Ten, weren't you?

A. Yes, sir.

Q. Who did that?

A. I think the old Company, because we didn't use the water in the building adjoining; there was no water there at all, we didn't require any at all.

Q. This big house you speak of, you have a bar,

this One hundred and nineteen dollar house with apartments, you have a bar there?

A. Bar.

Q. Restaurant?

A. There was a cafe there last year; yes, sir.

Q. And bath rooms and water closets on various floors?

A. Yes, sir.

Q. And twelve sets of apartments?

A. Yes, but not all the rooms.

Q. Did you figure up to see if it was charged according to the printed schedule rate?

A. Did I figure it up? Yes.

Q. Do you find any place where it is not according to the printed schedule rate?

A. Yes, sir.

Q. Let us see it?

A. I found out we were charged with more toilets than what we were using.

Q. More than there were in the house?

A. Yes, sir.

Q. Did you point that out to the Company??

A. I did not; I haven't had a chance.

Q. Now, your West End Court. There are two stores there, one is laundry and the other is restaurant, isn't it?

A. Yes, sir.

Q. And the one that is restaurant used to be a barber shop?

A. Yes, sir.

Q. How much is that house charged at?

A. Twenty-five dollars. there is no water in it.

Q. You don't use any water?

A. Don't use any water, except down stairs.

Q. Don't you in the summer, when it is occupied?

A. No.

Q. Do you pay the bill?

A. No, sir; haven't paid this bill, because I think

it is exorbitant; I paid the bill always until I got this bill, and I don't propose to pay it.

MOSES F. KAHN, sworn.

Direct-examination by Mr. McCarter:

Q. Have you got a place here in Long Branch?
A. I haven't now; I did have.
Q. Did you have?
A. Yes, sir.
Q. Where was it?
A. On Broadway; 163 Broadway.
Q. What kind of a place was it?
A. Meat market.
Q. Did you use the whole building?
A. I did, yes, sir.
Q. Just describe what water arrangements you had there?
A. The number of fixtures?
Q. Yes.
A. Well, some years ago—there is a little preliminary to it; at first I rented out the top floor, but for the last ten years I did occupy the whole house with my family, which consisted of six people, with myself. and we had on the top floor, we had a bath room. a. w. c. and a basin; on the second floor we had a bath room, w. c. and basin; on the ground floor the meat market; we had a basin, we had a wash basin in the dining-room, we had a sink and three tubs in the kitchen.
Q. Now, did you use all of that all the year around?
A. Yes, sir.
Q. Just in that shape?
A. Yes, sir.
Q. You were there of course under the old system?
A. I have been living here twenty-four years; I built the house in 1881.

Q. What rates have been charged against you since the new concern took hold of this?

A. I paid Ten dollars a year for the entire house.

Q. That was the old?

A. Yes, sir. At first when I built the house I didn't have it fixed on the top floor, but after the house had been built some years I converted that floor into living apartments, and the old Company was cognizant of the fact, and the rates were the same.

Q. When the new Company took hold what did they do to you?

A. They didn't do a thing. They raised me from Ten dollars to Twenty-seven.

Q. Twenty-seven?

A. Yes, sir; and I paid it.

Q. Well, has that remained the rate down to the time you left?

A. Well, I had a talk with Mr. LaMonte about it and told him I thought the rates were a little high; I said to him in the way of talk I thought perhaps that Ten dollars was too little to charge me for what I was using; I thought that corporations had rights that ought to be respected, and they were entitled, perhaps, to more money, but I thought if they would charge me Fifteen Dollars, which would be an increase of ffity per cent., it would have been enough. I told him I thought the old Company was making a lot of money, and I thought if they could get fifty per cent. increase on all their rates they would make a lot of it; but of course he said that was the rate; they went through the house and taxed me for all the fixtures, and so on, and of course I had no redress; I either had to pay it or they probably would have cut me off; I don't know as they would.

Q. Well, you paid it?

A. Yes, I paid it.

By the Court:

Q. They applied to you their regular rates, their regular schedule prices?

A. They sent me a schedule by mail, and they figured up according to the schedule it was right, Twenty-seven dollars; but I own the adjoining property also, 165 Broadway, and that is occupied by a small family, that is a two story building occupied by a man, his wife, and a child, and in that building there is a w. c., sink, I think two tubs, if I am not mistaken, and I think a faucet in the cellar; we discontinued the use of the hydrant to wash the windows with, as I said to the tenant I would cut that off because I was afraid this new company getting in the rates would be too high; well, I paid for that building Ten dollars, and they raised me to Nineteen dollars. I also spoke to Mr. LaMonte about that, and previous to that that was one store, that was also a meat market when I purchased the property, and I made two stores of that; then one side was rented out for a barber shop; there was no water in there; this man had a sink there which he carried in the water and had a pail to catch it, but this man moved and a haberdasher went in that place, and Mr. LaMonte said to me, you have a barber shop in that building; I said we did have, but we have not now. Well, at the time I spoke to him there was a gentleman in there that was giving him fits, and I suppose he got it all around, and I kind of felt sorry for him, that is an actual fact; Mr. LaMonte was placed in a very peculiar position as an employee of the Company; he simply had to carry out the edicts of the Company, and everybody went in and give him fits, and I happened to go in there when Mr. Oldorf (?) was in there, and every gentleman in the room knows Mr. Oldorf, and Mr. Oldorf was laying the law down to him; I simply sympathized with him

and said I will see you later. I did see Mr. LaMonte later, with no result, there was no result. There was no barber shop in that building; I think ten dollars for that building was a good price. I want to say in connection with my testimony, Mr. LaMonte put in a meter at 163 and 165. I told him that was the only way equitably to sell water; I told him water ought to be sold the same as merchandise; I was in the meat business twenty-one years, and I think water should be sold the same as merchandise. When a man comes in for a pound of meat he expects sixteen ounces.

Q. Does he always get it?

A. Sometimes he gets eighteen, we only charge him for the sixteen. But they put the meters in both houses, and they said they would charge me at the meter rate, which I said was the only way; that is the proper way to sell water. Now, I have a house right in the rear of this property on Union Avenue that has one faucet, but on that property I had my barn in which I had three horses. Well, I always paid for that property Ten dollars; I had just one faucet. They charge me for that now, they charge me Nineteen dollars.

By Mr. Corbin:

Q. What is that, stable?

A. No, sir; that is for a small house and barn; in this barn are three horses; there were three horses; they charge me Nineteen dollars for that now. I thought that was a little out of the way, but, as I said before, I paid my bill after—

Q. Kicking?

A. Well, I kicked, with the result, as I told you, that I paid the bill. As I said before, they put a meter in the Broadway building.

By the Court:

Q. Would put a meter in this if you would ask them, wouldn't they?

A. I didn't ask them yet to put one in there, because I don't think it is worth while, don't believe I would use Ten dollars worth of water on that property.

Q. What has been the result since the meter was put in?

A. I haven't got my bill since. I am satisfied to pay according to the meter if the meter is right Of course, as you said before to the gentleman from Red Bank, he ought to look after his own meters.

The Court: I want to say if you have all customers like Mr. Hahn you won't have any trouble.

Cross-examination by Mr. Corbin:

Q. Was there an ice machine in the cellar of 161?

A. There certainly was.

Q. Did this smaller house of the two you have mentioned, 165, have a water closet in it?

A. Which house.

Q. 165 Broadway?

A. I mentioned that it had a w. c., yes.

Q. Did it have a bathroom?

A. No, sir.

Q. You got a meter on now to measure what goes into both houses, haven't you?

A. I have a meter in each house separately.

Q. Do you know where this barber when he went out with a pail got his water?

A. I suppose he got—I don't know—I suppose he got his water on the premises; I can't say where he got it. But I want to say to you, so as not to mislead the Court, that this ice machine I used no water from Tintern Manor Company, never did;

I get this water from my neighbor from an artesian well, because that machine used in the neighborhood of a hundred and fifty gallons, and so you could imagine what I would have to pay for water if I bought of these people; I simply wanted to mention it for the benefit of all concerned, the ice machine used no water from the Tintern Manor Company.

SIEGFRIED HIRSHFELD sworn.

Direct-examination by Mr. McCarter:

Q. What property have you got here that is subject to water tax?

The Court: I will say the evidence you have got now from the proprietors of the water works in the neighborhood is very valuable; that I count as very valuable.

A. 137 Broadway and 117 and 119 Union Avenue.

Q. The Broadway property consists of what?

A. Tenement house occupied by two families and two stores, also a bottling department in the rear.

Q. What do you have in the way of water fixtures?

A. I have in the house two toilets and four faucets.

Q. What is your water tax there under the new system?

The Court: Have you got your bill, with items?

A. Yes, sir. This Broadway property I am paying Forty-nine dollars for.

Q. Is that in use the year around?

A. It is not; the upper rooms are mostly empty, my misfortune, I haven't got tenants for the house.

The Court: North side of Broadway, two families, one inside faucet for two families, Ten dollars; two water closets, Eight dollars; two stores, one faucet, Ten dollars; bottling works, Fifteen dollars; Forty-nine dollars.

The other one is 119 Union Avenue, one family, one inside faucet, one private stable, one horse, two additional horses, making Sixteen dollars.

Q. Do you have three horses in that stable?

A. I have not, sir, not at the present time; we only have two horses during nine months of the year.

Q. Two horses during nine months and three horses the other three months?

A. Yes, sir, three perhaps four.

Q. These tenement houses, are they for summer tenantcy, or occupancy the year around?

A. Year around.

Q. As a matter of fact, how much of the year are they rented?

A. The Broadway property is not rented at all only store, and of course upstairs, the other, is always empty, practically always empty.

Q. What rate do you pay under the old?

A. Under the old system I paid Forty dollars altogether for the Union Avenue property.

Q. For the both?

A. For the both, yes, sir.

Q. Now you have to pay how much?

A. Now I pay Eighty-four dollars a year, for 1902, and for 1903 I paid Eighty-one; there is a reduction of Three dollars on these bills.

Cross-examination by Mr. Corbin:

Q. Your apartments there in Broadway, your buildings are fixed for four apartments, but you are charged for two, isn't that it?

A. The one apartment I have turned in for one.

Q. It was arranged for four apartment house?

A. Sixteen rooms.

Q. And you rented them as two apartments?

A. I have rented to one party.

Q. This other porperty which you speak of in Union Avenue is dwelling?

A. Yes, sir.

Q. They charged how much for the dwelling there?

A. Sixteen dollars for one and Sixteen dollars for the other, but of course the horses that are charged for ought to be charged to me; there is a mistake there in making out this; my house 119 Union Avenue, the parties haven't got any horses.

Q. Bath room and water closet in those houses?

A. 117 bath room and water closet, not 119.

Q. Are they according to schedule?

A. They are all according to schedules; yes, sir.

ALFRED O. HICKS, sworn.

Direct-examination by Mr. McCarter:

Q. What kind of property have you got here?

A. I have got a store on Broadway.

Q. And what in the way of water fixtures do you have in that?

A. Now have got connection to my soda fountain, bath room and water closet, two water closets —three water closets rather.

Q. Three water closets in one store?

A. I have got a lodge room on one floor, three story building, with lodge room on top floor, living rooms on the second floor.

Q. Now, how often is the lodge room occupied?

A. About three times a week.

Q. What is connected with that in the way of water?

A. Wash basin, hand basin and water closet.

Q. Now, come down to the second floor; that is occupied by the family, is it?

A. That is our sleeping rooms.

Q. Your own family lives there?

A. Yes, sir.

Q. What do you have in the way of water arrangements there?

A. Have bath tub and water closet.

Q. And anything else?

A. No; nothing besides that on the second floor.

Q. Now, get down to the ground floor?

A. The ground floor, we have got a water closet and have got connection there for soda fountain. for tumbler washer, I think there is one other faucet in front of the cellar.

Q. What is this connection with the soda fountain?

A. It is for manufacturing soda.

Q. Is this a drug store?

A. No, candy store.

Q. And you make soda?

A. Yes, sir.

Q. What are your water bills?

A. Water bills; last one was Thirty-two dollars.

Q. And before that?

A. Twenty dollars; I believe it was Thirty-two dollars year before that; last two years it has been Thirty-two dollars, I think, and year before that it was Twenty.

Q. And previous to that?

A. It has always been Twenty.

By the Court:

Q. They raised you from Twenty to Thirty-two dollars?

A. Yes, sir.

By the Court:

Q. Under the schedule system?

A. Yes, sir.

Cross-examination by Mr. Corbin:

Q. Always been Twenty dollars in the old times?

A. Yes, sir.

Q. You put those things in gradually, from time to time, didn't you, and increased them?

A. Yes, sir, few of them. They have a meter in the place now.

Q. But you always paid Twenty dollars there, no matter what was in the house, until the new Company came in, and they put their printed schedule in force which now makes it Thirty-two dollars, is that it?

A. Yes, sir.

Redirect-examination:

Q. When did they put this meter in?

A. I can't tell just how long that was put in, some three or four years; that was put in by the old Company when Mr. Manning was there.

By the Court:

Q. How does it come out this way then?

A. I suppose I didn't use water enough to go by meter.

Q. Do they charge you meter rate by the meter?

A. I don't know whether they do or not; it don't state on the bill whether by meter.

Mr. La Monte: The old Company put out twelve or fifteen meters as test meters.

Q. He is charged schedule rates though?

Mr. La Monte: Yes.

A. I didn't know about that; I know they sent a man over every once in a while to look at the meter.

CHARLES MOUNT, sworn.

Direct-examination by Mr. McCarter:

Q. Mr. Mount, you used to drive one of the water carts here, didn't you?

A. Well, I had teams to furnish.

Q. Furnished the teams, were the proprietor; how many teams did you furnish?

A. Only one.

Q. How many loads a day do you know would be sprinkled in a season from one wagon?

A. Some days wouldn't sprinkle at all.

Q. Suppose you had a full day for sprinkling?

A. I should judge about thirty-two loads, probably.

By the Court:

Q. Thirty-two loads, one team, eh?

A. That is extraordinary dry time.

Q. Take the average time.

The Court: What will one team stand? That is the question?

A. Some doys we wouldn't put out more than ten loads.

By the Court:

Q. What would one team stand week in and week out without breaking down?

A. They wouldn't stand that; that would be extraordinary dry whether; next day wouldn't put out and maybe.

By the Court:

Q. Of course, you have perfectly flat roads here?

A. Yes, sir.

Q. And most of it macadamized, good deal of it?

A. Yes, sir.

By the Court:

Q. And hydrants are close together, don't have to haul it any distance?

A. No; don't have to haul it at all.

Q. The average?

A. Wouldn't average over fifteen or twenty loads a day on the average.

Q. Thirty-two in excessive dry weather?

A. Yes, sir; some days wouldn't go out at all; other days go out and use probably eight or ten loads.

The Court: There is a way to get at that. Just give the superficial area of all the streets to be watered and I think you can get an engineer who will give you an estimate how much it will take to water them, just from superficial area. I don't say that I can find any engineer that can do it now, but it is capable of being ascertained.

Q. Do you know how much your carts hold?

A. No; I don't know exactly what they did hold; the same as they use on the street here; I don't know.

Mr. Corbin: We estimate the average of these carts here is 550 gallons; there are different sizes, from 500 to 700.

Cross-examination by Mr. Corbin:

Q. Your soil is sandy and dry here, isn't it?

A. Where I watered mostly is on Ocean Avenue and side streets which are very hard.

Q. The streets where you water in the morning you again water in the afternoon?

A. Yes, have to go twice in the morning, dry times.

Q. Sometimes four times a day?

A. Yes, sir; other times only once a day.

ROBERT WELLS, sworn.

Direct-examination by Mr. McCarter:

Q. You live here in Long Branch, don't you?
A. Yes, sir.
Q. How long have you driven a water cart?
A. Well, ten or twelve years.

The Court: Let me stop you here. You know somebody knows here, how many months in the year do you sprinkle? When do you begin to sprinkle, and when do you quit?

Mr. LaMonte: We put two wagons on in April; run six months here.

Q. When do you generally begin to water?
A. I commenced the first of April last year.
Q. Last year?
A. Yes, sir, a year ago.
Q. When did you commence this year?
A. This year I think it was about the 17th.
Q. When do you generally commence, some where about there?
A. Yes, sir.
Q. How many wagons beside you?
A. Some of the fire teams go on earlier.
Q. You take one of the fire teams?
A. Yes, sir.
Q. How many commence as early as you?
A. Not but one commenced this year yet; two of us ought to.
Q. How late do you keep it up?
A. September about.

By the Court:

Q. Go through September?
A. Yes, sir.

By the Court:

Q. Don't run into October?

A. No, I think not.

Q. Where do you water?

A. I water on Broadway here, the railroad crossing down to the Arcade, then Third Avenue.

Q. And then that is all?

A. No; more than that.

By the Court:

Q. How many loads do you go out with a day on an average?

A. Owing to the weather; some days I would take fifteen loads, some days maybe three, and some days none; some days eighteen or twenty, and likely twenty-five.

By the Court:

Q. Sometimes run up to twenty-five?

A. May be twenty-six, something like that.

Q. On the average during the summer now, we will say from the first day of June, when the hot weather commences, until the last of August, during July and August now, June, July and August, those three months, which is your season down here, how many loads on the average do you do a day?

A. I couldn't tell.

Mr. Corbin: That is, on the days he goes; some days none?

Q. Yes.

A. That is right, too; I may average eighteen or twenty loads.

Cross-examination by Mr. Corbin:

Q. You have about sixty hydrants fitted to fill carts here in town, haven't you?

A. I don't know, sir, anything about that.

Q. When you get through dropping a load of water you find a place to load up again?

A. Yes, sir; I have a hydrant right above here and one right here.

Q. Are you not aware that these wagons frequently load up with water and unload and get ready to start again in from six to twelve minutes?

A. I can do it quicker than that.

Q. You can take in the load and put it out in less than six minutes?

A. No; not put it out in six minutes; I can load it in about two minutes.

RAYMOND BAZLEY a witness produced and offered by the defendant, sworn,

Direct-examination by Mr. Corbin:

Q. Were you employed by the Tintern Manor Water Company?

A. Yes, sir.

Q. Did you go out to observe how much the water carts were doing in a day?

A. I did.

Q. When was it?

A. On Labor Day; last Labor Day.

Q. Did you follow a cart all the way to see what it did?

A. I did.

Q. What cart was it, and what the result?

A. It was the team from the Elberon Engine Company.

Q. How long did you follow it? Have you got the hours there, and minutes?

A. Yes, sir.

Q. When did it begin and quit?

A. It started 7.43 in the morning first fill.

Q. When did it quit?

A. 4.35.

Q. How many loads did it put on the streets in that time?

A. Thirty-four.

By the Court:

Q. In nine hours?

A. Yes, sir.

Q. Have you got down the minute when it took every load?

A. Yes, sir.

Q. Just read some of those to give an idea, on this day?

A. Filled 7.43, 7.54, 8.04, 8.13, 8.40, 8.52,9.05,9.11.

Q. Six minutes?

A. Yes, sir. 9.20, 9.45, 10.12, 10.20, 10.26, 10.35, 10.50, 11.01, 11.15, 1.35.

By the Court:

Q. He put out 34 loads in nine hours?

A. Yes, sir.

Q. Give the rest of them?

The Court: What is the use?

Q. What streets were those on?

A. On Lincoln Avenue, part of Ocean Avenue.

Q. From what does he fill? Where does he get his water?

A. There was one hydrant on the corner of Lincoln and Ocean.

Q. You need not go to any particular one, they are all along the street?

A. All along; yes, sir.

Q. Do you know how many there are they can fill from?

The Court: The map shows; sixty.

Adjourned to Wednesday morning, 10 o'clock, May 4, 1904, at Chancery Chambers, Newark, N. J.

May 4, 1904.

Continuation of examination, pursuant to adjournment, at Chancery Chambers, Newark, N. J., in the presence of the counsel as before.

RAYMOND BASLEY, recalled:

Cross-examination by Mr. McCarter:

Q. You are employed by the Water Company?
A. I was last summer; yes, sir.
Q. And you were at the time you went down toward Elberon to see this loading?
A. Yes, sir.
Q. How did you happen to go that day? Who sent you?
A. I was sent by my employer.
Q. Who sent you?
A. Mr. LaMonte.
Q. How did you know where to go to?
A. I was sent to this certain place.
Q. This certain place?
A. Yes, sir.
Q. What time did you get there?
A. I was there about seven o'clock.
Q. Do you ordinarily commence to water as early as that there?
A. Yes, sir; in the summer.
Q. Are you there to know yourself?
A. I was there; yes, sir.
Q. I mean ordinarily, every day?
A. No; I ain't there every day; I was around there almost every day though.
Q. Where do you live?
A. Long Branch.
Q. What part of Long Branch?
A. Garfield and Main Avenue part.
Q. That is about two or three miles from where you saw this loading?
A. A mile and a half.

Q. You are not there every morning?

A. No.

Q. You don't know whether they commence at seven o'clock or eight o'clock?

A. I went down there collecting.

Q. You don't know whether they commence at seven o'clock or not, do you?

A. Not exactly; no.

Q. Now, you confine yourself yourself to what you know. Now, Mr. LaMonte told you to go down that morning?

By the Court:

Q. Did you have any conversation with the man who was driving the wagon?

A. No, sir.

Q. And you remained there all day?

A. All day; yes, sir.

Q. Take your lunch with you?

A. Yes, sir.

Q. Took your lunch along?

A. Yes, sir.

Q. And how late did you remain there?

A. I remained there until he put up; I didn't take my lunch; I stayed there.

Q. Didn't you have anything to eat all day?

A. Yes, sir, I stayed there.

Q. Did you have any conversation with this man during the day?

A. No, sir.

Q. He didn't know you were there?

A. He know I was there; he saw me there.

Q. What was this man's name?

A. I don't know his name.

Q. And you kept that tally?

A. Yes, sir.

Q. How late did you remain there?

A. Until he put up the wagon.

Q. What time was that?

A. About half past four.

Q. Where did he take the wagon?

A. In the Elberon stables, the engine stables.

Q. How did you know where he started—Mr. La Monte told you that?

A. No; I was there when he came out of the stable and I watched the first place he filled.

Q. You followed him to the place he filled?

A. Followed him; yes, sir.

Q. Your directions were to go to the stable, and you went to the stable?

A. I went right near the stable and watched him when he came up, and followed him then.

Q. How far was the stable from the place he filled?

A. About a block in back of the stable.

Q. Did you ever count any other days?

A. No, sir.

Q. What day did you say this was?

A. Monday, September first.

Q. When were you directed to do this thing?

A. On Saturday night.

Q. And where was this pipe that he drew from this hydrant?

A. There were several pipes he drew from.

Q. Where were they?

A. There was one right by the station, and one on the corner of Lincoln and Ocean, and there was one on the park.

Q. And how far did he go between drinks, so to speak?

A. He filled at the station hydrant, and then he would go down to the hydrant, corner of Ocean and Lincoln, and then around the park.

Q. Ocean and Lincoln, that is right down from the station?

A. Yes, sir.

Q. Is the avenue that leads from Ocean Avenue to the station known as Lincoln Avenue?

A. Yes, sir.

Q. He would go then from the station to Ocean Avenue?

A. Yes, sir.

Q. And then he would refill?

A. Yes, sir.

Q. And do you know whether he emptied or not?

A. Certainly.

Q. How do you know?

A. I watched him.

Q .How do you known whether it was empty?

A. Well, it wasn't likely he would fill unless he was empty.

Q. He might have been making a test, you know, he might have been filling up when he was half empty?

A. I don't know about that.

Q. Your idea is that one trip from the station to Ocean Avenue up Lincoln Avenue exhausts the wagon?

A. Yes, sir, more than exhausts it sometimes; it more than exhausted it sometimes.

Q. More than exhausted it?

A. Yes, sir.

Q. Why?

A. Didn't have enough water to last on that street.

Q. What is the difference? Why does it last more sometimes than another?

A. Sometimes he would wet and then turn around and go back and wet the other side.

Q. You mean on this day?

A. Yes, sir.

Q. Then where would he go after he filled there?

A. He would go to the hydrant on the corner of Lincoln and Ocean.

Q. Then where did he go?
A. Then he went down to the park.
Q. Along Ocean Avenue?
A. Along Ocean Avenue; yes, sir.
Q. And he would fill again?
A. Yes, sir.
Q. That is one block?
A. Yes, sir.
Q. Then he would fill at that corner, would he?
A. Yes, sir.
Q. And where did he go from there?
A. Up Park Avenue.
Q. Towards the station again?
A. No; Lincoln Avenue leads to the station.
Q. When he went from Ocean Avenue towards Park Avenue didn't he go west?
A. From Lincoln to Park; yes.
Q. Yes. And isn't the station west from Ocean Avenue?
A. No; he went north when he went from Lincoln to Park, down Ocean Avenue.
Q. After he got to the corner of Park Avenue and fil'ed again he then went down Park Avenue?
A. He went west.
Q. Went west?
A. Yes, sir.
Q. The station is west from Ocean Avenue?
A. Yes, sir.
Q. Where did he go after that?
A. He refilled on Park Avenue and took in Elberon Avenue.
Q. Took in Elberon Avenue?
A. Yes, sir.
Q. That is south?
A. It is a short street between Lincoln and Park.
Q. Is it south?
A. It is south from Park, yes, sir.

Q. That is right, isn't it, it is south. So he went around a square, didn't he?

A. Yes, sir.

Q. Just went around the block?

A. Yes, sir, down to the station.

Q. Well, that is how far?

A. About a block from Lincoln Avenue to the station.

Q. What he did was to commence here at the station, go up Lincoln Avenue to Ocean Avenue, north on Ocean Avenue to Park Avenue, west on Park Avenue to Elberon Avenue, south on Elberon Avenue to where he commenced, and right around that block? Is that right?

A. He went from Elberon Avenue down again to the station.

Q. I understand,—made a jog to the right again?

A. Yes, sir.

Q. Going right around and around one block?

A. Yes, sir.

Redirect-examination:

Q. Did you show the driver that you were watching him, or did you try to keep out of his way?

A. Kept out of his way as much as I could.

Q. Didn't you communicate with him at all?

A. No, sir.

Q. You tried to keep out of his sight, did you?

A. Yes, sir.

JOHN ENRIGHT, sworn.

Direct-examination by Mr. McCarter:

Q. You live where?

A. Freehold.

Q. What position or connection have you with the water supply of Freehold?

A. I am a memeber of the Board of Water Commissioners.

Q. Is that a public supply there?
A. Yes, sir.
Q. That is to say, owned by the town?
A. Yes, sir.
Q. How long has it been in operation?
A. Since 1890.
Q. What is the source of your supply?
A. Artesian wells.
Q. Driven where in connection with the town?
A. About a mile and a half from the Court House; about a mile.
Q. In which direction?
A. In a northerly direction.
Q. Is that out beyond the monument, that direction?
A. Yes.
Q. How much did the works cost you?
A. $55,000.
Q. How many taps have you?

The Court: You mean how many water takers, taps?

Q. Taps. You may look at the memorandum you have?
A. We have four hundred taps.
Q. Have you any hydrants?
A. You mean fire hydrants?
Q. Fire hydrants?
A. Yes, sir.
Q. How many?
A. Fifty-five.
Q. Fifty-five fire hydrants?
A. Yes, sir.
Q. Do you charge yourselves with anything on account of fire hydrants?
A. We do not.
Q. Have you any sewerage system?
A. Yes, sir.

Q. Do you have any flushing of the sewer system?

A. Yes, sir.

Q. Do you charge yourselves any thing for that?

A. No, sir.

Q. Have you a schedule of rates?

A. Yes, sir.

Q. Will you produce it?

A. (witness producing paper) Those are arbitrary rates (indicating); here are the meter rates.

Q. Have you now meter rates?

A. Yes, sir.

Q. Compulsory for everybody?

A. No; only public buildings.

Q. The next card you hand me is the schedule of rates where you do not use the meter?

A. Yes, sir.

Q. And the other, the meter rate, is for use in public buildings and things of that kind?

A. Yes, sir.

Q. And those are the two sets of rates that obtain to-day?

A. Yes, sir.

Marked Exhibits C14 and C15.

Q. Do you have any sprinkling?

A. Yes, sir.

Q. Any sprinkling, street sprinkling?

A. Yes, sir.

By the Court:

Q. City do that, town do that?

A. The town does that, yes, sir, no charge made.

Q. Now what about your making both ends meet?

A. Well, we have always done that; yes, sir.

Q. Done that?

A. Yes, sir.

Q. With the schedule of rates that you have produced?

A. Yes, sir.

By the Court:

Q. What is your gross income?

A. Well, the income for the past year, fiscal year ending April 1st, was $6,600 for the water. We have a sewer system connected with and run by the same board.

By the Court:

Q. Yes, but I want to get at what you received for your water rents?

A. Yes, $6,600.

By the Court:

Q. And what is your population? That is, in the range of your water supply?

A. 3,200.

By the Court:

Q. It is about Two dollars a head then?

A. Yes, sir, about Two dollars per capita.

By the Court:

Q. Of those three thousand population do they all take?

A. No, sir.

By the Court:

Q. What proportion have had water introduced into their houses?

A. Well, I should have to estimate that.

By the Court:

Q. You have got to estimate it—it takes an estimate?

A. I suppose we have about, I think it stands about the relation of four to six.

By the Court:

Q. About two-thirds have got the water?
A. Yes, sir.

By the Court:

Q. Then about a little over two thousand people supplied with water?
A. Yes, sir.

By the Court:

Q. Besides those who steal from their neighbors, I suppose? Then it is about Three dollars a head?
A. Three dollars a head for those who take.

Examined by the Court:

Q. Your income from the water takers?
A. Yes, sir.
Q. One more question. How deep do you go for your water?
A. Well, I have to explain—we went a mile and a half
Q. No; how deep in the earth?
A. Point where the wells are sunk, about sixty feet.
Q. Then you strike water bearing gravel?
A. Yes, sir, under the marl.
Q. Does that water rise to the surface?
A. Yes, sir, about five feet above.
Q. It will stand about five feet above?
A. Yes, sir.
Q. How many wells have you got?
A. We now have ten wells.
Q. And they cover a space, scattered over a space of about how many acres?
A. About three acres.
Q. What size are the wells, internal diameter?
A. Four inches.

Q. Have more than one pump?

A. We have three pumps; we have two steam pumps and one power pump.

Q. What do you mean by power pump?

A. Water power pump.

Q. You have got some water power there?

A. Yes, sir; the town owns that.

Q. Do you use a stand-pipe?

A. Yes, sir.

Q. How high is your stand-pipe?

A. The stand-pipe is one hundred feet, from the base of the stand-pipe.

Q. That is higher than the town, I suppose?

A. The base of the stand-pipe, no, is not; the base of the stand-pipe is about on the level with the Court house.

Q. Then you have got about a hundred feet head through the town?

A. Hundred feet head, yes, sir; we have about forty-three pounds pressure.

Q. See any signs of the water supply not being sufficient? Have you had to drive any more wells since you started?

A. We had to put in what is called an air lift or air pressure.

Q. In order to drive the water up?

A. In order to drive the water up; yes, sir.

Q. That is to say, you took so much water that it wouldn't suck any more?

A. Yes, sir.

Q. Then in order to meet that you pump it down?

A. Under the water.

Q. Then you use water—reduce the level of the water in the earth from four feet above the surface down to thirty feet below?

A. Well, not quite so far as that.

Q. Well, twenty-five?

A. Yes; probably that; I doubt whether a steam pump would reach thirty feet below.

Q. No, it wouldn't it would reach about twenty-five?

A. If it was working well it would; yes, sir.

Further direct-examination by Mr. McCarter:

Q. How much of the time is this air pump at work, your air lift, whatever you call it?

A. That varies as to the time of year; in the summer time when we are using water in dry spells, why, we have to in a few occasions use it all the time.

Q. And when you do use it you don't pump the water direct into your stand-pipe then, but into a—

A. Into a receiving well.

Q. A receiving well?

A. Yes, sir.

Q. Then you have to pump from there again into your stand-pipe?

A. Pump from the receiving wells into the stand-pipe.

By the Court:

Q. This air pump you have to connect with each one of your—

A. We have only two; two are sufficient to receive that; all the other wells are siphoned into the receiving well.

Q. Does your supply vary materially in winter and summer?

The Court: Consumption does.

Q. Consumption I mean?

A. Consumption varies; oh, yes, very much.

By the Court:

Q. Have you ever had any test to see whether your supply actually varies or not, whether there is any less water, whether the water rises a less height when it is in its natural condition in the

summer than in the winter? You don't know about that, I guess, do you?

A. It is the same.

By the Court:

Q. It is the same?

A. The pressure is the same as it was in the beginning.

Q. Have you much of a summer increase in population at Freehold?

A. No, not a great deal.

Q. Then you use the most water when, winter or summer?

A. In the summer time, because of the sprinkling, the sprinkling of the streets.

Q. About how long a time do you sprinkle?

A. We begin about now and carry it on until, well, into October, 15th, of October.

Cross-examination by Mr. Corbin:

Q. How did you raise the $55,000 to pay for the works?

A. By bonding the town.

Q. What interest do you pay on the bonds?

A. Four per cent.

Q. The bonds are all still outstanding, are they?

A. No, sir.

Q. Paid off some?

A. Paid off some; yes sir.

Q. How much did you pay off?

A. I can't give that accurately. We have paid off the sewer bonds and the water bonds together.

Q. You run your sewer and water business together, don't you?

A. Yes, sir.

The Court: Yes; the bill is made out that way.

Q. What is the income of your sewer department aside from your—

A. That is about $2,300 this last year.

By the Court:

Q. Then the Six thousand dollars you speak of is not for water rent?

A. Yes; just for water.

Q. So your total income for both is about Eighty-eight hundred dollars, Sixty-six hundred and Twenty-three hundred—Eighty-nine hundred?

A. About Nine thousand, isn't it?

Q. And how long have you had them both in?

A. We have had the water since 1890; the sewers were put in, I think it was in 1893.

Q. Didn't you have to levy some taxes to help out your Water Department for a while, pay interest on the bonds and so on?

A. Not for the interest.

Q. For what?

A. For the bonds themselves.

Q. What did you levy taxes for?

A. We levied a general tax of Five dollars a thousand for town purposes, out of which they have paid off the bonds, taken care of the interest, together with the amount paid over by the Water Board to the Board of Town Commissioners.

Q. And about how much a year have you had to take out of the general town levy for account of water and sewers?

A. For paying off the bonds? Do I understand the question for the current expenses or the payment of bonds? Current expenses and interest, that has always been taken care of by the income from the—

By the Court:

Q. The tax then is to reduce the bonds?

A. Yes, sir.

Q. Reduce the principal of the bonds?

A. Yes, sir; it varies, the income, from year to year, and I am giving approximately.

Q. Your income increases from year to year, does it?

A. Yes, sir; it increases; we paid over this year $4,200 after paying all current expenses, we paid to the Town Commissioners.

Q. And they use it for paying interest?

A. Interest and principal, yes, sir.

Q. And extensions—I suppose you have had to put in extensions?

A. Yes, sir; extensions, yes, sir.

Q. Now, take what I call Kellogg's standard dwelling house and tell me what your water rent would be on that. One kitchen sink with hot and cold water?

A. Six dollars.

Q. Wait. I am going to give you the whole house. One water closet?

A. Three dollars.

Q. One bath tub?

A. Three dollars.

Q. One washstand and bath room?

A. One dollar.

Q. Three laundry tubs?

A. Two dollars.

Q. Now, total?

A. Total is Fifteen dollars.

Q. Have you any takers of water besides for domestic uses?

A. One or two.

Q. Any railroads to take?

A. Yes; the railroads take it.

Q. Any factories?

A. Factories; yes.

Q. How much do you get out of railroad and factories and other large takers?

A. I haven't that.

Q. Can't you tell approximately?

A. Yes; it hasn't been a great deal of late.

By the Court:

Q. Has not?

A. No, sir; it was at one time, but the railroads have their own and only come to us in case of emergency.

Q. Out of your Sixty-six hundred dollars for water would as much as Two thousand of that come from railroads and hotels, &c?

A. No, sir. Railroads and hotels?

Q. Yes, others who take it by the measure in factories, large takers by measure?

A. That would include the Court House, I suppose—county.

Q. I don't know how you furnish that?

A. We furnish the Court House also with water and the jail; they are large consumers.

Q. Approximately, what do you get from those large and unusual takers, I will call them.

A. Probably runs Two thousand dollars from the large takers. I now infer that you mean the meter, that is, we have all large consumers metered.

Q. What do you charge for metered water?

The Court: He has got it here (referring to paper furnished by witness).

Q. I haven't had a chance to see it.

The Court: I will give it to you. It is from $1.50 a thousand gallons down to 15 cents a thousand gallons.

A. Pardon me. Didn't you misread. From $1.50 you said.

The Court: $1.50 for six thousand gallons.

Witness: That is right.

The Court: It is 25 cents a thousand gallons, for the start.

Mr. Corbin: Up to how much?

The Court: Down to 15 cents a thousand gallons, according to the amount used.

Mr. Corbin: That is the point I wanted to get. The stopping point is between that.

The Court: I am not used to gallons, and I am not used to putting it in this way in quarters at all, so I can't think it out. 25 cents a thousand gallons is 25 cents for 133 cubic feet.

Q. That is for the man that taxes six thousand or less per quarter, isn't it?

A. Yes, sir.

The Court: It is a little less, I think, than the other schedules that were put in. It is easily put into cubic feet.

Q. That is, the man that takes from six thousand gallons or thirty thousand gallons per quarter is charged 25 cents per thousand?

A. 25 cents per thousand.

By the Court:

Q. And twenty-five cents for 133 cubic feet, and the man that takes from thirty thousand to thirty-seven and a half thousand pays twenty-four cents?

A. Yes, sir; it is one cent for every increase of seventy-five hundred gallons.

By the Court:

Q. Deduction?

A. Yes, sir; one cent per quarter.

By the Court:

Q. Can't you send us three or four more of these?

A. Yes, sir; I can send them immediately.

The Court: I will give you some advice. You better put in meters.

A. We have considered the meter question, and we find if we put the meter in we will have trouble and if we don't put it in we will have trouble. We own forty meters.

Q. What is your minimum rate to a dwelling house?

A. Six dollars.

Q. Isn't it Seven?

A. No, sir.

Q. "Hydrant for family use, or one faucet, Seven dollars?"

A. "Hydrant in yard," doesn't it say?

Q. It is under the head of hotel and large boarding house?

A. Yes, sir.

Q. "Hydrant in yard or kitchen, Six dollars." That is your minimum rate?

A. Yes, sir, that is our minimum rate.

Q. Now, how much of the year can you depend on this water power to do your pumping for you?

A. In the winter time often times we have two months that we can use it for pumping but not for lifting the water.

Q. For pumping it out of the ground?

A. Yes, pumping it out of the receiving well.

By Mr. McCarter:

Q. Into the receiving well or out of it?

A. Pumping out of it. We lift with the air-lift the water into the receiving well.

Q. You don't have to do that all the year, do you?

A. Yes, we do that all the year.

Q. Your wells recede all the year around, do they, so you have to use your air-lift?

A. No; they don't recede all the year around, but we find it more economical to use the air-lift and get a large quantity of water so we can pump with the power pump to full capacity.

Q. How big is that reservoir, receiving reservoir?

A. That is ten feet in diameter and twenty-six feet deep.

Q. How big is your tank on the hill?

A. Stand-pipe?

Q. Yes?

A. That is twenty feet in diameter, one hundred feet high.

By the Court:

Q. It is a large one?

A. Quite large; yes, sir.

Q. How much of the year does your water power plant run?

The Court: Water enough to run it summer time?

A. Yes, sir, we use it.

Q. It runs all the time?

A. Yes, we use both systems.

Q. Your water wheel is running all the year around?

A. Yes, sir; we pump by pressure in the morning with steam, and in the afternoon we run with water.

Q. Do you run your steam plant night and day?

A. No, sir.

By the Court:

Q. Fired up night and day?

A. The fires are banked at night.

Q. A few hours a day answer the purpose, I suppose?

A. This season of the year a few hours a day.

Q. Have you any idea how much water you consume a year or day?

A. We used to think we knew, but the registering on the pumps are so defective, and we go by that wholly, and of course the slippage in the pump varies the amount so much.

Q. Approximately what do you estimate?

A. About probably one hundred and fifty thousand gallons a day.

By Mr. McCarter:

Q. What is the population of Freehold?

A. About thirty-two hundred now.

The Court: About two-thirds use the water.

JONN L. COFFIN sworn.

Direct-examination by Mr. McCarter:

Q. You live where?

A. I live in Asbury Park.

Q. And have you anything to do with the water supply down there?

A. I am superintendent of the Department of Water and Sewers of the City.

Q. Does the City own its own water supply?

A. It does.

Q. And what system have you? How do you get your water?

A. From artesian wells.

Q. Where are they located?

A. About three-quarters of a mile below the City limits, south.

Q. South?

A. Yes.

Q. About what supply of water do you use?

A. An average for the year of about five hundred and fifty thousand gallons for twenty-four hours.

By the Court:

Q. That is much greater in summer time than in winter?

A. Much more in summer time than winter.

The Court: What we want, with due respect to counsel is your maximum in summer.

Q. What is your maximum supply, as far as you know, in summer?

A. Our maximum supply is thirteen hundred and fifty thousand gallons, our maximum consumption is about eleven hundred thousand.

Q. Are you now giving your estimates from the pump registers?

A. Yes, sir; from the pump registers.

Q. Do you make any allowance, or is that the gross figures?

A. No; that is the pump registry.

Q. Pump registry?

A. Yes, sir.

Q. How far it is accurate you don't know?

A. No; we don't; we take that as a basis; it isn't accurate, of course.

Q. You supply both Asbury Park and Ocean Grove?

A. No, sir; Asbury Park alone.

Q. How many taps have you?

A. About thirteen hundred.

Q. Do you charge yourself anything for fire hydrants?

A. No charge has been made.

Q. Do you do your own sprinkling?

A. We do, but we have a separate system for the sprinkling line, although we use the hydrant water in addition to that.

By the Court:

Q. You don't rely on your hydrant water, your water works water, for sprinkling?

A. No.

By the Court:

Q. Get it out of a river or somewhere?

A. We take out of Deal Lake, separate line altogether.

Q. You do use some of it for sprinkling in summer?

A. Yes, sir.

Q. Of the regular supply for sprinkling?

A. Yes, sir.

Q. And do you make any charge yourselves for that?

A. No; we don't.

Q. About your sewers, do you flush them there?

A. Very little,—only when stoppages occur, that is all.

Q. Not regular?

A. No, sir.

By the Court:

Q. The ocean flushes your sewers?

A. No, sir; we discharge into the ocean, but the ocean does not back up into the sewers.

Q. What kind of rates have you got down there?

A. Meter rates.

Q. When did you do that?

A. In 1900, April first, 1900, I think is the date.

Q. What did you have before that?

A. We had flat rates.

Q. Have you anything here showing what the old flat rates were? These are the papers; you may select from them. Those were the old flat rates?

A. Yes, sir.

The Court: What do you call flat rates.

Q. What do you mean by flat rates, the Vice-Chancellor wants to know?

A. Arbitrary charge according to rooms in the house.

Q. Without regard to meter?

A. Yes, without regard to meter.

Q. Does this schedule you now produce show those rates?

A. It does.

Marked Exhibit C15.

Q. Now what, about the meter rate? Have you got that here?

A. Yes, sir.

Q. Does the paper which you now look at, entitled, "Ordinance No. 82," give the meter rate?

A. It does.

Marked Exhibit C16.

Q. Briefly, then, what is the meter rate?

A. $1.50 for a thousand cubic feet.

Q. Any sliding scale?

A. No, sir.

Q. Now, have you made both ends meet under this plan?

A. The ordinance has just gone into effect; previous to this it was one dollar, and we estimate that the $1.50 rate will make both ends meet.

Q. Charging yourself nothing for hydrant service then?

A. No.

Q. Or the other public uses?

A. No.

Q. Is there any other public use for the water that I haven't mentioned?

A. There are horse troughs.

Q. How many?

A. Two or three; I think three; there are public buildings, the fire houses, and Council Chamber; there are three public buildings, that is all. Well, we also furnish water for sprinkling at the flower beds where the avenues expand toward the ocean, where the avenues increase from one hundred to

three hundred feet in width toward the ocean we furnish water for sprinkling of the lines and flower beds there; we also furnish a drinking fountain at the Beach, and one on Main Street near the station. Those are about all the public purposes.

By the Court:

Q. I understand that prior to the first of April, 1904, your meter rates were one dollar for a thousand gallons?

A. Thousand cubic feet.

By the Court:

Q. No, thousand gallons this is?

A. No; one thousand cubic feet.

By the Court:

Q. Oh, you are right, thousand cubic feet.

A. That is seven thousand five hundred gallons.

The Court: That is fifteen cents a hundred; that is the cheapest of any that has been presented here.

Q. How many wells have you?

A. We are using seven; we have nearly thirty.

Q. Pretty nearly thirty?

A. Yes, sir.

By the Court:

Q. They all go to one layer of gravel though?

A. No, sir; we have two strata, seven hundred feet in depth and eleven hundred feet in depth; we have five wells from the seven hundred feet and two wells from the eleven hundred feet stratum.

By the Court:

Q. It is about twenty years ago since you first put those in?

A. Yes, sir; nineteen years; 1885.

By the Court:

Q. How much money did you spend on it then?

A. We started in with Sixty thousand dollars; we have spent since then amounting to One hundred and ninety thousand dollars in bonds and from our earnings an additional sum, making the present cost about Two hundred and fifty thousand dollars.

By the Court:

Q. About $250,000 it has cost you?

A. Yes, sir.

By the Court:

Q. Have any of the bonds been paid off by taxation?

A. No, sir.

By the Court:

Q. They are all outstanding?

A. They are all outstanding.

Q. And what rate of interest are you paying on them, some five aren't you?

A. Five per cent. on a portion, and four per cent., I think, on $22,500.

By the Court:

Q. Five per cent. on the rest?

A. Five per cent. on the rest; the total interest charge is $9,280 a year.

By the Court:

Q. How can you get that at 5 per cent. on $250,000?

A. No, but our bonds are but $190,000.

By the Court:

Q. Then you have spent some out of the general taxation?

A. Out of our earnings.

By the Court:

Q. What is your population in winter?

A. Approximately five thousand.

By the Court:

Q. And in Summer how much?

A. Well.

By the Court:

Q. You must have an estimate?

A. No one can tell you; it may be Twenty-five thousand, it may be Thirty-five thousand; I should place it perhaps between the two, may be Thirty thousand; they are going and coming; we can't make an estimate.

By the Court:

Q. What do you estimate the difference in the consumption between Summer and Winter?

A. The Winter consumption will run from 275,000 to 300,000 gallons; the August consumption last year reached 1,135,000, I think; 1,035,000, I should say, per day.

By the Court:

Q. You spoke about eleven hundred thousand?

A. Eleven hundred thousand as the maximum of the Summer demand; that is, we run about that, may be a few thousand over.

By the Court:

Q. Have you any idea how much you use for sprinkling, that comes out of your pump water for sprinkling?

A. Part of it.

By the Court:

Q. Have you any idea how much?

A. Of the artesian water? No, sir, but I have estimated as high as two hundred thousand gallons a day that we used last summer.

By the Court:

Q. From the artesian?

A. From the artesian water, street sprinkling line water; but that is mere conjecture.

By the Court:

Q. I understand, it must necessarily be so. You think that this dollar and a half per thousand cubic feet will make it pay?

A. We think it will.

By the Court:

Q. Will you please tell me how much your total income has been, gross?

A. Last year, nearly $17,000.

By the Court:

Q. And that didn't pay?

A. No, sir, by Five thousand dollars.

By the Court:

Q. How far have you introduced meters?

A. All connections within the city limits are metered; we have about forty on the outside which we propose to turn over to another Company, on the outside that are not metered; all others are metered.

By the Court:

Q. You found that the comsumption was very much reduced by the introduction of meters, didn't you?

A. Yes, sir; it is the only way to sell water. I

have had a fight on it in Asbury Park, and succeeded.

Q. Do you ever use all of your thirty wells?

The Court: Do you use them all, all your wells?

A. All of our seven wells we use.

Q. How many more have you?

A. We have twenty odd.

Q. Twenty odd?

A. Yes, sir; but they are the shallower wells, and some in other localities that have ben abandoned.

Q. You have all the water you want, don't you?

A. We do at present, yes, sir.

Examined by the Court:

Q. You first satisfied yourselves with the upper strata?

A. Yes, sir; about forty feet in depth.

Q. And you didn't get water enough?

A. For the time being, but the wells gave out.

Q. And then you went down to the next strata?

A. We did.

Q. And you had to go still further than that yet?

A. Yes, sir.

Q. So you did have some trouble?

A. We did.

Q. Found yourselves short of water?

A. Yes, sir.

Q. You think you have got enough now?

A. We have.

Q. By the use of the meter system?

A. Yes, sir.

Q. How near does that water rise to the surface?

A. In the original four hundred foot level it came about 28 feet above the surface for a time; then it gradually went down. I presume as the lane was

tapped in other places; we went to the seven hundred foot level and that raised to about the same height. To-day those walls will stand down to fifteen feet below the level; on our eleven hundred foot level we get flowing wells—we have used two wells about nine years—and even in August, when our demand is the greatest, in five minutes after the pump has been stopped the water will flow over the top of our reservoir.

Q. How high is your reservoir?

A. Six feet above.

Q. When you are pumping full blast—I will use the expression—how much does the water fall below the level by pressure guage?

A. That we can't tell; we pump by compressed air method, forcing the air down into the bottom of the well, letting it bring the water up with it.

Q. You have a different air pipe for each well?

A. Yes, sir.

Q. Well, have you or have you not substantially abandoned several of the wells that you sank in the first place?

A. Oh, yes; all of the four hundred foot stratum wells.

A. Have been abandoned.

Q. How about the seven hundred?

A. The seven hundred, a few perhaps three or four in the vicinity of our present pumping station, and a number in the vicinity of another pumping station which has been abandoned entirely, an auxiliary station which we have put up in Second Avenue.

Q. The fact is that you found other people drawing on that same strata effected your flow?

A. That is what we judged.

The Court: I guess there is no doubt about it.

Further direct-examination by Mr. McCarter:

Q. What is your minimum rate by your meter system?

The Court: It is all one.

A. The rates are the same.

Q. Have you a minimum charge?

A. The minimum charge is $1.50 for three months, Six dollars a year; we make it quarterly.

By the Court:

Q. What is that (referring to paper)?

A. That is our water ordinance that has been amended by this new ordinance.

Cross-examination by Mr. Corbin:

Q. I see by this water bill for 1903, which you have produced that you appear to have these flat rates for the year 1903?

A. Yes, sir.

Q. When were they abandoned?

A. In 1900 for the City; those covered only about forty attachments we have in West Asbury outside of the City.

Q. The water has been measured for the City then since 1900?

A. Yes, sir; 1901, we commenced our measureing.

Q. Is this flat rate the rate you used in the City previous to 1900?

A. Yes, sir.

Q. Tell me what the rate would be on a eleven or twelve room house?

The Court: I don't think you need bother with that.

Q. It is $14.50; that is what it is.

The Court: You can do it just as well.

Mr. Corbin: $14.50 is the Kellogg flat rate as we figure it.

Q. Your meter rate for the last three or four years has been a dollar a thousand cubic feet, has it not?

A. Yes, sir.

Q. And you found that didn't pay?

A. No, sir.

Q. And now you have made it a dollar and a half?

A. Yes, sir.

Q. Your minimum rate for any taker; Six dollars a year?

A. Yes, sir.

The Court: That is it; and he don't know whether that is going to pay him or not; he thinks it will.

Mr. McCarter: Make no charge for hydrants there.

Q. Last year you got $17,000, and you ran short about $5,000?

A. Yes, sir.

Q. That is, you ought to have had $22,000 to come out whole?

A. Yes, sir.

Q. What did you have to pay out of that $22,000, interest?

A. Yes, sir.

Q. $9,250 interest?

A. $9,280 interest.

Q. And the rest was for maintenance?

A. Maintenance and general operating.

Q. You are not retiring any of your bonds?

A. No, sir.

Q. Asbury Park is a pretty small area of territory, isn't it?

A. Yes, sir, about five hundred acres.

Q. About five hundred acres all told?

A. Yes, sir.

Q. Less than a square mile?

A. Yes, slightly.

Q. And your distributing system of mains are mostly very small ones?

A. Four inch mains; yes, sir; twelve inch is our largest; we run from 12 down to 3; very little of the 3.

Q. Your distributing mains are chiefly four inch, aren't they?

A. Well, yes, I think possibly we have more four-inch pipe than any other.

Q. And some six inch?

A. Yes, sir.

Q. Have you anything between six and twelve?

A. Yes; we have eight and ten.

Q. Now, you lack to-day a proper large system of mains, don't you?

A. For fire purposes, we do; yes, sir.

Q. You are lacking in proper fire service?

The Court: You don't think you are properly equipped for fire?

A. No.

The Court: I agree with you.

Q. You are contemplating laying big ones through your system, aren't you?

A. I can't say that; I don't know whether contemplating or not; if required.

Q. How many fire plugs have you got?

A. About seventy-five.

Q. What pressure do you keep up?

A. About fifty-five pounds.

Q. Have you a stand-pipe?

A. Yes, sir.

Q. How high?

A. 125 feet.

Q. Stands on the general level of plains there, I suppose?

A. Yes, about average level.

Q. You say you have got water enough now, but haven't you reported within the last year or two that your water supply was running short and something else had got to be done?

A. No; not that it was running short.

Q. That you were scant?

A. But that it is liable to run short in future; my report was based on the inadequacy of the fire supply more than anything else.

Q. And as the years go by you have to lift the water from rather a deeper level from year to year, don't you?

A. Yes, sir, that is true, only that we have changed from the four hundred foot level to the seven hundred and eleven hundred foot level; we find our present wells are holding out.

Q. From those deep levels?

A. Yes.

Q. You have had some trouble with the iron in the water, haven't you?

A. Yes.

Q. Your water is somewhat contaminated?

A. Yes, very much so.

By the Court:

Q. Very hard, isn't it?

A. Well, no, not hard, but very much impregnated with iron.

Q. Those artesian supplies from the sand on the sea shore are not very satisfactory for domestic supply for that reason, are they?

Mr. McCarter: Speak now of your own knowledge.

The Court: What do the water experts say about your water?

A. The water is strongly impregnated with iron;

at the 700 foot depth it is so that it can be used for domestic purposes, although it is objectionable to some; at the 1100 foot level it is objectionable for domestic purposes for the reason that it has a distinct odor, taste and color; that we remove by filtering; we take out 97 per cent. of the iron.

Mr. McCarter: Just as they do at Long Branch.

Q. You use a filtration process which is intended to remove iron, do you?

A. Yes, sir.

By the Court:

Q. Don't you have some acid in your filtration?

A. No, sir; we use no coagulum or chemicals of any kind, simply mechanic filtration.

By the Court:

Q. Is the water generally used for drinking purposes on the tables?

A. Oh, yes.

By the Court:

Q. Don't resort much to bottled water then?

A. No, not necessary.

By the Court:

Q. How about laundry purposes?

A. Perfectly good; we take 97 per cent. of all the iron.

By the Court:

Q. There is other hardness besides iron there, mineral substances?

A. Yes, but our water is considered fairly soft; it isn't hard by any means.

Q. Heretofore you have had to levy taxes to eke out the water account, haven't you?

A. Yes, sir.

Q. Always heretofore?

A. From the time that we put in the meter system the rates were dropped, the former rates were Three dollars.

Q. Weren't your meter rates formerly Three dollars a thousand cubic feet?

A. They were.

Q. Up to what year?

A. 1899, I think.

Q. Didn't you even then have to levy some taxes?

A. No, sir.

Q. Did not?

A. No, sir; not as a general rule; there may have been years when new work—required an additional supply of water.

Q. And you have fixed this rate of a dollar and a half a thousand cubic feet with the hope that it will pay your interest and running expenses?

A. Yes, sir.

By Mr. McCarter:

Q. Pretty strong hope, I think.

A. Yes, sir; that is the estimate.

Redirect-examination:

Q. What were your total receipts last year?

A. Nearly seventeen thousand dollars.

Q. And you came within how much of paying your expenses?

A. About five thousand dollars.

Q. Now you have increased fifty per cent. under this new schedule?

A. Yes, sir.

Q. And you are booming things down at Asbury Park and expect a bigger season, don't you?

A. Yes, sir.

Recross-examination:

Q. When you make interest charge you make it simply $9,250 on your outstanding $195,000 bonds?

The Court: You make your interest charge simply on what bonds are outstanding?

A. Yes, sir.

By the Court:

Q. You don't count anything for the principal, how long that has been invested in the works?

A. No.

The Court: They have cost $250,000, he says.

A. They have cost $250,000 of which $190,000 is in bonds outstanding.

Q. How many miles of mains have you?

A. Well, approximately fifteen; I couldn't give you the exact figures.

Q. Small plant?

A. Yes, sir.

By Mr. McCarter:

Q. How were that Sixty thousand dollars paid?

The Court: The extra sixty between one hundred and ninety and two hundred and fifty was paid by taxes.

A. Was paid by the earnings of the department.

By the Court:

Q. At a time when your earnings were more than your expenses?

A. More than our expenses; yes, sir.

Q. Is your sewer system run with your water department? Your sewer plant is run with your water department, isn't it?

A. Yes, sir.

Q. Same Board?

A. The same department.

Q. How much income do you have from that?

A. That has been changed this year; it will go in the general tax levy; they put in $3,500 for the operating expenses.

Q. Heretofore how much income have you had from your sewer plant?

A. We only took the sewer plant last April, and had nine months income from it.

Q. Which was how much?

A. That was about $6,500 to $6,800 I think.

Q. For nine months?

A. Yes, sir.

Q. Do you know how much more Bradley made out of it per year, or got out of it?

A. About $8,000 to $8,200 perhaps.

Q. Now, the two run together, the water and sewers run together?

A. Yes, sir.

Q. And you will have the income of the sewer department to help out?

A. No, sir; there is no sewer rent charged now; it was put in the general tax levy, the amount necessary to pay interest on the sewer bonds.

Q. How much sewer bonds?

A. Fifty thousand dollars; we paid him Fifty thousand dollars.

Q. Four per cent?

A. Four per cent; that is $2,000; $1,000 of that goes to the sinking fund, that makes $3,000; the salary list is $480, and balance $520 for repairs, and $1,000 for new work; $5,000 is the amount that has been estimated; but having a surplus left from last year, only $3,500 was put in the present year's estimate.

The Court: They make no charge now for the sewerage connection.

Q. That was put in the general tax levy.

A. Hereafter what the operating expenses are will be put in the general tax levy.

By Mr. McCarter:

Q. After you filter your water it is satisfactory, isn't it?

A. Yes, sir.

By Mr. McCarter:

Q. Entirely satisfactory for all domestic uses, drunk, and used for laundry pruposes, and general purposes then?

A. Yes, sir.

By Mr. McCarter:

Q. I don't think the good people down there drink much else, do they?

A. I hope not.

By Mr. Corbin:

Q. You mean it is satisfactory to you after you have gone through these motions?

A. Yes, it is, and to a great many others; they have so expressed themselves to me at least.

WELLINGTON LA MONTE, resumed for further

Direct-examination by Mr. McCarter:

Q. Can you give us the average consumption per year in gallons from the formation of the Long Branch Water Company to its consolidation with the Tintern Manor Water Company?

A. No, I can't, Mr. McCarter. I understood you to ask me for the year 1882, and we had no record for 1882, so I made you one for 1883, 1884 and 1885,

but I didn't understand that you wanted between that and the years I gave you on the schedule.

Q. Well, it was said as plain as day, and is right here in the notes. Give us what you can. We may have to get another adjournment then.

A. I understood you asked for only 1882; there are no records for 1882.

Q. You now produce a statement headed "Approximate number of gallons pumped for the years 1883, 1884 and 1885."

Marked Exhibit C17.

Q. Those are obtained from the readings of the what?

A. Strokes of the pump, record on the pump.

Q. Do you know what was the total income of the Long Branch Water Supply Company, gross and net, from the time of the earliest records down to the time of the consolidation?

A. (Witness handed counsel a paper).

Q. You now produce a statement. "Earnings, operating expenses and taxes from 1882 to 1899."

Marked Exhibit C18.

Q. Taken from the records of the old Long Branch Company?

A. Yes, sir.

Q. And they are accurately taken so far as you know, meant to be such?

A. Yes, sir. Now, the other schedule gives 1901 and 1902 and 1903; that you had the other day. Now, I will say there was one year out, and that is the year 1900. During that year the Tintern Manor Water Company came into possession, if I use that term, of the Long Branch Water Supply Company; the old Company paid part of the operating expenses for that year and the new part of the operating expenses for that year; the old Company had part of the earnings, or, in other words,

up to June first, 1900, and the new Company took them from that time, and I couldn't give you those records accurately; they don't show on the books.

Q. Do you know what the number of taps in Deal is?

A. (Witness handed counsel paper).

Q. You now produce record of the total number of taps in Long Branch Commission, Ocean Township, North; Long Branch Commission, Ocean Township west of the same, Seabright, Deal, Eatontown Township, Old Line Eeatontown Township, New Line and Shrewsbury Township?

A. Yes, sir.

Marked Exhibit C19.

Mr. Corbin: I call attention to the fact on that schedule the first five items are all in the limits of Old Ocean Township, for which this charter was taken out.

Q. What do you mean by the old line into Eatontown Township?

A. The old Long Branch Water Supply Company laid some pipes out in Norwood Park and at Cedar Avenue, West, Holleywood or West End, and that was part of the old system, and there were forty-nine taps in Monroe Park and on Cedar Avenue west.

Q. In the section known as Norwood Park?

A. Yes, sir.

Q. Right in the old Hoey district?

A. That is it; yes; I took that word so as not to mislead you.

Q. Now, this Shrewsbury Township line so called —

The Court: These are the whole number of taps in 1900.

Q. When you turned over?

A. Yes; no, these are the taps at present, April 1st, 1904.

Q. The Shrewsbury Township, is that line that runs around through—

The Court: Along just below the Shrewsbury River there?

A. Yes, sir.

Q. I mean the line that commences here at Little Silver and runs all the way around over into Seabright?

A. Yes, and from Newman Springs down to Oceanport.

Q. Fifty-five taps, total mileage how much?

The Court: We have got that already.

Q. I think the schedule you have given us, one of the schedules you have given us will answer the question. The next two questions I have noted, namely, revenue of the old Long Branch Water Supply Company, and also its operating expenses, that will show on this schedule.

The Court: All you have got to do is to do a little sum in arithmetic.

Q. Do you know the estimated supply derivable from the 47 and 7/10th square miles of shed at Newman Springs?

A. I haven't those figures at all; I couldn't give them.

The Court: I don't think his opinion is worth a snap, if you want to know, unless he is an experienced hydraulic engineer and has studied the matter for years.

Q. Perhaps you can help us this way. Do you remember, or not, whether the contract that you made with the construction company did not pro-

vide for a plant that would be equal to delivering twenty million gallons of water a day?

A. I believe the pumping capacity was to be that, and filter capacity twelve million.

Q. Filter capacity twelve million and pumping capacity twenty million?

A. Yes, sir.

Q. So you estimated your supply of water was going to be equal to your filtering and pumping capacity?

A. Yes, sir.

By the Court:

Q. They calculated their supply from that forty-eight acres was greater than their pumping plant that they put up; that is what you meant?

A. Yes, sir; it is necessary to have more pumps than you need at one time; one is liable to get out of order.

Q. Won't you describe generally the plant that you have at Newman Springs, what you have got there?

The Court: I will ask you a question before you commence on it, which, I think, subject to what Mr. Sherrerd may suggest, may have something to do with this case. I don't want to forget you. You have a little pond there, a little reservoir?

A. Yes, sir.

By the Court:

Q. That is how much higher than the sea level?

A. I should say about twenty feet.

By the Court:

Q. Not more than that?

A. No.

By the Court:

Q. How much higher is it than the general level of Long Branch, very little?

A. Very little.

By the Court:

Q. Now, your pumping plant is below that level?

A. Yes, sir.

By the Court:

Q. And you pump out of that immediately into a stand-pipe?

A. No; we have no stand-pipe; we pump direct.

By the Court:

Q. Have you got any by-way, I think the engineers call it by-pass; have you got any by-pass, so that you can pump directly—you have, of course; you pump directly into the system?

A. Yes, sir.

By the Court:

Q. Have you got anything of this kind. This is what I want to ask you now, and Mr. Sherrerd will take notice of this. Is there any by-pass by which you can dispense with your pump and let the steam fire engines draw right out of your system?

A. No.

By the Court:

Q. I will ask you this in advance; whether they use steam fire engines in Long Branch?

A. They do.

By the Court:

Q. Then you haven't any by-pass by which if your engine breaks down you can turn a gate and let the steam fire engines help themselves?

A. No; the grade of the ground is such between

the pumping station and Long Branch that the water wouldn't go over without our pumping or forcing it over.

By the Court:

Q. You mean to say more than twenty feet?
A. Yes, sir.

By the Court:

Q. Isn't there a straight line, level line from this place to Long Branch?
A. Oh, no.

By the Court:

Q. Go over a hill?
A. Oh, yes; go over elevations.

By the Court:

Q. What is the height of it?
A. Well, at least thirty feet.

By the Court:

Q. Above the level of Long Branch, eh?
A. Yes, sir.

By the Court:

Q. Have you got a profile?
A. No; I have no profile; this map gives the elevation.
Q. Will you kindly describe what your plant consists of at Newman Springs, roughly, generally. You built a dam there?
A. Yes, sir.
Q. How long a dam?
A. Well, it is about three to four hundred feet across, if I remember.
Q. Stone dam?
A. Yes, sir, concrete and earth dam.
Q. Do you have any reservoir there?
A. Yes, sir.

Q. About what acreage?
A. About two hundred acres flooded.
Q. Constantly?
A. Yes, sir.
Q. Then what distance is it between the dam and your pumping station up there?
A. It is about ten thousand feet, as I recollect it.

By the Court:

Q. Two miles, eh?
A. Yes, sir.

By the Court:

Q. Two miles between?
A. Yes.
Q. It runs by gravity from the dam to the pumping station?
A. Yes, sir.

By the Court:

Q. You have pipe?
A. Yes, sir, thirty-six inch pipe.

By the Court:

Q. The level—is that level with the water in the pond, twenty feet?
A. Yes, about twenty feet.

By the Court:

Q. That is all it is, eh?
A. Yes, sir.
Q. So you get for about two miles a gravity supply down to your pumps?
A. Yes, sir.
Q. Which are between Newman Springs and Red Bank?
A. Yes, sir, or at Newman Springs.
Q. That is thirty-six inch main down to there (indicating on map)?
A. Yes, sir.

Q. Then the character of your pump, have you described that there (referring to schedule)?

A. Yes, sir.

Q. That is in your schedule?

A. We have not used all that.

Q. What is that, roughly?

A. We have one three million gallon Worthington pump and one six million gallon Worthington pump already in.

Q. Is that all you expect to have?

A. No; we have another contracted for.

Q. What capacity?

A. Six million.

Q. So you have a total of fifteen million capacity?

A. Yes, sir.

Q. How do you expect to use those pumps when you get your completed third pump at Newman Springs, what is your plan of using?

A. Well, it is to have one ready to start in case of accident to the other, a break down.

Q. To run two?

A. Yes, sir, run two if necessary, the six and the three.

Q. And have an extra one for emergency?

A. Yes, sir.

Q. Now from the Newman Springs pumping station your thirty-six inch main extends all the way to Long Branch?

A. To Broadway, Long Branch.

By the Court:

Q. It stops way out on the side there?

A. Yes, sir.

Q. It goes from Newman Springs out to Little Silver?

A. Yes, sir.

By the Court:

Q. It don't come quite to Long Branch, it comes to the edge of the city?

A. To the city line.

Q. What pressure did your contract, which was set aside by the Hicks litigation, provide that you should maintain?

A. I don't think it provided for any pressure.

Q. Don't you think it ought to?

The Court: I don't think his opinion ought to be taken on that he is not a hydraulic engineer; he is a statistician and Clerk and secretary. I don't think he ought to be asked that question, and his answer would not—the only effect it would produce on my mind would show whether the Company were putting their mind on that matter or not.

By the Court:

Q. Your pressure runs 180 feet, don't it, or 150; you had some gauge the other day?

A. We carry full sixty pounds at the Long Branch station.

Q. That is on the other system altogether?

A. Yes, sir.

Q. What do you carry at Newman Springs?

A. Carried last Summer seventy pounds at Newman Springs.

By the Court:

Q. You lost ten of it somewhere?

A. Yes, sir.

Mr. McCarter: That is an entirely different system.

Q. The sixty pound pressure is the small system?

The Court: It is all connected together.

A. All connected together, yes, sir.

The Court: It will vary everywhere just according to the amount of water drawn out of the mains from time to time. Mr. Sherrerd will tell you the moment you open a fire plug the pressure will go down; whether it has ever been tested there with four or five fire plugs opened at once to see what the pressure guage would be, I don't know.

Q. The fact is at present your thirty-inch main delivers into Long Branch through an eight inch main, doesn't it?

A. At Broadway it does.

Q. Where else does it tap Long Branch except there?

A. It connects in at Seabright with a six and eight inch coming south into Long Branch and part of the way two 8's connecting onto a 12.

Q. Seabright where it connects is what distance from Long Branch?

A. I will have to scale it.

Q. It must be eight or ten miles, isn't it?

A. Oh, no, four or five miles, Seabright to Long Branch.

Q. Well, scale it, I want to know the distance, Seabright down to Broadway?

A. It is about fifteen thousand feet.

The Court: That is a little less than three miles.

Q. From Seabright to Broadway?

A. Yes, where the eighteen inch line comes in—not to Broadway; to the Long Branch Commission.

Q. I asked you to Broadway?

The Court: Broadway center, central portion.

A. Well, that is to Broadway, twenty-one thousand feet.

The Court: That is four miles.

Q. Have you any estimate of the quantity of water that Long Branch gets in gallons per day from the supplemental or Newman Springs supply?

The Court: You don't call that supplemental, do you?

Mr. McCarter: I do.

The Court: I thought that was the principal.

A. Newman Springs, the new pumping station has so far been used only as an auxiliary supply, because for the reason the new system don't tap onto the main arteries of the old system; the main arteries run along the coast and we only go to the edge of Broadway.

By the Court:

Q. The system, from your standpoint, you don't consider it finished yet?

A. Oh, no, not until this coast line is laid.

Q. Now, answer my question, if you can, and that was, how much water do you estimate you receive from the Newman Springs supply and consume in Long Branch, supplemental to the old supply which you still use?

A. I couldn't tell you.

Q. Sir?

A. I couldn't tell you.

Q. Is there any way of telling?

A. No, sir, not without you put meters on the large mains feeding in.

New Jersey State Library

Q. When did you hook up the Newman Springs supply onto Long Branch?

A. In May, 1903.

Q. Previous to that time for two years, practically two years, year and nine months, the Tintern Manor had used the old supply for Long Branch?

A. Yes, sir.

Q. Do I understand that there is a pipe running south all the way from Seabright to Long Branch?

A. Yes, sir; two.

Q. Two pipes, put in when?

A. Put in many years ago, several years ago.

Q. To do what?

A. Well, it was to supply Seabright from the Long Branch system.

Q. Well, you have given up supplying Seabright and Monmouth Beach from the Takanassee supply?

A. No, sir.

The Court: They are all connected, one pumps into the other.

Q. How many pipes run down Ocean Avenue from Long Branch to Seabright?

A. Two.

Q. Then the water runs both ways in those pipes?

A. Yes, sir.

The Court: May run both ways; depends which way it is drawing; sometimes run one way, sometimes another.

A. Yes, pumping the main; if the Takanassee stops and Newman Springs runs, then it will run down south; if the other way, it will run the other way.

Q. When Takanassee is going full split, as it generally is, the water runs from there down to Seabright, does it not?

A. It does now, yes, sir; we are not running the Newman Springs Station now.

Q. You are not running that this winter?

A. No.

Q. You only use it then in connection with Long Branch during the summer months?

The Court: So far?

A. So far; yes, sir.

Q. And how much of the time have you used it?

A. Why, we started the station up on May 23d, 1903, which was earlier than we expected to, on account of a scarcity of water in Long Branch last spring, and shut it down on the 26th of September, 1903.

Q. And it has not been run since?

A. It has not been run since.

Q. Has it commenced to run yet for the current year?

A. No.

Q. When do you propose to start it?

A. We expect to start it about next Tuesday.

By the Court:

Q. In that connection, I understood you to say the other day, if I didn't I want to know now, when you connected the Newman Springs reservoir with water under heavier pressure, you disconnected the Takanassee Pump Station from the stand-pipe?

A. Yes, sir.

By the Court:

Q. You dispensed with the stand-pipe there because that was only sixty or seventy feet high, and we always cut—we have for several years been cutting that out in the summer; it gave a heavier pressure than necessary in the winter.

Q. Then all of this extra work that has been done since the Tintern Manor has taken hold in the way of laying pipes through South Elberon and out in the neighborhood of Norwood that you

described the other day, is supplied by the Takanassee supply, except during the summer months?

A. Yes.

Q. And Deal also?

A. Yes, sir; we supply the whole system in the winter.

Q. From Takanassee?

A. From Takanassee.

Q. Are you able to tell us whether or not I am right in the idea that a thirty-six inch main will deliver about twenty times in quantity the eight inch main?

The Court: I can do that better than he can; square the diameter; it is simply a sum in arithmetic; it isn't worth while to ask this gentleman about it. I did the sum the other day in my office.

Q. Can you tell me whether the paper which in this pamphlet is entitled Exhibit D, Construction Contract of August 21, 1900, is a copy of the contract for the construction of the new plant about which we have been talking?

The Court: Contract between whom?

Q. Between the Tintern Water Company and Independent Telephone and Telegraph Construction Company?

A. It is said to be a copy; I have never seen the original.

Q. As far as you know it is a copy?

A. Yes, sir.

Mr. Corbin: I printed it myself; I shall not dispute it.

Marked Exhibit C20.

Q. You filter all your water that you supply to Long Branch?

A. Yes, sir.

By the Court:

Q. You filter the Takanassee water?

A. We filter the Takanassee Lake Water; we filter the Newman Springs water. We have two artesian wells, as I told you the other day, at Deal that we pump into this same system that are not filtered; of course, that might get a little water into Long Branch from Deal; of course I won't say, but probably not.

By the Court:

Q. You mean to say they have a filtering apparatus arranged at Newman Springs?

A. Yes, sir; twelve million capacity in twenty-four hours.

Q. As far as you know, the Takanassee has always been filtered?

A. Yes, sir.

Q. And you have designed Newman Springs to be filtered also?

A. Yes, sir.

Q. Is the water before it is filtered somewhat discolored?

A. At times at both places.

Q. But the filtering makes it all right so far as you know?

A. Yes, sir.

By the Court:

Q. Is it soft water?

A. Yes, it is very soft water.

Q. Now, how far do you carry your coal from railroads at Newman Springs?

A. Well, now, I can't tell you about that; we buy the coal delivered, and it depends on where they have the car switched.

Q. Well, how far is Newman Springs from Red

Bank? You have got to go to Red Bank to get your coal, haven't you?

A. Well, the New Jersey Southern road runs within seven thousand five hundred feet of the pumping station.

Q. Then you carry it a mile and a half anyway?

A. Yes, sir.

Q. At the shortest?

A. Yes.

The Court: The principal cost is loading and unloading the mile and a half distance don't make much difference.

A. I got the wrong one; there is a station; the New Jersey Southern road runs within one mile of the Newman Springs Station, and New York and Long Branch Railroad seventy-five hundred feet.

By the Court:

Q. Is there a switch just there?

A. No; switch just north of there, and we have contemplated putting in a switch.

Q. And the coal has to be carried from one or the other of those places to Newman Springs?

A. Yes, sir.

The Court: Unless they have a track put in.

Q. Who designed and built the Newman Springs plant, what engineer?

A. Mr. F. E. Pratt.

Q. Can you give me the length of the time that the Newman Springs Station was operated?

A. Last year.

Q. Last year?

A. From the 23d day of May, 1903, to the 26th day of September, 1903.

Q. That is about—

The Court: Four months.

Q. Am I right in the supposition that the coal bill at Newman Springs for that time was $1,847?

A. Yes, sir.

Q. The coal bill at Long Branch of the old supply company a year was how much?

A. $4,271.80.

Q. You have no way of estimating it for the same period.

A. No; I could not.

By the Court:

Q. You run it all summer, did you?

Mr. McCarter: The whole year, that is.

A. West End Station, twelve months, no.

By the Court:

Q. You didn't stop while the other was running?

A. No, run them both.

Q. Your expenses for filtering, I observe, for the West End Station that year were $1,195?

A. Yes, sir; that you might say was abnormally large last year.

Q. Where is the item for filtering in Newman Springs Station?

A. You mean alum, $242.62?

By the Court:

Q. Do you use alum for filtering?

A. The account reads: Alum bought for Newman Springs Station, sulphate of albumen bought Long Branch; it is chrystal alum; the sulphate of albumen has to be filled in the tank; the chrystal alum is saturated solution and feeds in just so much in the pipe.

Cross-examination by Mr. Corbin:

Q. State why it is, after having provided this large plant at Newman Springs, that you have still continued to the present time the use of the Takanassee pumping plant?

A. The principal mains from the Takanassee plant all along the coast north and south, and we don't come into the old system, into the large mains in the old system for our new supply, and of course cannot supply for the new plant until we have the large main extended either to the coast or along the coast parallel with the other system.

Q. Just tell what main is necessary to give good fire service from the Newman Springs plant, how much main, and where?

A. It will be necessary to extend it south for the benefit of Long Branch to Lincoln Avenue.

Q. How long and what size pipe do you estimate?

A. Well, it will take, roughly, oh, thirteen thousand feet.

Q. And what sizes do you estimate the pipe should be to give proper service?

A. Twenty-four inch.

By the Court:

Q. Are you an engineer? I didn't know that?

A. Well, I am not a graduate engineer.

By the Court:

Q. Do you have any advising engineer?

A. Yes, sir; in building the plant we have.

By the Court:

Q. Have you got any now?

A. No; we have none now.

Q. You are going on your own estimate, you estimate you want thirteen thousand feet?

A. Yes, sir.

Q. Is this Newman Springs plant in shape to fully supply the fire service?

A. It is.

By the Court:

Q. Have you got an estimate of what that is going to cost now, thirteen thousand feet of twenty four inch pipe, or haven't you estimated it?

A. We have figured it will cost fully Fifty thousand dollars to make the proper connections with the old system.

By the Court:

Q. You mean laying the pipe and connecting it with the old system?

A. And connect it with the old system; yes, sir.

Redirect-examination:

Q. Do you think the fire service to Long Branch has been up to this time and now is utterly inadequate? I mean the pipe service; leave out the supply of water altogether?

A. Well, we claim to be giving good service.

Q. Now, what is to prevent your simply laying a pipe about four thousand feet from the Broadway point where your thirty-six inch pipe connects with the eight inch pipe at present over to your twelve inch main over in Long Branch and thereby get fire service?

A. Because we find we have had a great deal of trouble with that main south of Takanassee, service was not sufficient to give the proper pressure.

Q. South of Takanassee only includes very small part of Long Branch?

A. Elberon lies south.

Q. Very small part of Long Branch Commission?

A. Yes.

Q. So that so far as Long Branch Commission is concerned in order to get the full benefit in Long Branch of your three inch main, you would simply have to lay a pipe, twenty-four inch or otherwise, from the point at Broadway about four thousand feet over to your twenty-four inch main, wouldn't you?

A. We have no twenty-four inch main.

Q. Twelve inch main?

A. Well, it is six thousand feet; it couldn't be laid within anything like that, because we would have to go by the streets.

Q. Well, how much more? You have taken a bee line on every other measurement; why do you now have to go around corners?

A. Because we can't go straight through the middle of the town, you know.

Q. How far would you have to lay a pipe to connect your Broadway with your twelve inch main and how large a pipe would you lay?

A. It would take fully seven thousand feet.

By the Court:

Q. He asks you how large a main you would lay?

A. We have always figured on a twenty-four inch main as an extension.

Q. I didn't ask you that?

A. I think a twenty-four foot main.

Q. Suppose Mr. Pratt would advise you to connect that way,—how large, in your judgment, a main would you have to put—you are running this thing—to utilize for fire purposes the additional water that you are getting through this thirty-six inch pipe?

The Court: I will add to the question, and make your service above all suspicion of sufficiency for a large conflagration in the City of Long Branch?

A. I should think a twenty-four inch main.

Q. You think it would have to be of that size?

A. Yes, sir.

Q. The mains that you say are running south from Takanassee down through South Elberon, and so on, are mains some of which were laid by your Company, weren't they?

A. We extended a little four inch main on Elberon Avenue.

Q. Can't you answer my question, yes or no?

A. Well, I want to understand it; that is the reason.

Q. (Question read.)

The Court: He is asking you whether you have not laid some mains down there?

A. Yes, we laid one pipe south for a certain distance.

Recross-examination:

Q. These additional pipes which you think are advisable to lay, as I understand are for the purpose of the public uses?

A. Yes, sir.

Q. And aside from the public uses, is the present system large enough, sufficient to supply the houses and hotels?

A. Yes; we can give good service from our present system for our present customers.

The Court: It think Mr. Sherrerd will tell you in order to give fire service a much larger general system of mains is necessary. That is my own expreience.

WILLIAM H. DE NYSE, sworn.

Direct-examination by Mr. McCarter:

Q. What is your business?

A. Civil Engineer.

Q. And where do you carry on your profession?

A. Long Branch.

Q. How long have you lived there?

A. Nearly all my life, with the exception of three or four years.

Q. Are you the County Engineer?

A. County Engineer at the present time; City Engineer or City Surveyor for twenty years or more of Long Branch.

Q. At that time that the old contract with the Long Branch Water Supply Company expired and the negotiation for a new contract was under way, did you, at the suggestion of the City authorities, or otherwise, make an estimate of the installation, the cost of the installation of a new supply there?

A. I did; yes, sir.

Q. Did you have any assistance in so doing?

A. Yes, sir.

Q. Who?

A. Assistance of the City Surveyor, who was then in office at that time, Mr. J. W. Seaman, and Messrs. Rudolph Harring and George W. Fuller of New York City, Consulting Engineers.

Q. What scheme did you have in mind?

A. That called for a plant of equal service, the plant that was supplying Long Branch at that time, equal service and efficiency, I think it called for.

By the Court:

Q. The same efficiency?

A. The same efficiency; yes, sir.

Q. Did you make an estimate of the cost of such a plant?

A. I did; yes, sir.

Q. Have you got the original estimate with you?

A. No, sir; I have not.

Q. You had this type-written from it, did you not?

A. Yes, sir.

Q. You know that to be a copy of it?

A. I compared it myself, yes, sir, in my office.

Offered in evidence; objected to.

Q. Was this submitted to the Long Branch Commission?

A. Yes, sir.

Q. It is on file in their archives now, is it not?

A. Yes, sir.

Mr. Corbin: A paper of that kind doesn't prove anything by any means.

Mr. McCarter: He is here to substantiate it.

The Court: It is marked and accepted; it has got to be proven. It is admitted in evidence and marked, but it has got to be proven hereafter.

Mr. McCarter: Of course this is not the original; we said that.

Mr. Corbin: I don't make any point of that. It is the competency of the paper.

Marked Exhibit C22.

Q. Now, you may look at this and tell us what this involved. In the first place, what was your source of supply?

A. Well, this covered two different sources of supply, one was from the natural stream and the other artesian wells.

Q. Do you know whether or not there has been any artesian wells sunk at Long Branch, and with what results?

A. There was one sunk the summer preceding the making of this report for—I think it is called the Monmouth Ice Company.

Q. Where is that sunk or driven?

A. Why, it is right near North Broadway, right in the center of the town nearly, near the Long Branch brook.

Q. And what kind of water did they strike, and how much apparently?

A. Very good water and very good supply, very much better than they anticipated.

Q. How far down did they go?

A. Well, I don't recollect about now, but I think in the neighborhood of five or six hundred feet, but I won't be positive about that.

By the Court:

Q. What is the size of the pipe they drive?

A. Well, I think four and six inch, I think.

By the Court:

Q. How many did they drive?

A. Only one, for the Ice Company.

By the Court:

Q. Find water bearing gravel; do you know how deep the layer was?

A. I do not, sir.

By the Court:

Q. Any test put on it? Do you know how much water they got out of it?

A. Two hundred and seventy gallons a minute.

By the Court:

Q. How was the test applied?

A. By the pumping test.

By the Court:

Q. And how high did the water rise naturally?

A. The water raised naturally I think probably five or six feet above the surface.

By the Court:

Q. But only one well was sunk?

A. That is all, sir.

Mr. McCarter: That was only for the Monmouth Ice Company.

The Court: I understand that, but does that give any idea whether there was water enough there to supply the City of Long Branch.

Mr. McCarter: Mr. Sherrerd states to me that was three hundred thousand gallons a day from that one well.

Q. Go on and give us the other figures you made up there?

A. You mean what was covered in the way of plant?

Q. Yes; did it include new pipes, new mains?

A. Yes, sir.

Q. Just read from the report so much as bears upon that.

Mr. Corbin: How much new main, sizes of it, and so on?

A. Twenty-seven miles of mains, including all gates, valves, &c., including 154 new hydrants, and then with the pumping station, standpipe or elevated tank, filter, &c., everything complete, stacks, everything in connection with pumping station.

Q. Pumping cost estimated—

Mr. Corbin: The whole thing?

Mr. McCarter: The whole thing.

Mr. Corbin: I object to that.

The Court: Is that estimate by items there? Have you got down the figure that each thing cost?

A. Not on this report, no, sir, but everything was

figured up separately and estimates were gotten on every separate item of the plant.

The Court: I don't think the sum total would amount to much.

Mr. McCarter: I think if he made an estimate and based it on calculation.

The Court: How can he cross-examine to test its value if he hasn't got the items of cost of each item?

Mr. McCarter: There is his report to the city, this gentleman and Mr. Harring and the other gentleman from New York; they made that report, and we give it just as it is; we have not got the figures; it wasn't made for this suit, or anything of that kind.

The Court: I understand, but the figures were given to the Common Council, as I understand, in detail.

Mr. McCarter: No, sir; this is the report that was made.

The Court: I think it is of very little value, Mr. McCarter. Mr. Corbin cannot cross-examine on it unless this gentleman recollects each item, what it cost, and how they made it up.

A. The cost of the artesian well supply was estimated $201,423 and the cost of the supply from the natural stream $241,651.

By the Court:

Q. Where were the natural streams?

A. Well, there were two sources that the water could have been taken from; this one was from the—

The Court: All right; I don't care about it.

Q. Where were these natural streams?

A. Well, the supply from Takanassee Lake had been sufficient up to that time, and of course the company were talking of abandoning that plant and the supply could have been taken from that stream, or there was another stream in the vicinity of Tintern Falls, which would have supplied ample water, as a water shed more than twice the size of the Takanassee Lake water shed, and it is much more thickly covered by forest, and population only about one-third per square mile of that of the Takanassee Lake water shed.

Q. Is that nearer or further away from Long Branch than the Newman Springs or Tintern Manor supply?

A. Nearer.

Q. How much nearer?

Mr. Corbin: How far is it?

Q. Or how far is it? No, I will say how much nearer is it?

A. It is about perhaps a mile and a half nearer than the reservoir of the Tintern Manor.

By the Court:

Q. Can't you point it out on the map there where it is?

A. Yes, sir.

By the Court:

Q. And the number of square miles—of supply? That is the brook that is there marked Tintern Falls?

A. Yes, sir; comes right down to Tintern Falls.

By the Court:

Q. That is south of the Swimming River, then?

A. Yes, sir.

Q. Is it on the same stream, or different shed?

A. It is the stream that runs into what is known as Swimming River below the Tintern Manor.

By the Court:

Q. How long, how many square miles?

A. 11 and 7/10; Takanassee Lake water shed is about 5 1/10.

Cross-examination by Mr. Corbin:

Q. You have figured on twenty-seven miles of mains, does that include mains down from Tintern Falls?

A. That includes the delivery main, yes, sir.

Q. That would leave about twenty or more in town?

A. No; there was twenty-seven miles in town besides delivery main.

Q. How big pipes did you figure on?

The Court: Have you got a schedule of the size of the pipes in the different streets here now?

A. No, sir; have not, but the size of the pipes were figured nothing below a six inch pipe and running from 6, 8, 10, 12 on up to 20 inch.

Q. Where did you have any twenty inch?

A. Main delivery main.

Q. That is, coming from Tintern Falls down you expected to bring the water in twenty inch main?

A. Yes, sir.

Q. That is the only one you had?

A. That is the only twenty inch.

Q. Did you expect to get fire service out of such mains as that?

A. Yes, sir. This report—please let me call your attention to one thing here. This called for an approximate cost of municipal water supply equivalent in service and supply to the present system.

Q. Equivalent to the present system as it was then?

The Court: Let me ask you right there. What do you consider the summer population to be supplied?

A. That wasn't taken into consideration; we were figuring on the same system that was supplying the town at that time; of course, they were supplying not only Long Branch, but a good portion of the territory outside of Long Branch, and we figured on just as large pipes in Long Branch and every street, and larger in some, than were installed.

By the Court:

Q. Then in use?

A. Then in use; yes, sir.

By Mr. McCarter:

Q. You had before you a schedule of the old pipes so that you knew their sizes?

Mr. Corbin: That is rather leading, isn't it?

Mr. McCarter: Perhaps it is.

The Court: He said they had them as large and some places larger.

Q. How much water did you expect to pump in the hottest day of summer?

The Court: As much as it supplied to Long Branch then.

Mr. McCarter: Long Branch, Seabright, Monmouth Beach, and the whole thing.

A. The report says we figured on a supply of three million gallons.

Q. You expected to take the old Takanassee Lake when you abandoned it; if you couldn't get that

you would get Tintern Falls and bring it down there from that. What was your total pipe?

A. I can't tell.

Q. How much twenty inch main did you expect to lay?

A. I can't give you that.

Q. How much twelve inch main did you expect to lay?

A. I can't give you any figures in detail.

Q. In fact, you haven't got any figures except these totals you have given us?

A. Haven't any now, no, sir.

The Court: I will say to you, according to this schedule put in the other day by the complainant, pumping schedule, that on one day in July, 1903, there were 5,400,000 gallons pumped.

Q. You figured on a three million maximum supply, pumping capacity, did you, per day?

The Court: How many pumps?

A. Figured on two three million gallon pumps.

Q. Are you not aware that a plant operated like that, to supply three million gallons a day, sometimes have to pump, would have to pump during a portion of the day at the rate of over eight million gallons?

Mr. McCarter: For Long Branch alone?

Mr. Corbin: Exactly.

Q. Don't you know when it is being used by everybody, without storage, you have got to pump at the rate as high as eight million gallons?

The Court: This I called for, was averaged for the month of July, 5,400,000 gallons.

Mr. McCarter: It is the largest amount per day; no average about that.

The Court: It says approxiate number of gallons pumped; that is the average.

Mr. McCarter: No, sir. On the right-hand column, "The largest amount pumped per day"; the middle is the average.

The Court: Yes, you are right, Mr. McCarter; four millions.

A. That supplied, of course, a very large territory outside of Long Branch.

Mr. McCarter: Exactly; that supplied Monmouth Beach, Seabright, South Elberon.

Q. You tried to match the present system. Weren't you aware there was eight million and a half pumping capacity at Takanassee at that time, eleven and a half rather at that time?

A. Yes, sir; I think they had two three and one five-million gallon pump there.

Q. You didn't figure to match this with the new system?

A. We were not figuring on the plant to supply all the territory they supplied, though.

Q. I am asking you whether you figured on that amount of pumping?

A. No.

Q. You were figuring on three million to be the most to be drawn, weren't you?

The Court: He says three million gallons a day, two three million gallon pumps, one to be held in reserve in case of accident.

Q. If you took the water from natural streams, as you call them, you estimated that the added expense of taking it from Takanassee would be Forty thousand dollars?

A. That was over the expense of an artesian well supply.

Q. How do you estimate it if you took it from Takanassee?

A. That would have come below this Two hundred and forty thousand dollar item.

Q. How much?

A. I can't tell how much.

Q. Do you know how many wells they figured on in driving?

A. I think there were ten or twelve wells that were figured on.

Q. Those you expected to drive right in Long Branch, didn't you say the water would be right there?

A. In Long Branch, yes, sir.

Redirect-examination:

Q. Have you any doubt in your own mind, from your experience there and your experience in the neighboring municipalities, that a perfectly adequate and proper supply can be obtained from driven wells?

Mr. Corbin: I object to that. Any of us can guess at that. I object to the question as not competent.

The Court: I will take the question; it has little effect on my mind, because I don't think anybody can tell whether there is anything there to supply Long Branch by driven wells until it has been tested. The experience at Asbury Park is very instructive on that subject, and anywhere else nothing but experience can tell what you can do with driven wells. The evidence at the last meeting was that there is about seventy-five thousand inhabitants there in the summer time; it would take an immense amount of water:

whether the water-bearing gravel there will supply it nobodoy can tell until they test it. You may have a perfectly unlimited supply from water-bearing gravel and you may not.

Q. Can you answer the question?

A. I am able to answer that question, but I will say this report was made; I have said in the report in reference to the artesian well supply that it is based on the assumption that wells could be put down that would yield a flow of the one put down for the Monmouth Ice Company in the town during the past Summer, simply based on that.

The Court: One pipe driven will supply a certain amount of water, and drive another down fifteen or thirty feet away may immediately reduce the flow of the other.

Recross-examination:

Q. You heard that the Monmouth Ice Company had put down a well which was said to have produced by pumping test two hundred and seventy gallons in a minute?

A. Yes, sir.

Q. And this estimate you made in Long Branch was on the basis that you could get ten wells of that kind which would give you two hundred and seventy gallons a minute apiece?

A. Based on that assumption.

Q. Because the Monmouth Ice Company on test got that you reckoned—

The Court: Don't argue on that. If any competent hydraulic engineer who is acquainted with drawing water out of these water-bearing gravel basins or plants will say that you can rely on that from experience, I shall yield my judgment.

Q. Don't you know that attempts have been made

to put down wells there which have failed, the Daly wells, and others?

A. No, sir; I don't know it of my own knowledge.

Q. You heard of it?

A. No.

Q. You didn't have anything to do with the putting down of the Monmouth Ice Company well?

A. No, sir.

Q. That is hearsay as well as the rest of it?

A. I have seen the wells; I was there and saw the test.

Q. Saw it tested?

A. Yes, sir.

Q. You have heard that others tried it and failed there?

A. No; not right in that vicinity.

Q. Long Branch, I am talking about?

A. No, sir; I don't know any wells that have failed there.

Mr. McCarter: That is all. That is our case.

Complainant Rests.

ROBERT M. KELLOGG, sworn:

Direct-examination by Mr. Corbin:

Q. Where do you live?

A. At Elizabeth, New Jersey.

Q. What is your occupation?

A. I am Superintendent of the Middlesex Water Company, and Secretary and Superintendent of the Bergen Aqueduct Company.

Q. How long have you been in the employ of the Middlesex Water Company?

A. Seven years next month.

Q. And state what its plant consists of, what towns it supplies, and extent of its plant?

A. It supplies five towns in all, running from

South Plainfield to Carteret, Middlesex County, and connecting in between or supplying in between Metuechin, Woodbridge and Seawarren.

Q. How many taps in all?

A. Well, a little over seven hundred, about seven hundred and twenty-five or thirty.

Q. And where is the Bergen Aqueduct Company which you have charge of?

A. At Ridgewood, New Jersey.

Q. How extensive a company is that?

A. They have four hundred and ten or four hundred and fifteen.

By the Court:

Q. Taps?

A. Yes, sir; houses.

Q. Have you been collecting rates of different water companies in this State and elsewhere?

A. I have.

Q. How long have you been making a collection of them?

A. Well, off and on about five years.

Q. Have you got a good many together?

A. Yes, I have.

Q. I have a schedule here which I have already referred to, which I have called Kellogg's—

The Court: Have you got one of the schedules of the Morris Aqueduct?

A. I haven't got the schedule; no, sir.

Recess.

Q. Have you tabulated the result of your water rates for private houses?

A. I have tabulated parts of them, yes, sir; quite a number.

Q. And how do you manage to get a basis for comparison?

A. Well, I take the fixtures that are usually

found in a house, which were kitchen sink, both hot and cold water, the bath room, which included the bath tub, hot and cold water; a closet and wash-stand, and also three ordinary wash tubs for the laundry.

Q. There are different methods in charging in the different companies, aren't there?

A. Yes, sir; it is quite hard to duplicate some, because some have by front footage the street, and others by stories and shape of the roof of the building, and some very singular ways.

Q. But on the basis of comparison?

A. I did, as near as possible.

Q. I have this schedule here, headed "Kellogg's Schedule for Dwellings"; look at that.

The Court: What the witness means to say, he has made up a schedule from comparison of a great number of water rates of different towns about here?

Mr. Corbin: Different towns about here.

Witness: Yes; that is the one I made up.

Q. Have you got the printed books and rates of these different towns?

A. For most of them; yes, sir.

Q. These are made up from those printed rates, are they?

A. Yes; well, some I went personally when I went in that neighborhood and personally visited them and found out; but that is only a few.

Mr. Corbin: I offer in evidence this paper called "Kellogg's Schedule for Dwellings."

Mr. McCarter: We are not going to stand on technicalities in this case on either side exactly. Of course I suppose this is largely hearsay.

The Court: You went to the trouble of bringing the witnesses here from different towns.

Mr. McCarter: That is what we did. That would be the accurate way to do. I don't want to be troublesome or captious. I want to know for a fact how this statement was taken, and subject to my objection then let it in.

Mr. Corbin: It is taken from the printed schedules.

The Court: From the official schedules, I suppose?

A. Yes, sir; I have got most of them right in the bundle right there now.

The Court: I think, Mr. McCarter, I might as well say here that it is common knowledge that the Water Works generally do have printed schedules, and that generally speaking they are reliable, their schedules showing what they actually charge. The question is, and pinch is, whether they have one schedule they pretend to charge and another that they do charge. In order to meet that question you would have to call everybody here; you would have to call somebody from every town; but there can be no mistake, I suppose, in the printed schedules you have got.

Q. You got them from headquarter?

A. Personally, yes, sir, I got them from the departments.

The Court: I will admit the evidence, subject to your objection, Mr. McCarter, and with that remark; the question is whether we can rely on that kind of information which comes simply from official statements. This is headed "Kellogg's Schedule of dwelling rates for suppdy of water in dwellings," and it consists of two pages.

Marked Exhibit D1.

The Court: I will look at the towns and see whether Mr. McCarter has any objection to their range. He has got here Nantucket, Massachusetts; that is a good ways off; the others seem to be all in New Jersey.

Q. These are all by the tap and none of them by the meter?

A. No; there are none by the meter.

By the Court:

Q. Have you any made up by meter rates?

A. I didn't make a schedule; I have a report from one of the towns which shows that for nearly all the larger cities, but it is hard to do that with the meter rates owing to the scaling rate; you see, some begin at 35 cents a thousand gallons, for instance, and scale down to 15 or 20, and then they scale down to different amounts for different companies, so it is hard to get the basis of comparison.

The Court: I will say for the benefit of counsel that the Morristown rates are scaled down for the quantity used in the course of twelve months, and a deduction is made at the end, on the first of April make an allowance and credit the account with so much, provided all the arrears are paid. If counsel of both sides want it I will furnish them with the Morristown rates.

Mr. Corbin: I would like very much to have it.

Q. I see your first item is Long Branch, $18, for such a house. What is that taken from?

A. That was taken from the printed schedule.

The Court: Present schedule?

Mr. Corbin: Yes, sir.

Q. Now, on this list which are the towns which are under your own superintendence?

A. Well, there would be Ridgewood, Metuchen, Woodbridge, Carteret.

Q. Those all happen to be the same thing, do they not, as Long Branch?

A. Yes, sir.

The Court: Happen to be what?

Q. $18, the same exactly as Long Branch, those four towns. You are familiar with Plainfield rates?

A. Yes, sir.

Q. That is one of your neighbors, isn't it?

A. Yes; our is the same as theirs.

Q. Can you tell which of these are public supplies?

A. Well, no; I can give you a few of them that I do know—New Brunswick, for instance.

Q. New Brunswick is public?

A. I know that; yes, sir; Bound Brook is; Perth Amboy is; Newark is.

By the Court:

Q. Take them at the start. Plainfield, is that public or private?

A. Private.

By the Court:

Q. Ridgewood?

A. Private.

By the Court:

Q. Metuchen?

A. Public.

By the Court:

Q. Somerville?

A. I don't know that.

By the Court:

Q. Summit?
A. Summit is private.

By the Court:

Q. Madison is public?
A. Public.

By the Court:

Q. Belleville?
A. I am not sure about that.

By the Court:

Q. East Orange?

Mr. Corbin: That is public now, since condemnation, I guess.

Mr. McCarter: East Orange is putting in its own supply at present.

By the Court:

Q. Montclair?

Mr. Corbin: Private.

By the Court:

Q. Woodbridge?
A. Private.

By the Court:

Q. Flemington?
A. Is private.

By the Court:

Q. Glassboro public or private?
A. That is private.

By the Court:

Q. Belvidere is public, isn't it?
A. I am not sure about that.

By the Court:

Q. Nantucket?
A. Private.

By the Court:

Q. Bound Brook?
A. That, I think, is public; I am not sure.

By the Court:

Q. Perth Amboy?
A. Public.

By the Court:

Q. Vineland, Freehold is public. Frenchtown? Clinton; how is that? Deckertown?

Mr. Corbin: That is public supply.

By the Court:

Q. Beverly, Bloomfield. Rahway?
A. Public.

By the Court:

Q. Erie, Pennsylvania?
A. That is public.

By the Court:

Q. Keyport; Lambertville. Greenville?
A. That is private.

By the Court:

Q. Roselle?
A. Private.

By the Court:

Q. Westfield?
A. Private.

By the Court:

Q. And Carteret?

A. Private.

Q. Did you put in all that you were able to compare in this vicinity?

A. Yes, I did, that were comparable, so to speak.

Q. Have you made an examination into the question of rates for fire hydrants?

A. Well, I have, but not as extensively as those; I have only got a few of those.

Q. What are the principal conditions that enter into the price that should be charged for public hydrants for fire purposes?

A. Well, the size of the hydrant for one thing, that is, the capacity of the streams, and the number of hydrants installed.

Q. You mean per length of main?

A. Yes, per length of main.

Q. Do you happen to know what the Fire Underwriters prescribe as the least number of hydrants they require?

A. Down in our territory, that is, Middlesex County, they ask a hydrant to be placed every eight hundred feet; that would mean four hundred feet between each hydrant; no, it would mean four hundred feet the furthest distance from a hydrant.

Q. They want every house to be within four hundred feet; is that it?

A. Yes, sir.

Q. So that they would have to be at least as thick as eight hundred feet apart?

A. Yes, sir.

The Court: With great respect to the underwriters, I think it is quite insufficient, for this reason, whatever supply you have if it is four hundred feet you have got to drive that through a three inch hose, and the friction is so great—

A. Two and a half.

By the Court:

Q. Isn't the hose three inch?

A. No; two and a half.

The Court: The friction is so great for that distance that in my humble judgment as a juryman you never can get good streams.

Mr. Corbin: I quite agree with your Honor; their provision is very lax; there ought to be more hydrants.

A. They maintain that as their minimum.

Q. As you put the hydrants thicker does the price of the hydrants increase or decrease?

A. Generally decreases.

The Court: Oh, yes; the more hydrants the better for the water company and the less price they can afford to take, the thicker the hydrants.

A. Yes; some cities have a scaling rate, one charge for the hydrants up to a certain number, and reducing it on down.

Q. Do you give hydrant service in the town you are superintendent of?

A. Yes, sir; in all of them.

Q. What kind of hydrants do you use?

A. We use a two way Matthews hydrant.

By the Court:

Q. That is a hydrant?

A. With two nozzles.

By the Court:

Q. Two and a half inch nozzle, and one for fire engine?

A. No.

By the Court:

Q. Both the same size?

A. Both the same size.

By the Court:

Q. The towns you supply don't have a steam fire service?

A. No; we have a high pressure service; our highest pressure in Ridgewood is about 105 pounds.

Q. Of course that is only on your lowest parts?

A. Yes, sir; lowest parts.

Q. What will it average there?

A. It will average there seventy-five or eighty pounds.

By the Court:

Q. Through all the series of towns?

A. No; through Ridgewood. In Middlesex County, going through Middlesex County the highest pressure there is from ninety to a hundred; it will average in all the towns but Metuchen, will average about seventy-five.

By the Court:

Q. Pounds to the inch, eh?

A. Yes, sir.

The Court: That is very heavy.

Q. In this little town of Ridgewood I think you said there were about four hundred taps there?

A. Yes, sir.

Q. How many of these hydrants do they take?

A. Eighty-two.

Q. In Metuchen how many taps have you there, about?

A. Have got there about two hundred.

Q. What do they pay you?

A. Twenty-five dollars apiece a year.

Q. In Metuchen how many taps have you there, about?

A. Have got there about two hundred.

Q. And how many fire hydrants do they take?

A. Thirty-six.

Q. What do they pay you for them?

A. Twenty-five dollars a year apiece.

Q. In the Township of Woodbridge how many plugs—how many taps first?

A. That takes three towns, Township of Woodbridge—Woodbridge, Seawarren and Carteret; there would be then about five hundred taps.

Q. And how many fire plugs?

A. They take, they have got sixty-four, I think it is, sixty-four or sixty-six.

Q. What do they pay you for them?

A. Thirty dollars.

Q. You have none of the big three-way hydrants then?

A. No, sir.

By the Court:

Q. What do you use in Long Branch?

Mr. Corbin: All three-way hydrants, with big steamer connection in every one of them.

Q. In a town like Long Branch with 146,008 feet of mains, and on those mains 146 fire hydrants, don't you think there are enough for ordinary—

A. That is one for every thousand feet.

Mr. McCarter: I don't want to admit this witness is an expert on that.

The Court: Well, he is a hydraulic engineer; he said civil engineer, I believe.

Mr. Corbin: No; water superintendent, but is is a pretty good hydraulic engineer.

The Court: But he has made the subject of what is proper hydrant supply somewhat

of a study, that is all the reason I would accept his evidence.

Mr. Corbin: He has been collecting information, he says, for four or five years about it. I thought he could speak of what was usual in that way.

A. An answer of that kind would depend on the number of houses built up; if those pipes were laid through streets that were not inhabited, or a large part of it—

Q. On streets that have inhabitants on it?

A. In my opinion it depends a great deal on the pressure; if they got about fifty pounds pressure I should think they ought to have hydrants at least every seven or eight hundred feet any way, if not more.

Q. You have told us the rates for the companies which are under your supervision; how do they compare with the rates charged by others, so far as you have investigated?

Mr. McCarter: The rates are here.

Q. You can name any others.

The Court: Have you got rates per fire plug of these other towns that you speak of?

A. No; I have only got a few.

Q. Name any that you know that you have inquired into and verified?

A. I got a few rates three years ago, and at Summit the rate was Forty-five dollars for each hydrant; that was similar hydrant, two-way hydrant —until 125 hydrants were installed; that was the scaling rate; then the rental should be reduced to Forty dollars for the whole number, not the additional amount, but the whole number.

The Court: Let me interpolate my personal knowledge again. Often times, in order

to induce a water company to go and supply a town with water, the town has to offer extra inducements to induce capitalists to put their money in, and then, by way of assisting them in the first instance, allow them a higher price for the fire plugs for say ten years than they would after the thing had been established and people had got to using water, for, as I remarked the other day, everybody don't take water at once—if the Town of Long Branch had not been supplied by wells and cisterns, all that sort of thing—it would take years before everybody would take water if you give it the very best supply; therefore, in order to induce people to do that, towns have given a bigger price at first for fire plugs than they expected to give afterward. It is a very complex problem.

Q. Have you any others? I find that Somerville was paying Twenty-eight dollars and East Orange Thirty, Morristown, Twenty-five, and Montclair, Twenty-six; Plainfield, they charge but Fifteen; they had some condition in their contract; I don't recall the exact condition, but the idea was that they should install a hydrant on every so many feet of main that the company found advisable to lay.

Q. Thicker than these others that you have mentioned?

A. Yes, sir; there is one, you might say, on every corner, so to speak, in Plainfield; the number was greatly increased, as can be seen on the map.

Q. Do you remember how far they were apart there?

A. No; I don't think they are very far; roughly guessing, about two hundred feet would be about the average—very close together in Plainfield.

Q. Any others that you can speak of?

A. No, those are the only ones; I have heard of

others, but haven't got the exact figures; these I compiled some time ago, and for that reason I know them, but haven't got the exact figures for any others just now.

Q. How many miles of main in your Middlesex water system, including this string of Villages in Middlesex County?

A. About forty miles.

By the Court:

Q. Is that all?

A. Yes, sir.

By the Court:

Q. Where do you get the water?

A. South Plainfield, artesian wells; we have eight of them, and are now installing four more.

By the Court:

Q. And you pump?

A. Pump; yes, sir.

By the Court:

Q. How deep do they run?

A. They will run two hundred feet deep.

Cross-examination by Mr. McCarter:

Q. When did you make this compilation of the different hydrant rates at Somerville, East Orange, Montclair, Plainfield, and, I think, one other point?

A. About the first part of April, 1901, or latter part of March, I guess, it was.

Q. You haven't any of the present rates in those Towns?

A. No, excepting I know that Plainfield is not changed; I know that.

Q. You spoke of some particular contract. Have you got that contract here, of Plainfield?

A. No; but I understand that is the condition

there; in fact, in looking upon the map it can be seen that there are an excessive number of hydrants there.

Q. You occupy what position in these different companies that you refer to?

A. Superintendent in the Middlesex, and Superintendent and Secretary in the Bergen Aqueduct.

Q. In each case they have driven wells?

A. Yes, sir.

By the Court:

Q. Do they have it in Bergen?

A. Yes, sir.

Mr. Corbin: Saddle River Valley—very fine water there.

Q. The driven wells are located were for all of the Middlesex district?

A. They are all located at South Plainfield.

Q. And you transport from there by pipes to these different localities?

A. Yes, sir, one pipe.

Q. You haven't given the number of hydrants they have in these different localities, have you, that you inquired the rate of?

A. In that printed list.

Q. No; hydrants?

A. No; I haven't the number of hydrants in this list.

By the Court:

Q. Have you given them? Didn't you give them to the stenographer just now?

A. I only gave the number of hydrants for our own companies, the ones I am connected with.

Q. Now, one of those is at Carteret?

A. Well, it is all one line.

Q. One of those includes the Village of Carteret?

A. Yes, sir; Carteret, Seawarren and Woodbridge.

Q. They are separate municipalities?

A. No, sir; they are one Township.

Q. Isn't Seawarren a government of itself?

A. No, sir.

Q. Is Woodbridge?

A. No, sir.

Q. All of the Township government?

A. All under the Township of Woodbridge.

A. Any Borough government in each one?

A. No Borough government in any of them.

Q. Run by a Town Committee, the whole thing?

A. Yes, sir; all three.

Q. Now, taking up your house rates tabulation, you have simply given us what is called the Kellogg standard house?

A. Yes, sir.

Q. The rates for additional faucets are not always the same, are they?

A. No, sir; they are not.

Q. The rates for additional bath tubs are not always the same?

A. No, sir.

Q. The rates are not always the same whether they are one or two families, are they?

A. No, sir.

Q. Why didn't you give all those in addition?

A. Simply because to give that would have to compile a list of cumbersome or large as each individual rate book would contain.

Q. The rates for each additional bath tub are not the same in each?

A. No, sir, you couldn't compare them, to put the additional, as long as they are not the same I can't compare, make an additional comparison.

Q. I am not asking for any excuses, I simply say, you haven't done it, and the rate isn't the same?

A. For additional fixtures? No, sir.

Q. For each additional water closet they are not, are they?

A. No; no additional fixture is the same pertaining to every one.

Q. And so the price of urinals, are they the same?

A. No, sir.

Q. How about hose use?

A. I say none of them are the same; every company has a different method of rates.

Q. You found them different in different ones, the hose use?

A. Yes, sir.

Q. Did you find any cases, did you give us any cases of summer resorts other than Long Branch?

A. I didn't compare them for summer resorts.

Q. I am not asking for explanations. I am asking for facts.

A. I am just saying, I am looking to see; I don't know whether I have or not; I didn't compare them; the only one I know of is Nantucket, Massachusetts, that I see on the list; I don't think there are any summer resorts.

Q. All the rest of these places are places whose population is about the same the year around, so far as you know?

A. Yes, sir.

By the Court:

Q. How long have you been in that position as superintendent?

A. In the Middlesex Company it will be seven years next month; in the Bergen Company it is four years this summer sometime.

By the Court:

Q. You found the population or consumption increasing or diminishing?

A. Always increasing; it doubles itself every few years.

Q. Do you know when your maximum draft of water is, what month?

A. In our companies?

Q. Yes.

A. Why, it varies; now, last year it was from about the middle of May to the middle of June.

By the Court:

Q. You used the most water?

A. Yes, sir.

Q. More than in February?

A. Yes, sir, last year.

Q. Well, ordinarily; we won't take just last year?

A. Well, if you want summer months, last year that was the period of hot weather, dry weather.

The Court: Very dry; fifty days without rain.

A. The rest of the summer it was quite rainy.

By the Court:

Q. Generally, I will ask you, do you find the greatest draft the hottest, dryest days?

A. Yes, sir.

Q. Have you got the tables here with you from which you made this Kellogg schedule for dwellings?

A. I have got most of them; yes, sir.

Q. Are there any meter rates in these places?

A. I think there are; yes, sir; they do have meter rates, but whether they supply houses in them by meter I don't know; there are some that have.

Q. Can you give us the meter rates, for any of these places?

The Court: Get your books and see what they are?

A. Yes, I can, but it will be quite a job to find them though.

The Court: if it is going to take some time you better submit it at a future day.

A. It is quite an effort to find them.

Mr. McCarter: We won't take time now.

Mr. Corbin: I want to see exactly what he wants, and then Mr. Kellogg will work it up for you.

A. I can't make a scaling rate, as I did for the house rates.

The Court: Just by meter, what they charge for a thousand gallons.

Mr. McCarter: That is it.

A. I started out to compile the meter rates, but I couldn't do it; there is no basis to go on.

The Court: You can only average it. I will say to counsel I want all the meter rates I can get.

BRYANT B. NEWCOMB sworn.

Direct-examination by Mr. Corbin:

Q. Where do you live, and what is your occupation.

A. Live at Long Branch; City Clerk there.

Q. Did you witness a test yesterday of filling one of the sprinkling carts there and the emptying of it again in the street as it drove along?

A. I did; yes, sir.

Q. Who was present with you?

A. Mr. La Monte, myself, and the driver of the wagon, and Mr. Van Note.

Q. Van Note, the city attorney?

A. Yes, sir.

Q. What size cart was it?

A. Six hundred gallon wagon.

Q. Just state what time it took to fill it and what time it took to empty it?

A. We held a watch on the man; from the time

he opened the valve until the wagon was filled was three minutes; in two minutes the time he filled the wagon and emptied it.

Q. First I want the time he took to fill it. Did you take the figures down? Have you got it in your pocket or somewhere?

A. One minute and forty-five seconds to fill.

Q. How long did it take him to empty it?

A. Three minutes and thirty seconds.

Q. When he filled it, tell how he emptied it, what did he do?

A. He opened all the valves in the sprinklers.

By the Court:

Q. In the ordinary way?

A. Yes, sir.

By the Court:

Q. This was done just as he usually does?

A. Went right out on the street and opened the valves and let it run out.

Q. Did he fill and empty it just as they ordinarily do in the course of their business?

A. I should judge so; yes, sir.

Q. Didn't see any difference?

A. No, sir.

Q. Did you assist in getting up a schedule of the streets and the area of the streets which are sprinkled by the Long Branch Commission?

A. Yes, sir.

Q. Look at this paper which I am showing you and see if this is the schedule you made up. It is headed "Streets sprinkled by the Long Branch Commission?"

A. Yes, sir.

Q. Did you make those computations there?

A. I did not; no, sir.

Q. Did you verify them?

A. No, sir.

Q. Did you foot them?

A. No, sir.

Q. Who gave the figures.

A. I gave the names of the streets per the ordinance of the town which were sprinkled.

Q. And who made the computation of the figures, the area of the streets?

A. I suggested the City Surveyor should do it.

Q. The streets are correctly stated there that are sprinkled?

A. Yes, sir; took them off the ordinance book.

Q. Are those the ones that were sprinkled last Summer?

A. Yes, sir.

By the Court:

Q. You don't sprinkle all the streets then?

A. Not all of them; no, sir.

By the Court:

Q. Your streets are not all the same width, are they?

A. No, sir.

Q. Now, how is this sprinkling paid for to the Commission?

A. By assessing the property owners.

Q. All the property owners?

A. Abutting on those streets.

Q. On what is shown, on the streets here, by taxes for sprinkling every year?

A. Yes, sir.

By the Court:

Q. Those that don't abut on a street don't pay anything, eh?

A. No, sir.

Q. Do you raise your sprinkling fund separate, or is your water and sprinkling fund altogether?

A. Water and sprinkling fund is altogether.

Q. All in one item.

A. Yes, sir.

Q. Do you happen to remember what the item was last year?

A. Dollar and a half a thousand.

Q. What do you mean by that?

A. That was the rate.

Q. I mean the total amount raised for sprinkling?

A. I think it was either $12,500 or $13,500.

By the Court:

Q. For sprinkling?

A. Yes, sir.

Mr. Corbin: Subject to Mr. McCarter's verification of the correctness of the area of each street—of course we can scale it on the map I supose—I offer the paper showing for the year 1901, which is the year I have here, 31 and 34/100 miles sprinkled, being 6,311,108 total square feet sprinkled, and showing the square yards included in that sprinkled that year 701,234.

Marked Exhibit D2.

Mr Corbin: Here is the map I am going to offer. All the streets colored on that map are provided to be sprinkled in that ordinance, blue, red and yellow. The red ones show graveled streets sprinkled; the blue one shows stone and gravel sprinkled, and the red one shows asphalt streets sprinkled.

Examined by the Court:

Q. I see on this list which is put in of the streets sprinkled which you say you gave the streets?

A. Yes, sir.

Q. But not the areas?

A. Not the areas, no, sir.

Q. I see first for 1901; then second it says 1902, is the same, then it says "off 1903," and the total length is greater. What does that mean?

A. That is I suppose, our stone roads were sprinkled by the County in 1903.

Mr. Corbin: In the year 1903 the County undertook part of the sprinkling, and was considerably reduced that year.

The Court: Then the County took off a certain distance here?

Mr. Corbin: Five miles this last year.

Cross-examination by Mr. McCarter:

Q. Are all the streets that are included in the ordinance to your knowledge sprinkled.

A. Yes, sir.

Q. Every one of them?

A. I suppose they are; yes, sir.

Q. I don't ask you what you suppose; I ask you if you know?

A. I don't know whether all; they are supposed to be.

Q. Do you know whether or not they are all sprinkled with the same frequency, about the same intensity?

A. I can't say about that.

Q. How long have you been City Clerk?

A. About eighteen months.

Q. And what were you before that?

A. I was employed as a bookkeeper in a local concern there at Long Branch.

Q. You had no public position before that?

A. No, sir.

This County performance by which about five miles of the sprinkling area has been reduced is because the roads which the County sprinkled last year have become County roads, have they not?

A. Yes, sir.

Q. And are relieved, the City is relieved from the care and attention over them for the rest of their lives, so to speak?

A. I suppose so; yes sir.

The Court: That part of it, I am quite surprised that the County should undertake

the sprinkling of it, because they don't in Morristown at all, they don't at all, and I don't know anything in the law that compels them to do it; it may or may not.

By the Court:

Q. Where do they get their water, the County?

A. The water from the Tintern Manor Water Company in some sections, and then I guess the County has a pumping station on one section of the stone road, they pump their own water.

By the Court:

Q. The part that is in Long Branch?

A. The part that is in Long Branch they get their water from the Tintern Manor Water Company.

Q. This test that you witnessed yesterday; don't you know that the full force of the water was poured on while you were measuring it and the wagon was filling in a minute and forty-five seconds, the full intensity, the full capacity of the hydrant was put on?

A. He opened the valve at a certain time by the watch when the second hand was on the minute part, and he opened the valve and the time was taken from that time.

By the Court:

Q. What he is calling your attention to is, he filled it as fast as he could?

A. He could.

Q. Now, when he began to empty he emptied all four—opened all four valves in his wagon at once, didn't he?

A. Yes, he did.

Q. So it was emptied as fast as possible?

A. Exactly.

Q. Right there?

A. Yes, sir.

Q. As soon as he got it off everything was put back, the point being to make it as quick as possible?

A. Yes, sir.

Q. This tax levy of $12,500 which you say you make for your water sprinkling purposes includes the expense of drivers, does it not?

A. Yes, sir.

Q. And hiring teams?

A. Yes, sir.

Q. And the repairs of the wagons used?

A. Yes, sir.

Q. And all the other incidental expenses besides the water?

A. Yes, sir.

Q. You have some eighteen or nineteen wagons, have you not?

A. Seventeen last year.

By the Court:

Q. The city owns the wagons but not the horses, I suppose?

A. They hire the teams; yes, sir.

The Court: The cost of sprinkling is more than the cost of water.

Mr. McCarter: I thought my friend wanted the Court to feel that that Twelve thousand was what they were raising for water alone.

WILLIAM H. LAIRD, sworn.

Direct-examination by Mr. Corbin:

Q. Where do you live, and what is your occupation?

A. Street Commissioner.

Q. For Long Branch?

A. Yes, sir.

Q. How long have you been a street commissioner?

A. Well, three years and about five months.

Q. Do you have charge of the sprinkling in the streets?

A. I have for the last three years; I have been street commissioner before, but before that I didn't have charge of the sprinkling.

Q. Previous to that at any time did you ever have to do with the sprinkling? Have you sprinkled the streets, yourself?

A. Yes, sir, I have so.

Q. You drove the sprinkling wagon?

A. For six years.

Q. And how many wagons do you use to sprinkle the streets now?

A. We had on seventeen last Summer.

Q. And how many the Summer before?

A. I think it was nineteen; they took the stone road away from us, and that cut us down.

Q. The County assumed some of the roads, and that relieved you of some?

A. Yes, sir.

Q. Do you know how much your carts hold?

A. Mr. La Monte has got it there; we looked it over and I gave it to him and he set it down; some of them four hundred gallons, and six hundred, and I don't know but what there is two holds seven hundred and fifty.

Q. You don't know the average?

A. No; don't know the average.

Mr. Corbin: Mr. Van Note says he admits the average is 550. Counsel is willing to take that as a fair estimate.

The Court: All right; average 550 gallons.

Q. In the Summer, how many times do you require the streets to be sprinkled in a day?

A. We sprinkle them over about four times.

Q. How early do you begin in the morning?

A. That is owing to how the weather is; if it is a cloudy morning we don't get out so early; if it is dry before seven o'clock, but they don't get out before seven.

Q. How many places have you where you can take water from the hydrants?

A. I reckoned it up the other day; I think there is forty.

Q. Isn't it sixty?

A. It may be; I think I can recall all the places so they could be counted over.

Q. What kind of hydrant have you for taking the water? It is a goose neck affair, goes up in the air?

A. That is stand-pipe.

By the Court:

Q. Have stand pipe, eh?

A. Yes, sir; stand-pipe, with hose on it, piece of hose.

Q. What is this stand-pipe attached to?

A. Attached to the hydrant.

By the Court:

Q. It disables the hydrants for fire purposes while you are using it then?

A. No; we shut it off every time, you know; that wouldn't effect it.

By the Court:

Q. You wouldn't put a fire hose at the end of this goose neck?

A. No; there is other plugs on it to attach fire hose to; they are a very handy affair.

By the Court:

Q. Did you screw it in one of the delivery nozzles?

A. Yes, sir; didn't screw it in; there is a sort of, what do you call it? Coupling.

Q. What time of the year do you begin to sprinkle?

A. Well, we begin,—put all teams on first of June; we have some fire teams there that begin, there is two of them sprinkling now; that is all owing to how the weather is in the Spring of the year.

Q. When did you begin this year?

A. I don't know exactly the date; the Chairman of the Street Committee put them two on.

Q. How long ago about?

A. I think about two weeks ago.

By the Court:

Q. Didn't you commence earlier than two weeks ago?

A. I don't think it is earlier than two weeks ago.

Q. You say you will put the rest on?

A. We aim to put the rest on by the first of June.

Q. You put them on gradually?

A. Yes, sir; as we need them; but the men are on the first of June.

Q. How many do you aim to put on this year?

A. Seventeen if we sprinkle the same district we did last year; I haven't heard anything to the contrary.

Q. How long do you generally keep them on?

A. We keep on the full force to the first of October.

Q. Then how?

A. Then maybe a couple of fire teams left on for sprinkling on the asphalt road; sometimes we have sprinkled Ocean Avenue up to the 15th.

By the Court:

Q. Don't you have bad dust up to the first of November?

A. Well, you know there is a great many of these streets there in the Fall of the year isn't drove but very little.

Q. You kind of let up when the sprinkling fund is pretty much used up?

A. No; I never heard very much of that; when the Summer people begin to go away—we kind of cater to them a little.

Q. You are familiar with the sprinkling ordinance, those required to be sprinkled, the streets?

A. The districts? Yes, sir; first off they gave them to me; now I know the district and put them on myself and divide them up as I think best.

Q. Do you sprinkle all the ordinance require to be sprinkled?

A. Yes, sir; if you don't you will hear from them.

By the Court:

Q. Because they are paying for it?

A. Yes, sir.

Q. About how many loads in a day does a man draw when he is working all day?

A. Well, I should think that it would take four load or six load to go over the most of their districts one sprinkle, once going over, that would be twenty-four, and sometimes there is a strip, dry spot we have to go over again.

Q. What would you say would be the average then?

A. From 24 to 26 load a day.

The Court: That is what the men swore to the other day; taking in wet weather, they don't have to sprinkle at all.

Q. About how many days in a month do they sprinkle?

A. Last year was a very dry summer; from May up to August they worked most all the time; then when it come August when it didn't rain there was cloudy weather; after a rain they didn't have to get out much.

Q. Do you sprinkle Sundays?

A. Yes, sir; that is our main day down to the Branch.

By the Court:

Q. They sprinkle every Sunday, too, eh?

A. Oh, yes.

Q. During those four or five months, or four months, when the whole force is on, about how many days a month do they sprinkle, about, according to your best estimate?

A. I should think 26 or 27, somewhere there; I know last year right by me, back where I was working on the streets, that from the 18th of April up until July we didn't lose hardly any time, for the dry weather.

The Court: It was a very dry season.

A. Very dry season; last Summer, you know, it was a very wet season.

The Court: Very difficult to compare one with another, gentlemen; I suppose you know that as common knowledge.

Q. The greater part of your streets that you sprinkle are what are called gravel streeets?

A. Yes, sir, most part of them; we have a few of them that have never been improved; they don't take much water.

Q. You sprinkle some twenty-three miles of graveled streets, do you not?

A. Yes, sir.

Q. Then you have a little less than three miles of asphalt?

Mr. McCarter: He don't know.

By the Court:

Q. Where do you use most water?
A. Ocean Avenue.

By the Court:

Q. No; but what kind of streets?
A. Ocean Avenue and the asphalt. Oh, the asphalt uses most water.

By the Court:

Q. Why does the asphalt use most?
A. I don't know, but it seems to dry right up; when the sun come out, go right behind the wagon it will get dry in a hot sun shiny day; I have seen that so warm it will be soft so a horse will make a track in it.
Q. Your streets are pretty wide?
A. Ocean Avenue is pretty wide.
Q. To sprinkle them don't you have to go up one side and down the other?
A. On some place of Ocean Avenue we have to make four trips; there is others that can cover at once with those big wagons; some of our wagons sprinkle wider than others.
Q. But you have some that take two swaths, and Ocean Avenue even takes four swathes in some places?
A. In some places; Ocean Avenue is not of uniform width.
Q. In some places it take four swathes to get the width of it?
A. Yes, sir.

By the Court:

Q. That is what he says; and some places it gets through with one?

A. Yes, sir.

By the Court:

Q. And big wagons with wider swathe empties quicker?

A. We have different sized gates on them; we have two sets of gates; you can turn them on full blast or not.

By the Court:

Q. If it is a bright day you can put them on liberally; if it is a moist day, you can put them on lighter?

A. Yes, sir; we don't aim to mud them if we can help it.

Cross-examination by Mr. McCarter:

Q. You don't sprinkle every street from curb to curb?

A. No; we don't aim to sprinkle any of them from curb to curb except Ocean Avenue.

Mr. McCarter: Your Honor sees the fallacy, therefore, of this area business.

The Court: It is the only way you can get at it though; it is one of the elements; it is an entirely interminable problem

Q. And you don't put on the full force?

A. Not at all times.

Q. At all times?

A. No, sir; that is why I look after them, to keep them from emptying too much on a cloudy day and the wind east there; it don't require nearly as much with a west wind.

Q. Summer before last was a pretty wet season?

A. Yes, sir.

Q. You don't think you used twenty-six days a month then, do you?

A. No, I don't.

Q. I don't recollect a Summer as dry as last Summer?

A. I recollect one when I drove wagon.

Q. That is all you can recall?

A. Yes, sir.

By the Court:

Q. It wasn't so very dry after the rain set in?

A. It kept up until July.

Q. Did you keep the whole force, the full seventeen carts as until October 1st?

A. Yes, generally, yes, did last year.

Q. How many? Ocean Avenue I think is the only street you sprinkled from curb to curb?

A. That is the only one we aim to sprinkle from curb to curb; of course on the asphalt if you don't sprinkle from curb to curb, if you sprinkle the center it will run down, because a good deal of that don't have to go, but one strip in the center, it runs down, the water don't go in; that is the trouble on an asphalt road, the water runs right away, drains away, don't stay there; we have got two or three roads, twice over them a day is plenty; it has never been graveled and are sand and hold the wet, Holleywood Avenue and Hoey Avenue.

Q. Those roads are only sprinkled twice a day?

A. That would be twice a day.

Q. So you don't think that on all those roads you have mentioned they go over four times?

A. No, not on them, it isn't necessary, but on the others four times a day in any ordinary day will keep the dust down.

RUFUS BLODGETT, sworn.

Direct-examination by Mr. Corbin:

Q. You reside in Long Branch?

A. Yes, sir.

Q. And are president of the Tintern Manor Water Company?

A. Yes, sir.

Q. Were you connected with the old Company, the Long Branch Water Supply Company?

A. Yes, sir.

Q. When first?

A. I can't name the year; I should think before 1890, but I am not sure; I couldn't name the year.

Q. Were you a Director of that Company?

A. Yes, sir.

Q. From that time on?

A. Yes, sir.

Q. And were you connected with the Executive Committee of that Company?

A. I was a member of the Executive Committee.

Q. Have you been familiar with the Long Branch water situation since that time, when you went into the Board?

A. Reasonably so; yes, sir.

By the Court:

Q. Did you say 1889?

A. Well, my impression it was 1888, but I can't say; somwheres about that, 1888 or 1889; prior to 1890, I think.

Q. Your supply in those earlier days was from what was has been called Takanassee Lake?

A. Yes, sir.

Q. What reasons led the Company to consider getting another supply, Mr. Blodgett?

A. We realized that our supply was not sufficient for the territory that we were covering Long Branch Commission limits and the township of

Ocean,—and for a number of years we got through the season, but it was pretty close work for us, and we decided that either the Company would be compelled to find another supply of water or sell it to the parties who bought and let them do it; that was what actuated us in the trade which we made with the new parties that came in.

A. As a mater of fact, the old owners sold out, did they?

A. We sold out practically.

Q. And did you then become associated with the new Company, too?

A. Yes, sir.

Q. What have you to say about the quality of the supply and the likelihood of contamination in the old locality?

A. We believed the quality of the water was good, as good as any along the shore; there was a danger of contamination which worried us considerably; I remember Mr.Framstock wrote me a very sharp letter—

Mr. McCarter: I don't think that will do.

Q. Well, you can state your own views about it, and what the views of the Board of Directors was, if you know.

A. What is the question?

Q. Whether the question of the likelihood of contamination was considered?

A. That was considered; they were building near our stream, encroaching all the time.

Q. And what was the nature of the water shed that you had for the Takanassee Lake, the four miles of water shed?

A. My impression is it was six miles.

Q. Four and seven-tenths the map says?

A. Does it? Well, somewheres five or six; I won't be sure about that.

Q. What was the nature of the ground originally?
A. It was originally covered with small timber.
Q. What kind?
A. I should say pine and oak mostly.
Q. And what is the condition of that now?
A. It is being cleared off very generally.

By the Court:

Q. You didn't own it?
A. We didn't own it.
Q. Have you observed any effect from that clearing off of the timber on your water supply?
A. Well, the water was less from year to year.

By the Court:

Q. It came down in greater quantities and the stream was less steady in flow?
A. Yes, sir.

The Court: I don't want to anticipate Mr. Sherrerd's view, but I believe the modern view is that it don't reduce the quantity of water, but makes it run off quicker. Is that right, Mr. Sherrerd?

Mr. Sherrerd: That is about it.

A. It soaks in the ground.

Mr. Sherrerd: It don't effect the rain fall in such a small drainage area.

Q. In what year did you first, so far as you can remember, begin to find your supply getting towards its limit?

The Court: A witness gave it here; that one year they would get down—it would be several days before it would run over.

A. Our Superintendent at that time called the attention of the Board of Directors to the fact.

Mr. McCarter: I don't think that is original evidence. I don't want to be technical.

The Court: It is regular course of business, their information, information of Directors, information of everybody, everything of that kind is what their subordinates call their attention to in regular course of business; otherwise you never could prove anything at all; no Superintendent of a Water Works has personal knowledge on all these things; his attention is called to it by subordinates; they look into it and call attention to it in the regular course of business. I think it is competent.

Mr . McCarter: We think we ought to have the people who did know.

The Court: The exact weight and strength of it is another thing.

Q. (Question read.)

A. I don't recall the year, three or four or five years before we sold out, but I couldn't say what year our attention was especially directed to it.

Q. And what was the year when you sold out?

A. 1899 possibly; my memory is treacherous; it may have been the year before or the year after; I am only speaking from my best recollection; I haven't looked at the dates; it may have been the year before or the year after.

Q. In those old works have you any storage capacity except a little lake right there in Long Branch?

A. None.

Q. In this new plan which substituted the Newman Springs supply is it the plan to run both of them or abandon this one when the other is completed?

A. To abandon this one when the other one is fully completed.

Q. And how about the little supply at Deal which has been mentioned?

A. That certainly will be abandoned; we have been compelled to use that for the last two years because of the lack of water at the Takanassee supply.

Q. And now, it is testified here that you turned on the water last May from Newman Springs; why then have you not already abandoned the supply at Takanassee?

A. Well, we are not completed.

Q. What remains to be done ?

A. The plant isn't completed; we should extend our large mains down so as to connect with the large pipes near the works; we want to connect onto a twenty inch, I think that is the size of the pipes at our works, and we want to connect the Tintern Manor onto the large twenty inch pipe; that gives a circulation, an open circulation all through the town.

By the Court:

Q. In other words, your new supply has not been introduced into the central section where the great distribution takes place?

A. That is it; these large mains branching out from the present Takanassee system, that is the point we want to make this connection with.

Q. For what purpose is it necessary to have these large mains?

A. Well, it is for the purpose of supplying—

The Court: Oh, making a ready supply.

A. The whole system.

The Court: The Court ought not to rely on everything that is not common knowledge, but it does seem to me that it is common knowledge,—I remarked this morning, and I repeat it,—I think the criticism I say on the system was that it was not sufficient

for fire purposes, and I don't know, I am not ready to say that when you reach that twenty inch main belonging to the Takanassee works you will have sufficient for fire purposes.

Mr. Corbin: I want to call attention to one thing. The witness Mr. La Monte in his testimonw to the other side this morning, spoke of two lines coming down from Seabright along the shore, an eight inch pipe and a six inch pipe.

Q. What do they join that with at their southerly end?

A. At the northerly perhaps you mean.

Q. I mean southerly?

A. At the northerly end of the Long Branch system and southerly end of the two pipes, my impression with an eighteen inch pipe at North Long Branch.

Q. Now, you have a large summer population in Long Branch, have you not?

A. Very large.

Q. What becomes of the houses that those people occupy, when they are away during the winter?

A. Some of them are rented to care takers, or persons whom they allow to move into them for a nominal rental; others are closed during the winter.

Q. When they are occupied by your summer guests what sort of numbers do they accomodate as compared with an ordinary dwelling house of a man who resides there all the year probably?

A. Four times as many as an ordinary dwelling house; they are usually packed in the summer time.

Q. How many people, for example, in an ordinary large dwelling house, summer dwelling house in Long Branch?

A. My experience is that most of them, or a

good many of them who rent houses allow their friends and neighbors to come in with them, and perhaps three times as many, that would be safe, as an ordinary family.

Q. As an ordinary family?

A. That is substantially what happens at a seaside resort during the summer season.

Q. What have you to say as to your own observation as to the way those people use water, as compared with a man who lives all the year in his own house?

A. Well, I don't know as I have had any personal observation seeing just what they do; my impression is that they use it very lavishly.

Q. Do they have horses and carriages?

A. Horses and carriages, and do use it lavishly.

Q. Do they have lines?

A. Yes, lines.

Mr. McCarter: They are required to pay for every one extra.

Q. How long do these people use their street sprinklers, what hours are they allowed to use them?

A. We have a rule that they shall not use them until late in the evening, but when we have sufficient water we don't interfere with them, they can use them any time of day they want to.

Q. How about nights?

A. Oh, yes, use them nights, every night.

Q. Do they run all night?

A. Oh, yes, run them all night.

Q. You do say they do run in the day times, too?

A. We don't interfere with their using their sprinklers when we have plenty of water, we allow that, but if the water gets short we admonish them not to use them in the day time; that is our rule; I think it is printed on our schedule.

Q. The papers put in here, I think, show that

there are 146 fire hydrants in your Town on 1,468 feet of main, that is in Long Branch Commission.

The Court: That is only one to a thousand feet, little less than one to a thousand feet.

Q. Are the streets upon which your mains are laid all built upon, more or less?

A. Well, more or less; yes, sir.

Q. Have you any considerable amount of main on streets that have not yet been built on?

A. No, sir.

By the Court:

Q. Are there many streets yet to be built up and to have mains laid in them?

A. Yes, sir.

The Court: The estimate of the present winter population is a little less than nine thousand. Have you made any estimate of what the future population, winter, will be for Long Branch, when it is all built up?

A. Not in connection with the supply of water. My impression is that in twenty-five years Long Branch and the new territory which is being taken in—

The Court: Never mind; leave that out. Long Branch we are talking about alone.

A. I haven't made any estimate of Long Branch.

By the Court:

Q. By itself?

A. Not the present territory.

By the Court:

Q. I take it for granted in laying out these works you speculated on the total amount of population

you could get within all the lines of pipe you laid outside of Long Branch?

A. That is what I was getting at.

By the Court:

Q. The question here is, what share of that Long Branch should use. I wanted to get at what the probable future of Long Branch was, if we could get it.

A. To answer you, Mr. Vice-Chancellor, there is considerable territory in Long Branch not yet built up, and we believe in a very few years it will all of it be built up.

By the Court:

Q. Is it half built up?

A. Long Branch? I should say not; I should say that the territory of the Long Branch Commission is not half occupied by cottages to-day.

By the Court:

Q. And they are not so particular about getting on the seashore as they used to be, willing to go back aways?

A. Back a mile, or half a mile; yes, sir.

By the Court:

Q. And there is a good deal of territory of that kind to be built on?

A. Yes, sir; I should say more than half the territory of Long Branch is not built on.

Q. In planning these new works, you obviously planned them somewhat larger than necessary for present uses, did you not?

A. Yes, sir.

Mr. McCarter: I don't think Mr. Blodgett is an engineer.

Mr. Corbin: I think he is, for this purpose.

The Court: I am not an engineer, either.

but if I was planning water works I would get information from engineers, and all that sort of thing, and I should estimate what the population would be; then I should want an engineer to help me figure out what the water works ought to be.

Mr. McCarter: I think the engineer ought to be here to testify about that.

The Court: He is only asking him whether they did do it or not, not the extent.

Q. How long a forecast did you try to make in the future in planning these works, you directors, and what territory?

The Court: Did you have any plan on that subject?

A. We talked it over, the Board of Directors did, before we made the sale, and we talked it over after the sale was made; in fact, we expressed an opinion to the people who bought us out as to the size of the pipe they believed that—

By the Court:

Q. He is asking you how long a time you looked forward to, the size of the population for so many years, &c.

A. Fifty years.

Q. That is, in your main pipe and supply you were going to provide for fifty years ahead?

A. Yes, sir.

Q. You didn't mean to develop your system to that?

A. No, sir, but the main pipe; we went back where we belived we could get a supply that would last us fifty years, and that pipe was large enough to bring the water.

Q. The supply, and main pipe, you thought, would last fifty years. Was anything else developed for any such period as that?

A. No; I don't know as anything else was considered, except the main supply of water.

Q. Do you know what supply of water it was estimated you could procure from that?

A. Well, yes; I have heard it; I can't repeat accurately.

By the Court:

Q. Don't recollect the figures?

A. I don't recollect the exact amount, but we had a careful estimate of the amount of water.

Q. And you hoped that a thirty-six inch main would carry it for fifty years?

A. Yes, sir.

Q. And carry all of it?

A. Yes, sir; carry all of it that we needed.

By the Court:

Q. What particular engineer did you rely on?

A. We had an opinion from two or three expert engineers in New York, one in New York who wrote us his views, but I can't recall his name, I can't recall his name at this moment.

Q. Would you know it if you heard it?

A. We changed from a thirty inch main to a thirty-six inch main after conference about it.

By the Court:

Q. After consideration?

A. Yes, sir; the first plan was thirty inch main for the main works; we finally concluded to put in a thirty-six.

Q. It has been referred to this Court to decide how much you are to have for fire hydrants. What do you think you ought to have?

The Court: I don't think that—

Mr. Corbin: I think we ought to state our views; I think it is fair for us to express it.

The Court: He has just as much right to

give his opinion as anybody, and I have just as much right to pay attention to it.

A. I think Twenty-five dollars a year for each hydrant is a fair price.

By the Court:

Q. That is for fire service?

A. That is for fire service exclusively.

By the Court:

Q. Do you expect for that that your present system of pipes running through the streets on which these fire hydrants are placed, is large enough?

A. Yes, sir, with the proper condition; but the tendency, Mr. Vice-Chancellor, is to increase the size of the pipes; we have increased the size of the pipes very materially, do from year to year, as we take out old pipes put in larger all through the system, that is the tendency.

Q. You were about to describe the kind of hydrants you furnish?

A. Three-way hydrants, one for steamer connection and two for hose connection.

By the Court:

Q. To make them of any use you have got to have a very large pipe, unusually large pipe?

A. Those three-way hydrants we can use them very well on six inch pipe, but ten is better.

The Court: Six inch pipe, any particular length, without grid iron plate wouldn't supply water for a steamer and two fire plugs, two ordinary hose.

A. We haven't very much six inch pipe; there is no six inch pipe except through the short streets.

By the Court:

Q. I didn't ask your other people, but Mr. Blodgett knows it. Do they use there steam fire engines, or hose?

A. Yes, sir; steam fire and hose as well.

By the Court:

Q. Both?

A. Both.

By the Court:

Q. How many steam fire engines have they got there, do you know?

A. Four. I take that back. We have three steam fire enginess and the chemical.

By the Court:

Q. Chemical don't have anything to do with water.

A. No, but we have three very powerful engines.

Q. What, if any, additional mains to re-inforce this system does your company contemplate laying before abandoning Takanassee?

A. We contemplate putting a thirty-inch main to the southern extremity.

Mr. McCarter: That seems to me to be immaterial.

The Court: I think it is the most material question that has been put here to-day, if you want to know what I think about it. I think the system of mains that they have got there, as a juryman, is entirely insufficient and it affects the hydrant head value very materially, and perhaps any decree I make must be on condition that it is put in.

Mr. McCarter: I was just going to say that.

The Court: I suppose Mr. Corbin is anticipating that.

Mr. McCarter: If that is so I quite agree with your honor. The point was, what they might contemplate and what they might require for us to pay, and what they might in their good graces do, is a different thing. If this is all conditioned on their doing it is a different thing.

The Court: They have had no very bad fire there, I judge, to test this, and it is a very difficult thing to test it. The only way I know would be to go there and open half a dozen of these plugs, as much as would be required for a pretty good fire, and see what the effect was on the pressure. I will venture to say that Mr. Sherrerd could devise a plan to test it. And that is a very material matter, as I recollect now. What they should charge for the last two or three years is submitted to me, but that is not the serious question. The serious question is what they are going to charge in the future.

Q. There is no lack of good fire service there?

A. No; I think it has been good.

By the Court:

Q. I will ask it, Mr. Blodgett, because I have criticised it, whether you have had any severe fires there?

A. No, sir; we have an excellent fire department.

By the Court:

Q. They nip it in the bud?

A. Yes, sir; and we put on, the moment the fire alarm is given we give them extra pressure, and we have always been able to handle every fire, and we have had some very bad starts.

Mr. McCarter: I hope your honor understood by point. I think it is material if they

obligated themselves to do it, but the contemplation of doing it is not fair.

The Court: Mr. Corbin made a remark which I think right here—while we are about it we might as well know what we are all about—is quite proper. He says that they want to drop the Takanassee, for two reasons. They don't want the expense of having two stands, two sets of men to look after; I know what that means; and in order to do that they won't think of such a thing as considering their supply ample at present, because either their supply is so far off and comes in on what may be called the thin side of the town, on the side where the pipes are small, he says at present my criticism does not apply, and I am not sure he is not right, as long as they are using Takanassee.

Mr. Corbin: That is it.

The Court: I was looking the other day when I made that criticism, and my criticism was based on the condition of things at the point where this new supply comes in. Now then, Mr. Corbin says, and I haven't looked at that, that when you come to come in from Takanassee that criticism don't apply, and I am not sure he is not right; that on that side there are big mains, twenty-inch, I think you said, something like that, coming up there. Now then he says, Mr. McCarter, we are going to drop Takanassee from a policy of economy; then we are going to make our big supply come in and start where Takanassee does in effect, and perhaps a little better.

Last question and last answer read.

A. I want to qualify that answer. It is correct that we intend to do it, but that the first mains

which we intended to lay was to connect with the Takanassee system, as I had explained, into the largest pipes of the system right up to the works, that would be perhaps a mile and a half.

Q. Of what kind of pipe?

A. That would be thirty-inch pipe, or thirty-eight.

By the Court:

Q. Thirty-inch pipe from the end of your thirty-six inch pipe?

A. Yes, sir.

By the Court:

Q. Mile and a half to strike the largest main that comes from the Takanassee system?

A. Yes, sir.

Q. And would it be connected with the others as you passed along?

A. Yes, sir; it would be concrete iron connected with others in every street.

Q. When do you contemplate doing that?

A. The Board of Directors have already authorized that outlay to be made.

Q. Has there been any contemplation of abandoning Takanassee until you get the reinforcing mains on?

A. Not until we are thoroughly equipped for it.

Q. If you had that reinforcing main laid now would there be any further occasion from any point of view of keeping up the Takanassee pumping station?

A. None whatever.

By the Court:

Q. There has been no evidence given here—it is quite an engineering problem—I don't know that there has been any engineer on the stand who could do it—as to how far the fire supply is affected by

the lateral main that you have laid way around up through Ocean Township and North End of Seabright and around, whether the mains running down through Seabright, way up there, would amount to anything in case of fire?

A. Very much.

By the Court:

Q. The distance is great.

A. Very much; the pressure at Seabright is very good; it was formerly very poor.

By the Court:

Q. What do you say?

A. It was formerly very poor.

By the Court:

Q. You have got eighteen-inch pipe?

A. Eighteen-inch pipe across the river.

By the Court:

Q. Just tell me how large the main is from the north end of Seabright, where you have an eighteen inch pipe, all the way down to Long Branch?

A. My recollection is there is two six and eight-inch pipe.

By the Court:

Q. All the way?

A. Yes, sir; that is my recollection; I think I am correct.

By the Court:

Q. Distance of several miles?

A. Distance about three.

By the Court:

Q. From the north end of Seabright?

A. Yes, sir, to where it connects with the large

pipe at North Long Branch; we don't necessarily go to Broadway.

Mr. Corbin: Fifteen thousand feet, Mr. La Monte testified.

Q. What is the present status of Long Branch in regard to growth? Is it growing or declining?

A. Growing.

Q. Any new houses going up?

A. Not many new houses this year; a great many last year.

Q. Are you called upon for new taps, new service?

A. Yes, sir; continually.

Q. What public uses do you furnish water for besides the fire hydrants and the sprinkling?

A. The Central Railroad of New Jersey and the New York and Long Branch Railroad.

Q. I mean of the town, city, engine houses, city hall, &c., just enumerate those if you can. I think we have got it all on the schedule.

A. I guess you have got that.

Q. Yes. I won't trouble you about that. Now take up the matter you were about to refer to, of supply to large users, railroads and so on?

A. We supply the Central Railroad of New Jersey and New York and Long Branch Railroad.

Q. Have you any other large takers except that, to amount to anything?

A. No, I shouldn't call them large.

Q. What do they amount to, roughly, a year?

A. You mean the two railroads?

Q. Yes.

A. I have got an impression it is thirty-six hundred now; I may be wrong; thirty-seven hundred perhaps.

Examined by the Court:

Q. You have here—I have a schedule which was furnished in Long Branch last week of the amount per month and the average per day and the largest amount per day in the year 1891, and then that is compared with the years 1901, 1902 and 1903. The latter years, I understand, you were under a heavier pressure, you put the Takanassee under a heavier pressure, didn't you?

A. Yes, sir.

Q. Bigger head?

A. Yes, sir.

Q. Now, I observe that after that heavy head come on the variation between the month of January, for instance, and the month of August, if I am not mistaken, was greater—that the increase in the month of August, July and August, was not so great over what it was in January as it had been in that previous year, in 1891. Now, I may be mistaken in the remark I made at Long Branch, which was that the difference between the summer and winter consumption, the proportion was not as great of late years as it was way back in 1891. Now, have you observed that or had your attention called to it?

A. Not especially; no.

Q. Then you haven't taken any pains to account for it?

A. Well, I should say, while I see these figures, Mr. Vice-Chancellor, I have other duties, and the Superintendent knows more of them, and made them.

Q. I am going to ask whether or not it is not due in a measure to the great increased pressure over what it used to be, increasing the amount that is wasted through leaks?

A. Possibly that is correct; I should presume that is correct.

Q. Now, have you considered the propriety of in-

troducing what is called the meter system generally in all your houses?

A. Yes, sir.

Q. Your objection to it, I presume, is that it won't catch anybody—it wouldn't catch the summer birds?

A. It won't catch them on terms of public equality, we are afraid.

Q. Have you considered the propriety of using meters and having a different rate charged by the cubic feet in the summer from what you do in winter, equalizing it that way?

A. We have supposed that we must be uniform in our charges.

Q. The year round?

A. Yes, sir; that has been the theory upon which we have been acting, that we must be uniform in our charges to every person, and whatever we did to one we must do to all; for instance, if we put a meter into one house we should put it into all.

Q. All right; if they want it?

A. If they want it.

Q. You have a right to do it any way. But suppose you charge to every man you put a meter in for, one rate four months in the summer and another rate in winter, that would be uniform, wouldn't it?

A. I suppose it would.

Q. You haven't thought of that, have you?

A. We haven't come to any conclusion what to do.

Q. The problem of making it equal in a case like this is a very serious one, and I see it has troubled you. I ask you whether you have considered that?

A. All the people would be charged a different rate; then that would be a hardship upon some people living in Long Branch the year around.

Q. Why?

A. Because they would be charged more, perhaps,

one season of the year than another, and they are yearly takers.

The Court: But they would have less in summer than winter.

Cross-examination by MrCarter:

Q. What position do you hold in the Water Company?

A. I am President of the Company.

Q. And what position do you hold in the City of Long Branch?

A. I am a Commissioner.

Q. And also Mayor?

A. I think so.

Q. And you also hold what position in the New York and Long Branch Road, one of your principal consumers?

A. I am Superintendent.

Q. You have been connected with the water enterprises down there since before 1890. Did you ever hear of any valuation placed upon the pipe line plant in Long Branch?

A. I don't know that I understand that question.

Q. The plant, the pipes.

The Court: The pipes alone, the street mains.

A. Of that system?

Q. Yes.

A. No, sir; I don't know as I have.

Q. Have you any estimate in your mind?

A. No, sir; I have not.

Q. It is worth Twenty thousand dollars?

A. I haven't made any calculation as to the value of that pipe; the pipe is worth not so much now perhaps as it was two or three years ago; it fluctuates as to value of the pipe; I couldn't tell you about that.

Q. At the time you sold out what value did you put upon it?

A. I have got to stop and think a little about how much we got for it.

Q. I am asking you as to the pipe line alone?

A. I was taking the whole. My impression is that we valued our plant at 450,000; I think we sold out for that; that is my impression now; I may not be quite right.

Q. Have you any estimate at all? Have you any figures?

A. We didn't make any estimate of the value of the pipe.

Q. Wasn't it worth estimating?

A. We didn't; we simply sold it.

Q. Was it a large or small feature in the enterprise?

A. What?

Q. The pipe line.

A. It is part of the system.

Q. How large a part did it play?

A. Well, we had the pumping station with the pumps, and we had the plant and all its entirety, the pipe plant, and we sold it for so much money.

Q. Now, how large a part of that did the pipe line—

The Court: He says he made no estimate.

A. We made no calculation as to the pipe line different from any other part of the property.

Q. Well, you don't think you got Four hundred thousand for the pipe line, do you?

A. Four hundred and fifty thousand.

Q. Four hundred and fifty?

A. I should think so.

Q. You are going to throw away the rest?

A. I don't understand what you mean.

Q. Aren't you talking about abandoning Takanassee?

A. We intend to take all our machinery away from there, every particle of it.

Q. Where?

A. To the new plant.

Q. Well, what are the two pumps worth?

A. We intend to take them there.

Q. What are they worth?

A. We are paying $26,000 apiece for two new pumps.

Q. I didn't ask you that. I want you to say what the two pumps are worth.

A. You want me to set a valuation on the two pumps we have had in use at Takanassee at the present time?

Q. Yes.

A. Possibly Eight or Ten thousand dollars apiece. I didn't come here to value the property right on sight.

Q. Well, now, this Takanassee plant which consisted of the mains laid in the streets, the stand pipe which you abandoned, the two pumps at Takanassee Lake, &c., you as an officer and director of the Long Branch Water Supply Company sold to the Tintern Manor Water Company, of which you are also an officer and director, for the sum of $325,085.56, plus underlying bonds $100,000, did you not?

Mr. Corbin: He didn't say so, and the statement you are reading from don't show so.

The Court: You are giving your statement of what the cash valuation is?

Q. Cash valuation. That was right, was it not, Senator?

A. State that again. I didn't follow you.

By the Court:

Q. Hundred thousand dollars underlying bonds?
A. That is correct.

By the Court:

Q. Three hundred and twenty-five thousand besides?
A. Yes, sir.
Q. In cash?
A. I think that is correct.
Q. (Previous question read.)

The Court: The question whether that is true or not?

A. Whether we sold it?
Q. Yes.
A. I wasn't an officer and director of the Tintern Manor when the sale was made.
Q. That was what you got for your Long Branch Water Supply Company stock when it was sold?
A. Yes, sir.

Mr. Corbin: Now you have got it stock.

Q. What other assets had the Long Branch Water Supply than the mains that we have been referring to, with the plant pertinent thereto, the two pumps at Takanassee Lake, the pumping station connected therewith, and the water supply?
A. We had some assets which we did not sell.
Q. Then for the things which I have enumerated the price that I have stated was received, plus Five hundred thousand dollars in stock?
A. I think so.

By the Court:

Q. You had your water plant there under ground?
A. Yes, sir.

By Mr. Corbin:

Q. Seabright plant?

A. Yes, sir.

By the Court:

Q. You had your Seabright plant and Deal plant?

A. Didn't own the Deal plant.

Q. Deal plant?

A. That was part of the system.

Q. I understand that, talking about the pipe system complete, that the old Long Branch Water Company had a pumping station at Takanassee Lake with water rates, whatever they were. Now, what building up has occurred along the shed in the past fifteen years that you have in mind that has contaminated or tends to contaminate seriously the Long Branch Water supply at Takanassee Lake?

A. There is a barn there and there has been for two or three years just opposite of our little intake; it has disturbed us somewhat.

Q. Anything more?

A. Yes, a sewer pipe, not an iron pipe.

By the Court:

Q. Tile?

A. A tile pipe has been run across our system.

Q. Where?

A. It has been leaking. From Cottage Number 5 across to the Hoey settlement.

Q. Anything else?

A. Yes, sir.

Q. Go on.

A. There is more or less drainage from the Hollywood settlement, all descending ground from the hotel.

By the Court:

Q. You mean to say the natural drainage of the Holleywood settlement runs into it?

A. Would be into our stream. The natural drainage from Mr. McCall's property—he is now preparing to drain into that stream all his lands and houses; he has been to work in there digging out.

Q. That is a mere surface drainage, is it not?

A. I don't know.

The Court: Worst kind, in my judgment; surface drainage is the worst kind.

A. It has been in there and troubled us all last summer.

Q. Isn't there a sewer along the stone road there?

A. I don't know.

Q. Well, speaking as a juryman, I will say there is.

A. I haven't any connection with the sewer company; I don't know anything about it.

The Court: I myself have such a fad, I consider it amounts to a physical impossibility to have pure water from a drainage area that has much human population in it, or cattle either.

Q. How much human population is within a hundred yards on either side of your drainage area?

A. Mr. Gaddis' property and adjoining property drained into our stream. Mr. Gaddis has a fine country seat there that he occupied, before he died, four or five months a year, with a farm house over there.

Q. Off from the stream?

A. Yes; and his cows went and stood in the stream all day long, and he said that was his right; that was the argument that Mr. Gaddis made to us.

Q. Now, what else?

A. A gentleman insisted upon having a hog pond up at the fountain head of the stream, and we had some trouble to get him out.

Q. You finally succeeded?

A. We did, by the aid of the Vice-Chancellor.

Q. You never tried the Vice-Chancellor's aid for these other nuisances?

A. We tried a good many of them; we tried to keep them all off as much as we could.

Q. As a matter of fact, there would have been no trouble to have kept these two or three isolated instances away from your stream if you had made rigorous effort to do so, would there?

A. Well, we did make effort, and we think we have kept the stream pretty pure; I think we did; but we had a good deal of trouble with these sewer mains that crossed there, had a lot of trouble, had to invoke the aid of the Board of Health of the State.

Q. Those cottages are not occupied every season, are they, this Hoey No. 1?

A. Usually the drainage is not very near us; and this disturbed the Company, the Directors, everyone of us; we debated it.

By the Court:

Q. Made a great lot of trouble?

A. Yes, sir; makes us trouble.

Q. More so, you think, than any open water supply in any district?

A. Oh, perhaps not; the water ought to be kept pure.

Q. And you undertook to keep it so?

A. We have, and I think we succeeded very well; I drink it every day.

Q. Now, you said you had no storage. Didn't you own the old mill up there in the Village of Oakhurst?

A. Yes, sir.

Q. Isn't there storage there that could have been utilized?

A. You asked if we had any; I said, no.

Q. Couldn't it have been utilized?

A. Possibly.

Q. There is a large mill pond there, is there not?

A. No; small one, four or five acres.

Q. That could have been utilized for storage; your Company bought it and owned it?

A. We owned it.

Q. Ocean Mill?

A. Not the Ocean Mills.

Q. Woolley's Mills?

A. I don't think we owned that mill; yes, you refer to Mapp's pond, you refer to—

Q. No, I refer to the mill in Oakhurst, in the Village of Oakhurst?

A. Ocean Mills; you are right.

Q. Now, as you go back from the old Deal pipe at Ocean Mills there are almost no houses and almost no neighbors near the stream to its source, are there?

A. There is quite a good many up in the woods, there are two or three little streams; we have had considerable trouble of contamination at the upper source; I spoke of the hog case as one, and we had some other trouble with a man that was there; we have had quite considerable trouble.

Q. Do you expect to have no trouble over at Newman Springs?

A. I expect we will have.

Q. You didn't have, as I think you said before, more trouble with this shed than you will with any shed?

A. I should say not; up in the woods, I should say, after we passed the settlement of Long Branch the trouble would be no more, no greater than it would elsewhere.

Q. Since the interference by the Honorable J.

Frank Fort with the gambling houses, and the interference by somebody else with the horse racing, have there as many people come to Long Branch as previous?

A. I should say more people there last year than any year before—not the same kind of people.

Q. That certainly did not show in the hotels? A. No; not in the hotels; not the same kind of people.

Q. Then the cottage life is increasing at the expense of the hotels?

A. Very largely.

Q. Individual cottages, persons rent or owning their own cottages?

A. Yes, sir.

Q. And you think those families are all twenty-five in number?

A. No, not all of them.

Q. They must be sons of Abraham if they are?

A. There are a good many sons of Abraham there; they are not all perhaps twenty-five; but the larger cottages where they are owned and people living in their own cottages they are quite numerous with servants and coachmen, and their own families; I am speaking more particularly of the small cottages and boarding houses; they are as a rule overcrowded in the summer season at the seashore.

Q. Where do you consider is the average cottage of Long Branch at the present time that you rely on now showing the prosperity, on what street?

A. I should say South Bath Avenue.

Q. And they are not so much on the ocean proper as on the by streets back from the ocean?

A. The best cottages are back from the ocean.

By the Court:

Q. Tendency is to go back?

A. Tendency is to go back, but some think otherwise and want to be on the ocean.

By the Court:

Q. But still you find plenty of customers for streets back?

A. Yes, sir.

Q. The building the present year has been very little?

A. Yes, sir.

Q. What engineer advised you that it was proper to forecast in the construction of a water supply for a period of fifty years?

A. That matter was debated by the Board of Directors; I didn't consult with any engineer; it wasn't really an engineering question, we thought.

Q. Since 1890, or 1888 at least, since 1882, the formation of the Water Supply Company to the present time, with a little care the Takanassee supply has been, so far as it went, satisfactory, has it not?

A. Entirely.

Q. Why abandon it?

A. We abandoned it because the supply was short; the population was increasing.

Q. You use it with entire satisfaction now in winter?

A. Yes, in the winter.

Q. Your settlement in the summer?

A. Yes, sir.

Q. You used it all last summer?

A. Yes, sir.

Q. You didn't give it up when you had your Newman Springs tacked on?

A. No.

Q. Why abandon it?

A. We abandoned it because it is not profitable to maintain two or three pumping stations, as we did last summer, three; the supply wasn't sufficient last summer, wouldn't have been sufficient.

Q. It was sufficient the summer before, was it not?

A. Well, no, it wasn't sufficient.

By the Court:

Q. Tight squeeze?

A. Tight squeeze; we were running it night and day.

Adjourned until to-morrow.

May 5, 1904.

Between

LONG BRANCH COMMISSION,
Complainant,

and

TINTERN MANOR WATER COMPANY,
Defendant.

Continuation of examination, pursuant to adjournment, on May 5, 1904, at Chancery Chambers, Newark, N. J., in the presence of the parties as before.

ROBERT M. KELLOGG, recalled for further direct-examination by Mr. Corbin:

Q. Have you looked into the question of prices charged by the water companies for large quantities of water, for factories, &c?

A. Yes; I have.

Q. Well, now, state in the first place what your own Company, the Middlesex Water Company, charges for large quantities?

A. We have a scaling rate by meter, which starts

at a Dollar a thousand cubic feet for all water used up to five hundred thousand cubic feet per quarter.

By Mr. McCarter:

Q. Five hundred and twenty-five thousand?

A. No; five hundred thousand per quarter.

Q. Next?

A. The next, five hundred thousand cubic feet used in that quarter at seventy-five cents per thousand cubic feet; then all over a million cubic feet per quarter at fifty cents a thousand cubic feet.

Q. Do you sell largely to factories?

A. Yes, sir; our main revenue in fact is factories.

Q. Down in Carteret and that vicinity?

A. Yes, sir.

Q. Do you know the rates of the Plainfield Water Supply Company?

A. They are flat rate of a Dollar a thousand.

Mr. McCarter: I think we ought to have the Plainfield man here.

Mr. Corbin: I guess he can tell from his personal knowledge on this.

Q. How do you obtain your information in regard to the Plainfield Water Supply Company?

A. They are right near our territory; I am back and forth and talk with these men all the time; I never made out any of their bills myself.

Q. Have you got their rates? Did you get their rates?

A. I have got their rates; they haven't got a printed rate of that, but I know it for a fact because I talked the questions over with the men, with the superintendents themselves; I go up there, and they come down and see me.

By the Court:

Q. They get theirs from driven wells, too?
A. Yes, sir.

By the Court:

Q. The water-bearing gravel underlies the City of Plainfield?
A. That is right.

By the Court:

Q. Have they ever succeeded in stopping all the cesspools that go into it?
A. They claim they have; they are quite a good ways outside of the city.

Mr. McCarter: I object to the Plainfield —I think we ought to have a Plainfield man here. We brought all these people; we haven't undertaken to have Mr. Sherrerd come here with schedules.

The Court: I think the printed schedules by the companies of a late day, I think they are competent.

A. I have a Plainfield schedule with me; that is not printed on the schedule.

The Court: However, I am not willing to rule it out, for this reason, it is a good deal like a real estate man finding out the value of property from the sales he had heard of. A real estate man says, "I know about the value of property; I have watched public sales, I watched private sales, some that I negotiated myself, and some I know of others." Isn't it about the same way?

Mr. McCarter: It doesn't seem so to me. I think we are entitled to have the man here.

The Court: I wouldn't dare to rule it

out. The other cases you brought with great care and are of great value to the Court. I don't think you depended so much on the rates that they produced,—I don't think the proof of the rates depended so much on the men swearing to it as it did the general financial condition, and the result of those rates; I think that is what —when we consider the value of the evidence of those gentlemen—it consisted in. I will admit the evidence.

Q. What is the rate of Plainfield? A. One dollar a thousand cubic feet, flat rate for factories.

Q. Are you acquainted with the Union Water Company?

A. Yes, sir; that runs from Plainfield to Elizabeth and connects Westfield and Cranford and Roselle and intermediate towns, and they are the same rate as Plainfield.

Q. Where do they get their water?

A. They buy their water from Plainfield.

Q. At the Netherwood wells?

A. At the Netherwood wells; yes, sir.

Q. Where do you live?

A. At Elizabeth.?

Q. Are you familiar with the Elizabethtown Water Company's rates for water to factories?

A. Yes, sir.

Q. Do you happen to know whether they supply factories to any great extent?

A. Yes, sir; they supply nearly all the factories at Elizabethport, including the Singers Manufacturing Company.

Q. How far do they run down the shore of Staten Island Sound?

A. They run down towards Carteret as far as the Rahway River and supply there.

Q. Your mains supply them at Carteret, your

supply, but you don't supply—you are not connected with them?

A. We are not connected with them; we don't cross the river, and they don't.

By the Court:

Q. Which river?

A. Rahway River.

Q. These territories you have mentioned, Plainfield, Westfield, Cranford and the others, are all contiguous?

A. Yes, sir.

Q. They supply a circle that goes around Rahway?

A. Yes, sir; Union and Middlesex County.

Q. You each have your separate territory?

A. Yes, sir.

Q. What is your rate in Elizabeth factories?

A. One dollar a thousand cubic feet for all factories, even including Singers, they are large consumers.

Q. Have you got a printed schedule of some other water companies?

Mr. McCarter: I make the same objection in regard to Elizabeth and the other companies.

Q. Now, Mr. Kellogg, have you got the printed schedules and have you worked them up for other companies?

A. I have for a few of them, as near as I could make them out; yes, sir.

Q. Take the Hackensack Water Company first. Just tell us the rates of the Hackensack Water Company.

A. For large consumers?

Q. Large consumers?

Mr. McCarter: The same objection.

A. A dollar and forty-five cents per thousand cubic feet for water used up to Two hundred and twenty-five thousand cubic feet a quarter; $1.30 per thousand cubic feet for water used in excess of two hundred and twenty-five thousand cubic feet a quarter; $1.20 a thousand cubic feet for the difference between three hundred thousand and six hundred thousand cubic feet a quarter, and all over six hundred thousand cubic feet $1.15.

The Court: Good deal higher than the others.

Q. Did you obtain this printed list from the Company?

A. I did, yes, sir.

Mr. Corbin: I offer the printed schedule.

Mr. McCarter: I object, I think we ought to have the person here connected with the Company, on the very theory of Mr. Corbin.

The Court: This pamphlet is dated January 1st, 1901. This gentleman says, I understand him, he got it from the Company.

A. I did, I wrote to the Company.

The Court: I think it will do, Mr. McCarter.

Mr. McCarter: I wish my objection to be noted, that we ought to have the man here, on the theory of the counsel on the other side, to learn the character of their works, what it cost, and all that kind of things, so we can have a basis for this. I think it would be proper for a Company that has a very expensive water works that is legitimately attributable to the locality to charge a higher rate than a concern that has a cheaper supply. The mere fact that Hackensack charges this don't

mean anything to us unless we know what they have got up there.

The Court: Your argument is perfectly sound, and I don't know that it requires any modification. You commenced with bringing in the rates of other towns, and Mr. Corbin is following it up. Now, I think I remarked somewhere that the comparison between one town and another is always subject to the circumstances of the particular case. It costs a great deal more to supply one town with water than another; one may have very great facilities over another for supply, and the rates should vary in each case. Hence in applying all these things you cannot lose the basis of common sense to take into consideration the circumstances of each particular case. I don't recollect where the Hackensack Water Company get their water now, but they used to get it out of the Hackensack River up at the head of navigation there, get it right out of the river.

Q. Do you happen to know where the Hackensack Water Company gets its water?

A. No, I do not.

Q. Do you know the towns they supply?

A. I know they supply quite a number, but I don't know them all.

The Court: Just pump it right out of the Hackensack River about four or five miles above Hackensack; that is the way they used to; that is the knowledge of the Court; I don't know whether you ought to act on it.

Mr. McCarter: I don't know whether they do now.

The Court: I understand Hoboken threw

them over because their water was not good at one time. They may have got some other source, or they may have adopted some good filtering system. I haven't any doubt Mr. Sherrerd knows all about it.

Printed rules and regulations of the Hackensack Water Company marked Ehibit C 25.

Mr. McCarter: It seems to me, with perfect deference to the Court, unless we know those things, I mean by knowing them they are on record, the evidence don't amount to a hill of beans; that is how it strikes me.

Q. Have you the schedule of the Dover Water Company?

A. Yes, sir.

Q. Did you obtain it from them?

A. I did, in the same way, by their printed rate.

Q. What is their rate for water to the large—

Mr. McCarter: Same objection.

A. Flat rate of $1.20 per thousand cubic feet.

Q. Did you obtain the rates of the New Brunswick Water Supply system?

A. I did; yes, sir.

Q. Have you got their schedule here?

A. Yes; they are the same as Plainfield, a Dollar a thousand cubic feet.

Mr. McCarter: Same objection.

Q. Have you a schedule of the Passaic Water Company?

A. Yes, sir.

Q. What do they supply?

Q. They supply Paterson, Passaic and all of the intermediate towns.

By the Court:

Q. Take it out of the falls above?

A. Yes, sir.

Q. Have you a schedule there?

A. Yes, sir.

Q. What are their rates?

A. $1.50 per thousand cubic feet between six thousand and twelve thousand cubic feet a quarter; and seventy-five cents per thousand cubic feet for all over twelve thousand cubic feet each quarter.

Q. Did you obtain the schedule of rates of the Jersey City Water Supply Company?

A. I did.

Q. Have you got them here?

A. Yes, sir.

Mr. McCarter: Same obection.

Q. What are they?

A. $1.35 per thousand cubic feet up to one hundred thousand cubic feet per month; $1.25 par thousand cubic feet from one hundred thousand cubic feet to five hundred thousand cubic feet a month, and $1.15 per thousand cubic feet for water between five hundred thousand feet and one million feet per month.

Q. Have you obtained the water rates for the City of Hoboken?

A. Yes, sir.

Mr. McCarter: Same objection.

Have you them here?

A. Yes, sir.

Q. What are their rates?

A. One dollar per thousand cubic feet up to one and a half million feet per month, and ninety cents per thousand feet for water used between a million and a half and two and a half million a month,

and eighty-five cents per thousand feet for all used over two and a half million feet per month.

Q. Produce your schedules for the Dover, New Brunswick, Passaic Water Company, and Jersey City and Hoboken,—that is five.

The Court: I don't see the value of that here. The question of sale of large quantities to factories is not involved here, is it?

Mr. Corbin: I thought it would afford a basis for this large amount of water taken for sprinkling; I don't know anything better to give a basis; that is the view to which I offer it.

Mr. McCarter: I think we will say now that we are perfectly willing, so far as the sprinkling is concerned, and the hydrant supply is concerned, to take the figures that Company agreed upon under the Hicks contract, of which they have expressed a willingness in this suit to abide by.

The Court: I can't take account of anything that occurred before me at Morristown. There the contract was put in evidence, but it is not put in evidence here.

Mr. McCarter: We are going to put it in.

Mr. Corbin: Twenty-five dollars for each hydrant Mr. Blodgett said yesterday on the stand he would be willing to accept. Sixteen hundred a year for all the sprinkling in that city, with seven fire houses, we wouldn't be willing to accept that.

I will say this to counsel. Perhaps we can come to a basis; if we can, so much the better. We are willing to take a very moderate price for those sprinkling wagons; what I am going to suggest to the Court I think is moderate, that is Forty dollars per month per cart; that will figure out about

two-thirds of what these lowest rates amount to; we think that is a very low rate.

Mr. McCarter: Your Honor will recall this suit was based upon correspondence between Senator Blodgett, on behalf of the Water Company, and this municipality—he was not then in the City Government—in which he called their attention to the fact that the Hicks contract had been set aside, as he expressed it very properly enough, on a technicality. They had endeavored to re-initiate that contract; they were willing to have it go into operation, and that unless we acceded to that at once they would cut off the water. Now, we came into Court and said we were trying to fix up the private rates on a fair basis. There never has been any quarrel, as I understood it, between us, so far as I am aware, about either the public rates as far as the hydrants are concerned, or the sprinkling. The trouble was, as we showed before your Honor on the application for preliminary injunction, that Senator Blodgett's view was that the city had no concern with the private rates. Now, therefore, it seems to me that there is practically no dispute between us, and we made none in our case, have never had any difference with these people. You will find the evidence here offered in the Hicks case, if you want to look at that, was that we thought a fair rate had been fixed in regard to the hydrants and the sprinkling. The sole question was whether the private matter was one which the Court should consider.

The Court: I think you are a little mistaken in your recollection—not intention-

ally so—but I have a pretty distinct recollection, for I read over the notes of my oral opinion, that you did say that you did object very strongly to my making terms that you should pay, that the town should pay the Company *pen dente lite* the full amount of that contract price. You wanted it reduced, and I did reduce it, I think, from about Ten thousand dollars a year to Eight thousand; and I think you complained of that pretty strongly; you were instructed by somebody there from the town—I don't know who was there—and I think you are mistaken about that, so far as what occurred before me, because—I won't say anything about the pleadings—I have forgotten; there was a decided objection.

Mr. Corbin: Here is the bill. The bill charges the terms against the town were oppressive, unfair, exorbitant, terms and rates.

Mr. McCarter: I am relying—I ask Mr. Corbin what evidence we have offered here in this case suggestive—

The Court: You haven't.

Mr. McCarter: Not the slightest.

Mr. Corbin: I am more than pleased with Mr. McCarter's suggestion that perhaps some of these items we can get together on; I know it would please your Honor to have it settled. But surely this bill brings us into Court here when we thought there was no particular occasion for being brought in. It goes on and alleges that the Court of Appeals set aside the contract as unfair, oppressive, exorbitant, all that sort of thing. We have answered. We didn't want to come here. Now we have come here, submitted to your Honor's jurisdic-

tion. The whole matter is open for a fair contraact. On the Twenty-five dollars a year rate for hydrants for the comparatively small number they take we have said all the way through we are willing to take it. I think myself, under the circumstances of this case, it is very moderate..

The Court: Let me say to you here, these hydrants Morristown have are old fashioned single nozzle hydrants, most of them—we have been putting in a few double nozzle, one for engine and one for the other, only about half a dozen, and are going to put in more, but of the one hundred and thirty-six fire hydrants in Morristown more than one hundred—one hundred and twenty-five are old fashioned single way fire plugs, and we get Twenty-five dollars a year for them.

Q. (By the Court, addressing Senator Blodgett.) Do you have any trouble freezing up in the waist?

Senator Blodgett: Some times; we are not troubled much with it.

Mr. Corbin: With regard to the sprinkling, I just made these figures to show where it comes out as the evidence now stands. I am perfectly willing to meet, if we can meet. The testimony is that these wagons average 550 gallons apiece; the testimony of the superintendent yesterday was 26 to 27 loads a day, 14,300 gallons a day; take it 26 days each of those carts in a month of the summer will distribute 371,800; at 15 cents a thousand gallons that is $55.70 per month. I say right off we will take off that and call that, if that is satisfactory to the other side, Forty dollars per month.

Mr. McCarter: Utterly unsatisfactory. You have got the water right at your door;

it don't cost you a dollar to get it; all you have got to do is to pump it.

The Court: Mr. McCarter, this thing, it seems to me, I want to hear you on. Must not the gauge of the water works be fitted to the greatest consumption? Here is a town that has got, first, a very large summer population, some witness said probably seventy-five thousand.

Mr. McCarter: He is very much mistaken; it is not anything like that.

The Court: Somebody said seventy-five to a hundred thousand. That is the only evidence we have had.

Mr. McCarter: We are going to have some more.

The Court: That consumption of water for ordinary purposes is greater in summer time, then comes in the sprinkling on top of it, and I say to you, we would be very glad in Morristown to have no sprinkling whatever; we consider it a positive injury to us, because it is in the very dryest time they want the most water, and if we had to pump all our water you have got to have your pumps of sufficient capacity to meet that extra demand for two or three months in the summer time, and it is the most unprofitable business you can go into. Now, for instance, if it was—I want to show you for I want you gentlemen to agree—if it was a factory that was running the year around, and a steady consumption, it would be a very different thing, but it is only a consumption for very dry weather and in the very height of the season; that is the trouble.

Mr. Corbin: I think possibly Mr. McCarter does not fully understand the significance of what I said. The rate I have

charged this up to make it Fifty-five dollars a month is one hundred and twelve thousand cubic feet; I say at once we will take off the $55.77, which reduces this water to about eighty-three cents per thousand cubic feet. If he can show me anything in New Jersey, anybody in New Jersey that will say that is not cheap for sprinkling, or any purpose, all right. We are not here to ask for anything exorbitant whatever; we want a living contract that will stand for years. That is the bottom that we shall suggest. I say that reduces the water practically to about 83 cents per thousand cubic feet for sprinkling purposes, on the evidence as it now stands before the Court; that will be Forty dollars per month per cart.

Mr. McCarter: You are taking the very highest assumed rate for sprinkling, the highest assumed quantity for sprinkling. We are utterly unable to agree on any such thing. We will have to accept what this Court or some other Court decides.

Mr. Corbin: The superintendent said it averaged twenty-six loads a day, twenty-six or twenty-seven days a month, 1,112,000 cubic feet, $55.75 a month per cart would make. Now, I say at once we will throw off more than a quarter of that and reduce it to about 83 cents a thousand cubic feet, or Forty dollars per month per cart.

The Court: What was the old contract? The Court: The old contract was Forty dollars per hydrant, and sprinkled for nothing. The one made and set aside by the Court of Appeals, Twenty-five dollars per hydrant and One hundred dollars for sixteen water wagons, with the privilege to put on as many after that as we wanted—a Hun-

dred dollars apiece for sixteen; we could practically run nineteen wagons; Sixteen hundred was to cover all the sprinkling, but we had to have at least sixteen wagons.

Or we will do this, make this offer. We will put a meter on every cart; if they will pay half the price of the meters we will pay the other half. That is done frequently. But at $100 per cart per season, Sixteen hundred dollars for that time, don't begin to pay us for the water, in our judgment; but if they prefer to measure it we will do that and pay half the cost of the meter.

Mr. McCarter: Twenty-five dollars a hydrant rate is on a contract based on the idea that they have got to go buy these hydrants. These hydrants are theirs.

Mr. Corbin: They are ours.

Mr. McCarter: You are right that you are entitled to a fair sum, but you are not entitled to the first cost. We are willing to do this, we are willing to abide by the basis—viz.—that they are quite willing to renew that contract so far as public rates are concerned.

Mr. Corbin: What is your idea you want for sprinkling?

Mr. McCarter: What Senator Blodgett said in a letter a week before this suit he would agree to do.

Mr. Corbin: It is too late.

A letter from the Dover Water Commissioners, of Dover, New Jersey, showing the rate, dated June 26, 1903, offered as evidence.

Objected to as improper.

Marked Exhibit A.

List of rates from the Passaic Water Company, of Passaic, New Jersey, offered and marked Exhibit B.

List of water rates from the City of Hoboken, New Jersey, dated September 23, 1902, offered and marked Exhibit C.

List of rates of the Jersey City Water Company, or water used in Jersey City, dated January 9, 1900, offered and marked Exhibit D.

List of rates for the City of New Brunswick Water Company, no date, offered and marked Exhibit E.

The Court: I don't suppose Mr. Corbin wants to run any risk. I will fix a day here for Mr. Corbin to get all these proofs; but I will suggest to you, you or your clerk in your office, or your solicitor, Mr. Van Note, if you will take the trouble to write a letter to these different companies, you can get confirmation of these rates, and suppose Mr. Corbin is perfectly willing that that should be done. Mr. Kellogg can make out a list and give the proper name of the corporation or municipality to write to, and if you will take that trouble it will save Mr. Corbin a good deal of work.

Mr. McCarter: I am not standing on technicalities; that isn't the point. My friend Mr. Corbin knows perfectly well, I think you know, that is not my make-up; but we do feel we ought to have the men here to testify. William H. Corbin is a large water man—he is counsel for water works—he knows a great deal about water that I don't begin to dream of; your Honor knows perhaps more than he. Now, I feel that our side, the city or municipality down at Long Branch, is entitled to have the details of the several companies, the particulars in regard to it, where their water supply is—is it a well

right near by? is it a river that you get for nothing? or do you do as you have to in Morristown, have to buy up valuable property? All those things we ought to know. That we cannot very well get satisfactorily out of court. I am perfectly willing to write.

The Court: I shall assume, whether you prove it or not, that you cannot compare any one of these with another. They all vary, so that—I don't know what word to use—the levelness of their various charges cannot be compared; one charges a little more for this, and the other more for that, and a little less for the other. The witness has testified to what I knew before. Take any one of these lowest rates, put them alongside of the other, it will be a little higher on one and a little lower on the other. And so, Mr. McCarter, as to this matter of the cost of supplying one town as compared with another, I shall assume that it is a complex problem to say which one town can be provided easier than another, and I will say that Morristown is the most troublesome place to supply than all of them, as far as you have got them here, and the greatest hardship on us to supply sprinkling—that we couldn't do it only for the general benefit of the town, in order to keep people there—put the rates down very low in order to make Morristown an attractive place. We have been at that now for forty years; I have been into that job now for nearly forty years, making Morristown an attractive place; one of the attractions is to have pure water and build it up, and we take some credit for it. Now, you cannot compare one

with another, except within limits, and I have no doubt that this water company feel that it is to their advantage to make Long Branch attractive in this respect, have the streets well sprinkled, and they would be willing to have a rate put down that is hardly compensatory to them. They have got this advantage at present, they have got an unlimited supply; they have got a great big brook, a river, and all they have got to do is to filter it and pump it, and they know just what that costs; they have got the apparatus there, and they take the bitter with the sweet, the profitable with the unprofitable, and that all companies do to a greater or less extent, just as a groceryman attracts people; he sells some goods at cost in order to induce people to come to his store, and he sells other goods at a greater price. It is the same principle, in a modified degree, in regard to water companies. So you may assume I shall make allowance for every one of these on that account, but if you wish them here, and doubt very much if you insist upon it, it may be that Mr. Corbin ought to do it.

Mr. Corbin: I don't like to testify myself, but it so happens that almost all of them are within my personal knowledge, and I am disposed to give a little testimony myself rather than go to that bother.

The Court: So that the objection that you make, Mr. McCarter, that you ought to have the men here to cross-examine as to the cost of the works and what they cost for other things is all discounted, it is all taken for granted that they will be varied. Now, if that makes any difference in varying this

evidence, take it for what it is worth. You are under no obligations to do what I suggested.

Mr. McCarter: I would be very glad to accommodate the case and counsel. I am friendly to everybody connected with this controversy, just as much so to my friend La Monte and Senator Blodgett and everybody else, but I really feel we ought to have these men before us.

WILLIAM H. CORBIN, sworn:

Jersey City has a public distributing water system of its own.

By the Court:

Q. Buys its water?

A. But for the present buys its water, and has since 1896, under a contract which I personally drew, and am familiar with. The water comes from the Little Falls of the Passaic River, four miles above Paterson, and is transferred thence to Jersey City by the East Jersey Water Company and is bought by the City and received into the City's distributing system. It is pumped at Little Falls by water power and by steam power to an elevation which raises it to Garret Mountain, about four hundred feet above the sea. Hoboken owns its own distributing system, but buys its water delivered substantially at the City line from the Hackensack Water Company under contract running a long period of years, and which I assisted in drawing. The Hackensack Water Company is a private water company which takes its supply from the head waters of the Hackensack River, just above where the tide rises and falls, at a place called Milford, on the New Jersey and New York Railroad. It sells water by the large to Hoboken, and I think to

other towns, and has a very large distributing system of its own to Rutherford and adjacent places, Hackensack, and the northerly towns of Hudson County. Its operations are very large. It pumps water at Milford so as to give it sufficient head. It has standpipes on the Palisades, possibly elsewhere.

The Union Water Company I am one of the stockholders of and am familiar with its affairs. It has a specially chartered company which buys its water from the Netherwood wells of the Plainfield Water Supply Company at Netherwood, and carries it through its own system of pipes through Fanwood, Westfield, Cranford and Roselle, and some intermediate boroughs, supplying them with water and distributing to itself as I think at the present time by something over eleven hundred taps.

New Brunswick is a public water supply, from springs, as I understand, although I am not very familiar with it. I am attorney of the Passaic Water Company, and have been for years. It is a company specially chartered for supplying water to the City of Paterson and vicinity. It buys its supply from the East Jersey Water Company at Little Falls, the same place where Jersey City's supply comes from. It buys filtered water. The East Jersey pumps it into its pipes at sufficient head and it supplies the entire City of Paterson, and through the instrumentality of the Aquanock Water Company it also supplies the City of Passaic and some adjacent smaller municipalities, probably a hundred and fifty thousand people in all.

Cross-examination by Mr. McCarter:

Q. How much population has Elizabeth, served by the Union Water Company?

A. At the last census a little over fifty-two thousand, in 1900.

Q. Permanent?

A. All permanent.

Q. How much population has Paterson?

A. A little over a hundred thousand, practically all permanent.

Q. And Passaic?

A. My recollection is thirty-five thousand at the last census, practically all permanent.

Q. And Jersey City?

A. Jersey City, two hundred and sixteen thousand, I think, are the figures, all permanent. Jersey City's situation is singular; they sell some eleven million gallons of water per day to the railroads and large factories, and their cousumption, therefore, is rather abnormal; they consume much more than Newark, although less population.

Q. Does each one of these companies not have to pay for the water, apart from the pumping?

A. For instance, which do you mean?

Q. Well, the Jersey City, the Hoboken, the Union?

A. Let me take them in their order. Jersey City has no water company; Jersey City has municipal ownership; it buys the water from the East Jersey Water Company delivered into its city at a given price per million gallons.

Q. While it is building its municipal plant?

A. It has what is called temporary contract under which delivery commenced January 10, 1896, and delivery has not yet ceased under it.

By the Court:

Q. It is building its own works?

A. A corporation is building works which the City is expected to buy, but until it does buy it that corporation will furnish water at a price per million gallons for twenty-five years.

Q. Passaic, Paterson, Hoboken and Jersey City are each of them compelled to pay somebody for the water?

A. Passaic and Paterson are on an entirely dif-

ferent basis; the water supply system in those towns is owned by the water companies, in one case by the Passaic Water Company, and the other by the Aquanock Water Company. Hoboken and Jersey City own their own distributing system.

By the Court:

Q. Nothing else?

A. And practically nothing else. Hoboken never has had a supply of its own. Jersey City's original Passaic River supply is moribund, discontinued.

RUFUS BLODGETT, resumed for further cross-examination by Mr. McCarter:

Q. Senator Blodgett, the Mansion House that used to exist at Long Branch has been burned down, has it not, and is no longer a hotel?

A. A portion of it.

Q. The Ocean Hotel has not been successfully operated for some time, has it?

A. That is true.

Q. The United States Hotel has been torn down or burned down?

A. Yes, sir.

Q. The Hollands Hotel has not been successfully operated for some time, has it?

A. It has been operated every year, but I judge not so successfully as formerly.

Q. The Elberon Hotel failed within a year or two?

A. I am not aware of that fact; the proprietor of the Elberon Hotel was mixed up in some other matters, but I think the hotel itself has been profitable always; that is my understanding.

Q. Hasn't a Receiver been appointed for the hotel company?

A. Yes, for the entire thing; he was involved in some bank.

Q. Is there any hotel in Long Branch, any so-called summer hotel, that, during the last five years, with the possible exception of the West End, that has been successfully operated?

A. I am unable to say, except from common rumor; the impression is that the Holleywood Hotel has been a profitable house, and the Scarborough.

Q. The Holleywood, I think, closed early in August last summer?

A. Last year may have been an exception, but you have asked within the term of five years.

Q. It did close though very early last year?

A. I think it did.

Q. Very poor season?

A. I should say last year was a poor season.

Q. Those hotels in the good old days that I have named, when our friend Jim Fisk and others used to luxuriate at Long Branch, were in active full bloom, were they not?

A. Yes, sir.

Q. What summer hotels are there that operate successfully now at Long Branch, that you know of?

A. I only know from common rumor; I should say that the Holleywood, West End and Scarborough, and possibly some smaller ones, but I should say that those three were successful.

Q. You wouldn't think last summer the Holleywood—

A. The Holleywood closed early; I understand, however, they make their money and close before they begin to lose it.

By the Court:

Q. They quit while the play is good?

A. Yes, sir, that is the theory.

Q. The play season wasn't a month long last season, was it?

A. With them?

Q. Yes.

A. I don't know.

Q. Now, what boarding houses have come to Long Branch and opened in place of those hotels? In other words, what new large boarding houses, if any, are there there that have been put up in the last five years?

A. I don't know of any within the last five years.

Q. Is it or it it not true—whether morally proper or not—is it or is it not a fact that Long Branch has suffered in the eyes of the people there a black eye, so far as the hotel life is concerned, from the closing up of the horse race track and the gambling places?

A. Many people think so.

Q. The Phil Daly Philadelphia Club has been sold under foreclosure, has it not?

A. Whether it has been sold or not, I am not sure; it is advertised for sale.

Q. And several of those large club houses have been standing empty for a year or two?

A. Yes, sir; all of them.

Q. What is the basis for your statement that last summer Long Branch had a larger summer population, in your judgment, than at any previous year?

A. Because there was a great many more cottages; there had been a large number of cottages built during the last three or four years, and a great many last summer—now I am taking Long Branch and surroundings—more than making up for the deficiency in the hotels; the cottage element had been increasing.

Q. When you say you are taking in Long Branch and surroundings what do you mean by surroundings?

A. I mean Elberon.

Q. South Elberon?

A. Yes, sir.

Q. Outside of the bounds of the Commission?

A. Some parts of it, and some parts in.

Q. Isn't it a fact that most of the growth that you advert to has been in the neighborhood of Deal and outside of the bounds of Long Branch?

A. More; but there are a great many cottages built in Long Branch during these last five years.

Q. Now, Senator, have you any idea that Long Branch has as large a summer population as Asbury Park?

A. You are speaking of the Commission limits?

Q. Yes.

A. Yes, sir, I think it has a large one.

Q. Larger one?

A. Yes; the territory is a good deal—there is a great deal more territory than there is at Asbury Park. Let me explain this. There are a lot of people go to Asbury Park that don't stay there over night.

Q. But they consume water while they are there?

A. Yes, I suppose; I am talking about the population.

Q. The people—the people that are there for the summer, for a day, or a week, or a month, if you will?

A. It is a small place, but it is packed for one month.

Q. And it has very much more—

A. More densely packed at Long Branch, that is true.

By the Court:

Q. Not near so much territory?

A. No; not quarter.

Q. Have you any idea the summer population of Asbury Park?

A. I have heard it variously estimated, but we have no statistics that I should want to venture a guess.

Q. Can you give any idea of the summer population of Long Branch?

A. I am in the same condition with Long Branch.

Q. Don't you think with me that Dr. Reed's estimate of seventy-five thousand is very large?

Objected to as not cross-examination.

The Court: No; that isn't fair. You don't want to bring Senator Blodgett in contact with Mayor Reed.

Mr. McCarter: I don't want to do anything unfair to Senator Blodgett or Mayor Reed; I don't want it to go on the record seventy-five thousand, because Dr. Reed is wrong, I know.

The Court: I understand the winter population is about nine thousand

Mr. McCarter: Roughly speaking, yes, a little less than nine.

The Court: Senator Blodgett has told us in the summer time they pack like sardines.

Mr. Blodgett: That is true of every seashore resort, Mr. Vice-Chancellor.

The Court: I will ask him this question. A great many houses that are occupied in winter are larger, I suppose, than the occupants need, built so on purpose?

A. Oh, yes.

By the Court:

Q. A good many small boarding houses?

A. Yes, sir.

By the Court:

Q. People take lodgers in the summer?

A. Yes, sir.

Mr. McCarter: Twenty-nine on their list; they supply twenty-nine boarding houses.

Q. Now, the Turner (?) Hotel has been closed, has it not, last summer?

A. Oh, I don't know about that; it is unimportant.

Q. Well, it was closed?

A. I am not sure whether it was closed last year or not; it has been open more or less a week or two at a time.

Q. Now, do I understand then, Senator, that your view is that more people come now to Long Branch—I don't mean more cottage people relatively with the former cottage people, but taking in view the fact that hotel after hotel that used to be flourishing for the season is closed up that used to be open two or three months, that more people come to Long Branch and stay there than ever did before?

A. Yes, sir; I am of that opinion.

Q. Confining yourself to the Commission?

A. I understand the hotel shrinkage has been going on for the last ten years, considerably more of it during the last five years of it; this didn't come all at one time; and the increase in other ways from cottages and boarding houses has fully kept pace.

Q. How many summer cottages have you in the Long Branch Commission?

A. Oh, I can't begin to tell you, I have never counted them.

Q. Can't you give me some idea?

A. Oh, it would be a mere guess, Mr. McCarter.

Q. Where are they located, on what streets?

A. Every street in town; every street in town nearly.

By the Court:

Q. Mixed all through?

A. Every street practically.

Mr. Corbin: 1318 taps in the Commission.

Mr. McCarter: That is summer and winter and everything; that is the whole thing.

Mr. Corbin: 1363 last year.

By the Court:

Q. You don't know, but Mr. La Monte was asked the question how many taps you have added every year on the average; that was given before, wasn't it?

Mr. La Monte: Yes, sir; the increase was given.

By the Court:

Q. You know, as President of the company, without giving details, whether there is a regular increase of taps every year?

A. Yes, sir.

By the Court:

Q. That is what you watch for?

A. Yes, sir; I watch for results.

By the Court:

Q. Well, this population that you have now which has taken the place of the old hotel population is more temporarily permanent? Those people come to stay a week, a month, when before they used to stay only a few days?

A. That is about the situation; the hotels have been open during the summer, and supposing that they did seventy-five per cent. of the business which they formerly did it would be a failure financially. Now, a hundred per cent. would pay, because they keep all their servants, so that these hotels have been opened and have been doing business and have been having a good many pople there during all these years. That is the situation.

By the Court:

Q. The question has been profit and loss, that is the question?

Exactly; we must not consider that these hotels are absolutely empty; it isn't true, except in one or two cases.

Q. I don't think they are very full?

A. Well, that is conceded.

Q. You have never, either as a citizen, as a public officer, or as superintendent of the railroad company, in the past five years made any estimate of the summer population of Long Branch?

A. No; I haven't, I confess; we might make a guess at it, but I have never taken any meaures to get at the accurate population.

By the Court:

Q. He is after a guess, I guess now. I would be glad to have what you have guessed.

A. Do you want my opinion of it?

Q. Yes.

A. I don't know as it would be worth much. My own opinion is that Mayor Reed stated it higher than it should have been, the summer population.

By the Court:

Q. What would you put it at?

A. I should put it at fifty or sixty thousand; I think he said seventy-five to a hundred. That would be my estimate.

Q. I think the gentleman who was on the stand yesterday, Mr. Coffin, stated that the summer population of Asbury Park was estimated to be about thirty-five thousand?

A. Thirty-five thousand; I should think that was about right.

Q. Now, on reflection, Senator, including excursionists, to a certain extent, remember that they are

consumers of water both in water closets and in faucets; is it not true that a very large excess of railroad traffic is done at the Asbury Park stations of your road over what is done at the several stations of Long Branch?

A. No, sir; it is not true. Asbury Park station is the most important, and much larger business than at Long Branch Station proper, but Long Branch has in it, in the Commission limits of Long Branch, four stations on the New York and Long Branch Railroad and four on the New Jersey Southern Railroad, eight stations, as balancing Asbury Park.

By the Court:

Q. You mean to say Asbury Park Station is bigger than the Long Branch Station proper, but not larger than all eight?

A. All eight.

By the Court:

Q. Does the New Jersey Southern carry passengers too?

A. Yes, sir.

By the Court:

Q. They come down by boat, then?

A. Yes, sir.

By the Court:

Q. Where do they land?

A. They land at East Long Branch.

By the Court:

Q. Where do they land? They come down by boat, don't they?

Mr. McCarter: From Atlantic Highlands.

A. Which end do you mean?

By the Court:

Q. Where is the north end of the New Jersey Southern road?

A. At Atlantic Highlands; there connect by boat to New York.

By the Court:

Q. If I go to Long Branch by Atlantic Highlands —I went down that way once, or rather I went by boat from the foot of Liberty Street somewhere to Asbury Park; we didn't go down the New Jersey Southern road, we went down right through Long Branch.

A. You started from Liberty Street?

By the Court:

Q. Yes.

A. You went down the New Jersey Southern road; you transferred at Long Branch.

By the Court:

Q. You mean to say we come on the New Jersey Southern Railroad?

A. Oh, yes.

By the Court:

Q. That crosses the other up at Red Bank?

A. It crosses there and crosses at Branchport and connects at West End.

By the Court:

Q. Then you knew as railroad President, have a general knowledge of the amount of passengers that land at Long Branch, and with all its stations and those that land at Asbury Park?

A. On the New York and Long Branch Railroad, yes.

By the Court:

Q. You have some idea of the other, don't you?

A. I have an idea of it, but it don't officially come under my notice.

By the Court:

Q. You have an idea of it?

A. Oh, yes.

By the Court:

Q. They don't get Atlantic Highlands trade, the Pennsylvania?

A. No.

By the Court:

Q. They only get their own trade?

A. That is all.

By the Court:

Q. That comes down there by rail?

A. All rail.

Q. Have you four stations on the Long Branch Road in Long Branch. The Elberon Station is in the limits; the West End Station is in Long Branch; the Long Branch is in Long Branch; the Branchport Station is just about two hundred feet north of the limits, but the people that get off there, a good many of them, live in the Commission limits, a large portion of them, say.

Q. Now taking into consideration the number of people that get off at North Asbury Park and at Asbury Park, do you mean to be understood to say that as many get off at the Long Branch Stations to which we have referred as get off at both of the others?

A. I didn't say at the Long Branch Stations.

By the Court:

Q. Stations—plural?

A. You mean the entire eight stations of the two Companies?

Q. Yes.

A. I mean to say that there is as many at Long Branch, I should say more. Now, I haven't the figures for the New Jersey Southern, and know nothing about them; in fact, I can't recall the figures now on the New York and Long Branch Railroad, but I should say that, yes, sir.

Q. You mean excursionists and all?

A. Well, I don't know about excursions; we don't bring many excursions to Long Branch; I should make an exception on excursions, although all the excursion trains that go down stop there; but I should say excursionists must not be included in this calculation.

Q. A large excursion business goes to Asbury Park?

A. That is true; that I hadn't in mind when I answered your question.

Q. You are taking the regular summer travel without regard to excursions?

A. Yes, sir.

Mr. McCarter: I should think you were probably right about that. I think so.

Redirect-examination by Mr. Corbin:

Q. In regard to these hotels, you have been clearing out the vice in Long Branch these last few years, haven't you?

A. Well, there has been some things going on at Long Branch.

Q. With the exception of these disreputable things Mr. McCarter has mentioned, the progress of that Town has been towards enlargement, betterment, hasn't it?

A. Yes, sir; Long Branch has been steadily im-

proving in certain lines; not with the hotels; the hotels are growing older, and old-fashioned, not so attractive.

By the Court:

Q. The hotel life is not so much sought after as it used to be?

A. No.

By the Court:

Q. Families that used to go down and board at those hotels in the summer time for weeks don't do it now?

A. Don't do it so much.

J. WESTON SEAMAN, sworn:

Direct-examination by Mr. Corbin:

Q. What is your position?

A. Civil engineer, residing at Long Branch, 425 Broadway.

Q. Are you City Engineer of Long Branch?

A. Yes, sir.

Q. I show you this schedule, which is marked Exhibit D2, being a list of streets. Have you been over this schedule of streets from the sprinkling ordinance of Long Branch?

A. Yes, sir.

Q. These pencil figures, showing area, &c., and length, who made those?

A. Mr. La Monte.

Q. You verified them?

A. Yes, sir.

Q. Do they correctly show the length and width of those streets?

A. Yes, sir.

Q. And do they correctly show the area, square yards of roadway?

A. Yes, sir.

Q. How much of the roadway, from curb to curb, what is the total included in the sprinkling ordinance in miles?

A. 1901 there was 31 and 3/10ths miles, that is the length, and the square yards 701,234; and for 1902 is the same; 1903 there was some taken off on account of the stone roads, the County does that. 1903 there were twenty-six miles in length and 137,351 lineal feet, and in square yards 588,576.

Cross-examination by Mr. McCarter:

Q. How were these calculations made up?

A. The Clerk of the City gave us the streets sprinkled and then we ascertained the length and width.

By the Court:

Q. The width from curb to curb?

A. Yes, sir.

Q. From what?

A. From profiles of the Town showing the length of each street.

Q. What part did you play in this?

A. I had the maps, you know, showing the length of each street.

Q. I mean how much part did you take in the calculation?

A. I calculated all.

Q. You did?

A. Yes, sir, I along with Mr. La Monte.

Q. From the City maps you took th length and width of each of these streets that are within the ordinance?

A. Yes, sir.

Q. And wrote them down here, and then made the calculation?

A. Yes, sir; each separately.

Q. And they are correctly put here?

A. Yes, sir.

Q. You don't, of course, pretend that each street is in fact watered from curb to curb?

The Court: He didn't say anything of the kind. The evidence is the other way.

Question withdrawn.

Redirect-examination:

Q. Are they, as a general thing, the streets sprinkled from curb to curb?

A. Yes, sir, they do, on one side and then on the other side.

Recross-examination:

Q. Where do you live?

A. 425 Broadway, Long Branch.

Q. And where is your business?

A. I have an office 182 Broadway.

Q. And are you home all the time, or away, during the summer?

A. In town all the time.

Q. Now, you mean to tell me that on every avenue in Long Branch, with one or two exceptions, they water from curb to curb?

A. I didn't say that, every day.

Q. What do you mean to say then?

A. Some rainy days, of course, they are not sprinkled at all.

The Court: The width. What has been your general observation as to whether they sprinkle from curb to curb, or only through the center of the street; what was your observation?

A. They go on one side and then on the other side.

Q. Do you know the Street Commissioner?

A. Yes, sir.

Q. He knows more about that than you do, don't he?

A. Yes; he has charge of that.

WELLINGTON LA MONTE, having been already sworn, is now called for the defendant.

Direct-examination by Mr. Corbin:

Q. What is your position in the Tintern Manor Water Company?

A. Superintendent and Secretary, and also one of the Directors.

Q. How long have you been Superintendent?

A. I have been Superintendent of the Tintern Manor Water Company, well, I was first Superintendent of the Long Branch Water Supply Company, and then when we took over the plant I became Superintendent of the whole thing.

Q. How long have you been there in Long Branch managing the water business?

A. About four years.

Mr. Corbin: I will, with the Court's permission, put in my exhibits right at this point. The first one I desire to offer is the certificate of incorporation of the Long Branch Water Company. It is C1; it was to be my D1.

I offer the agreement between the Long Branch Commission and the Long Branch Supply Company, dated September 21, 1891, original contract for ten years. It is Schedule 1 attached to the bill of complaint.

The Court: You waive the production of the original paper, I suppose?

Mr. McCarter: Oh, yes. We are not standing on those technicalities at all.

Mr. Corbin: I offer the consolidation agreement of July 2, 1901, creating the present Tintern Manor Water Company. It is found in the printed pamphlet which we have already used, on page 13.

The Court: That has been put in?

Mr. McCarter: I put in part of it. We

put in one agreement in there. The consolidation agreement was not put in.

The Court: You put in the whole?

Mr. Corbin: I put in the whole of that consolidation agreement, not the whole pamphlet.

Next I offer the agreement of November 24, 1902, between the Long Branch Commission and the Tintern Manor Water Company, which is attached to the bill and there called Schedule B, being the contract which was set aside by the Court of Appeals.

The Court: These are all admitted as you go along.

Q. I show you this map which you have been using, which is the State topographical map of the Monmouth shore. Did you map upon it these water sheds that are indicated here?

A. I supervised the work, stood right over the young man in my office that did it.

By the Court:

Q. Done in your office under your supervision?

A. Yes, sir.

Q. Are your old Takanassee water shed and your new Newman Springs water shed correctly shown there?

A. Yes, sir.

Q. And have you made on it the new mains, the thirty-six inch main and eighteen inch main?

A. Yes, sir.

Q. How are they indicated on this?

A. They are indicated by a red line, starting at the Newman Springs reservoir to the Newman Springs pumping station, thirty-six inch main running to Broadway, Long Branch, and eighteen inch main branching off at Little Silver and running through the Rumsen Neck to and into Seabright.

Mr. Corbin: I offer that.

Q. What is this red-shaded portion along the shore? What does it indicate?

A. That indicates on that map the area that we supply with water.

Q. Your system of pipes laid supplying the area which is there shaded?

A. Yes, sir; that is, of course not on all the streets, but the other map shows the exact streets. That is our territory.

Mr. Corbin: I offer that Monmouth shore sheet in evidence and ask that it be marked.

Marked Exhibit D5.

Q. Look at the other sheet we have been using, on the two thousand feet per inch scale, known as the Nevisink sheet; what have you laid down indicated on that? Your Nevisink sheet is made up of two, isn't it?

A. Yes, sir.

Q. What are the red lines you have laid down there? What do they indicate?

A. Show the pipe lines of the company.

Q. Have you indicated the hydrants also, street hydrants?

A. Yes, sir, in Long Branch.

Q. How many in all?

A. 146.

Q. Have you indicated those which are fitted with arrangements for filling sprinkling carts?

A. They were last summer and for several years previous.

Q. How many are there?

A. There are either 59 or 60.

Q. Have you indicated the outlines of the Long Branch Commissioner?

A. Yes, sir.

Q. Have you indicated Eatontown township?

A. Yes, sir.

Q. Ocean Township?

A. Yes, sir.

Q. And is your reservoir indicated here?

A. Yes, sir.

Q. And Shrewsbury Township?

A. Yes, sir.

Q. And your pipe lines?

A. Yes, sir.

Mr. Corbin: I offer that map in evidence. Marked Exhibit D6.

Q. Are all your mains laid down on that map?

A. I believe they are; yes, sir.

Q. Are the sizes indicated?

A. Yes, sir.

Q. We have been using here by common consent certain schedules which we have been calling La Monte schedules. The first one I call Schedule A1, headed "Cost of the plant to the Tintern Manor Water Company." Did you make up these schedules?

A. I did.

Q. Now, tell me, in the first place, whether this shows correctly the capital stock and bonds outstanding?

A. It does.

Q. That is the entire share of capital and bonds outstanding, is it?

A. Yes, sir.

Q. Has the company any other debt more than current bills?

A. Nothing but current.

Q. Now, refer to Schedule A2, which is entitled "Actual cost of plant in cash and stock to the Independent Telephone Telegraph Construction Company."

A. I might explain that our bills are all paid, but there was a little money borrowed against some

of the uncollected water bills; everything is paid up.

Q. Now state from what sources you made up this schedule of actual cost, and where you got your information?

The Court: Long Branch Water Supply Company plant, $325,000, that first item, A?

A. That was taken from a statement furnished us by the company that constructed the plant, and verified.

Mr. McCarter: I don't want to admit this schedule or this witness' evidence—I don't want this Schedule A2 to go in here by this witness' proof of anything that he does not know originally.

The Court: He knows nothing about it, as I understand, so far, except a statement of the cost was made up by the old company; his evidence don't go any further than that.

Q. Now, the second item, for the Deal Water plant, how do you know what was paid in cash for that?

A. Well, I have seen the contract and the extra items on it, interest on deferred payments and attorney fees; I verified them.

Q. How about the Middletown Water Company plant?

A. Well, that was paid to the State at the time the company was incorporated; I saw the check.

Q. Now, take the large item D, Newman Springs Reservoir, &c., $936,740.77. Do you know how that item was arrived at, and what did you do with a view of arriving at it, and tell all you know about it?

A. Well, early in the year 1903 the plant was near completion.

Q. Who constructed it?

A. The Independent Telephone and Telegraph Construction Company. Early in the year 1903 the plant was nearing completion; there had been no settlement made with the construction company. The plans had been materially changed of the project as it was first contemplated; for instance, we expected to put a pumping station in Red Bank, and were fought there and were not allowed to use their streets; we expected to put a standpipe on Lovett's Hill; we lost that by poor title; and there were a great many changes made. They submitted to us early in 1903 a statement of the actual cost, actual money they had paid out on this plant, giving details. The Board of Directors, of which I was one, met several times, had several conferences, and this was referred to a committee of the Board.

Q. Who was the committee?

A. Mr. Blodgett, Mr. E. A. Walton and Mr. Whitney Conant; Mr. Conant took the statement that was rendered to him—

Mr. McCarter: Are you speaking of your own knowledge?

Q. What did you do?

A. I had a conference with Mr. Conant in Paterson; he gave me the details of his—of what he had done.

Q. Where was the Construction Company located, where was its home?

A. Its home is in Scranton, Pennsylvania.

Q. Did you go to Scranton?

A. Yes, sir. I was appointed a committee to go to Scranton and examine, to verify Mr. Conant's work, all of the cash items, all their vouchers, their check books.

Q. Did you do it?

A. I did.

Q. How long did you take to it?

A. I took a week, a week in Scranton.

Q. Did you see their checks?

A. Saw their checks and their receipted bills, and went into it in detail.

Q. Checked it up?

A. Checked it up, put the whole time that we could in on it.

Q. Now, was this checked up by you and Mr. Conant in any other way as to quantities and so on?

A. As to quantities, yes, sir.

Q. Did you make an estimate of its cost and value as to quantities?

A. We did.

Q. Length of pipe and cost of pipe, did you go into that?

A. Yes, sir.

Q. Did you take up the cost of lead and oakum?

A. Lead and oakum; had their contracts before us that they had made with their sub-contractors for laying pipe in different sections.

Q. Did you cover all the work in that way?

A. We did.

Q. Did you assist him in making up what the cost of it had really been?

A. Yes, sir; I did; I went over it with him.

Q. What was the figure that you finally ascertained in this way?

Mr. McCarter: I object to it. By a contract that was put in yesterday by me, which should be supplemented by another one that I see is a modification of it, that I was not aware of at that time, the Tintern Manor Water Company made an agreement in writing with this Independent Telegraph and Telephone Company—whatever they call it—to build these works for stock and bond consideration; and the Independent Tele-

phone and Telegraph Company undertook to build it, and did build it. I think if the question of what those works cost is material to this case in cash to the Independent Telegraph and Telephone Company, the people who spent the money and did the work are the people to prove it, and not somebody who went over what is said to be the vouchers and other papers in connection with that thing and found what the vouchers showed. I can't go up and examine the vouchers of the East Jersey Water Company and then come here and tell what the work cost the East Jersey Water Company to put this water supply for Newark in. The people who spent the money and did the work are the people to prove that. Now, it seems to me that Mr. Corbin's idea of this case is that it can be proven any way. One of the most material things in this case is the claim made in our bill that they are endeavoring to foist upon Long Branch the total, practically total cost, or as counsel opened yesterday, two-thirds of the cost of a large plant that has no relation to Long Branch, but that the cost itself was largely exaggerated—water, water. And Mr. La Monte might have gone over a lot of figures and found this and found that and found the other thing, and be satisfied that those people did spend so much money; but the contract between the two companies provides that one company shall be paid in stock and bonds, and the supplemental contract, which will be offered in time, makes the same provision. And I say that what was discovered by the Tintern Manor Water Company in a supplemental inves-

tigation that the Telephone people say they spent in constructing this thing is not the evidence of what they spent at all, or what these works cost, and that this is the very fundamental nub of this whole thing. We want to know the details of this cost; we want to know whether there was not a lot of watering and stock jobbing here, as we suspect. I don't mean that on behalf of Mr. La Monte or on behalf of Senator Blodgett at all; but German and Wentz and the people that stay in Scranton and do not come here, and who were this Independent Telephone and Telegraph Company are the people that we want to find out what they spent for this thing.

The Court: I don't think it is necessary to hear you, Mr. Corbin. We are not here to determine the question whether this company paid one cent too much or one cent more than the cost, or whether the Telephone Company made too big a profit, or no profit. If we were to go into that we would never arrive at any conclusion, because all this work is done by contracts and sub-contracts, and sub-sub-contracts. A man undertakes to lay a pipe and he contracts to do the excavation for that pipe, and he puts it out in sections, sub-contracts, and that man sub-contracts with an Italian for a gang of men to do that at so much by the cubic foot; you get into an interminable detail which would not lead to any accurate results at last, because it is a subject that is not capable of entire accuracy. Now, as I understand the tendency of this evidence, it is that they had a contract, and this is what Mr. Corbin wants to prove, they had a contract for cash and bonds.

Mr. McCarter: No cash at all.

The Court: And stock which was watered, of course; that was a watered contract; but in the course of carrying it out they were obliged to abandon the letter of the contract and make substitutions at various times, with the result that in order to get on they had occasion as business men acting, not for the purpose of imposing something on Long Branch or anybody else, but as business men looking out for their own pockets, to find out how much the contracting party had spent on it.

Mr. Corbin: That is it exactly.

The Court: And what they propose to prove now is the mode in which they went to work to do that, to find out what, as near as they could, had actually been spent on it. Now, they state that mode, and it is the usual mode, as I understand it; if it is not it will be open to Mr. McCarter's criticism in argument; but it is one mode; it is the mode they adopted; if it is the usual mode that is so much the better; if it is not, so much the worse. But they adopted a mode, as I understand the line of evidence now offered, to find out how much had been spent on that, for the purpose of making a new deal; that is what I understand the line of evidence is.

Mr. Corbin: Exactly.

The Court: And they are telling how they did it. Now, whether they were cheated a little, more or less, is another question which is open to argument. But the fact that at the time, with no view of cheating somebody else, but with a view of finding out for their own benefit in a businesslike manner just about as near as you can how much it had

cost, how much money had been put into it, I think that is competent to show, to tend to show what the whole cost was, and I think it is particularly competent in this case, because Mr. McCarter himself, on cross-examination I think of Mr. Blodgett—if I am wrong in that—

Mr. McCarter: Not a word about this.

The Court: You asked him what it had cost.

Mr. McCarter: Long Branch supply. That is a different item altogether. This is the cost now of Newman Springs.

The Court: Oh, well, I beg pardon then. But still I doubt whether it has much to do with the case; but I think Mr. Corbin has a right to have it in, because I think probably that the problem that is presented will be almost inexplicable. The plant covers other tracts, other regions, I mean other territory, is the word; if I should attempt to go into a calculation as to how much ought to be put on Long Branch, why, I would get in the region of speculation. These gentlemen speculated; they speculated on a great lot of land around there, territory four times as big as Long Branch, and they built their plant to fit something that they hope will come within five, ten, fifteen or twenty years. But still, I think it is competent and I think Mr. Corbin is entitled to it on the face of the allegation in the bill that this was largely overrated and watered. Now, I think they are entitled to this very evidence in order to meet that charge in the bill, of which really there has been no proof.

Mr. McCarter: I don't want to be misunderstood about this. Mr. Corbin very plainly and properly opened his case yesterday

and claimed that it was the duty of this Court in this particular case to award, arbitrate, if you will, a compensation to these people in their private rights, based upon, among other things, the cost of the investment, and, anticipating from suggestions that have been thrown out by us, as well as by our charges in the bill, that it was unfair that the total cost of this thing should be charged to Long Branch, he admitted that so far as one-third was concerned, and said we are going to claim two-thirds of the cost of this as being properly chargeable to Long Branch. Now, he is making his own case now, and he is undertaking to show your Honor what this cost was for the purpose of carrying out his opening, and asking your Honor whether you will adopt that. Of course, I don't know that two-thirds of this total cost to be charged up to Long Branch is a fair and equitable way of reaching the sum. Now, I say the cost is a fact, and that because somebody else went over some vouchers and papers which are said to show what they cost, does not prove the cost.

Mr. Corbin: You don't understand my question.

Mr. McCarter: Excuse me; let me finish. The way to prove what they spent is by the people who spent it.

Mr. Corbin: I didn't ask what was spent. I asked what it was worth.

The Court: I think the evidence is clearly competent. I have only to say that this is one mode by which these gentlemen undertook to find out what this property was worth when they made the new deal, and this is one mode, and it is the usual mode. It

would be interminable to come down and prove every detail.

Mr. McCarter: My objection is on the record.

The Court: I think the evidence is competent. The weight of it and the effect of it is another question. With regard to Mr. Corbin's opening, he admitted the general doctrine which nobody has iterated and reiterated more than myself, which I have lately written down, that is, the question of charges by a corporation attempting to serve the public and having a practical monopoly, are all subject to the test of reasonableness. Now, he says, we subject this to the test of reasonableness; we show approximately, as near as we can, what this property cost us. I remarked I didn't think it amounted to much here, because the cost was figured not for Long Branch alone, but for a large amount of other territory, and Mr. Corbin, when he said he thought two-thirds to Long Branch would be about right, said the Court might differ from him. He was very modest in putting it, left it entirely to the Court, as I understand it, merely made that as a suggestion.

Q. (Question read.) What was the figure that you finally ascertained in this way?

Mr. McCarter: I object to that.

A. We found the cost up to that time to be $1,334,031.83.

Q. What does that include?

The Court: What was the cost of the new work, the Swimming River work?

A. $936,740.77.

Mr. McCarter: Same objection.

Q. Did you ascertain the amount of land that had been obtained for the Company?

A. We did.

A. How much was it?

Mr. McCarter: Same objection.

A. It was about six hundred acres.

Q. What did you find that had cost per acre?

Mr. McCarter: Same objection.

A. My recollection is that it cost about $61.73 per acre.

Q. Did you ascertain the weight of the pipe used in the new works?

Mr. McCarter: Same objection.

A. We did.

Q. Did you ascertain the value of the pipe in the market at the time these works were constructed?

Mr. McCarter: Same objection.

A. We did.

Q. Did you take up that question as to the quantity and value of lead?

Mr. McCarter: Same objection.

A. We did.

Q. And what other items?

The Court: All these questions are objected to—you need not repeat them—because they are not original proofs.

A. Some of the excavations and amounts that we could not verify ourselves we required the engineer to put in under affidavit.

Q. Did you make a computation of what these works ought to have cost irrespective of what they reported they did cost?

A. We did.

Q. How did your computation come out on that basis?

Mr. McCarter: Same objection.

A. We thought the amount was fair, and the way we figured it, that they might have left out some items.

By the Court:

Q. You thought there was a little padding?

A. We thought the One million three hundred and thirty-four thousand dollars did not any more than cover cost; we thought that some of the items for engineering were low, and that they hadn't gotten it all in perhaps. I don't know that that was just the item, but that was the conclusion that we came to personally.

By the Court:

Q. Cost of pipe, &c. You verified that by their invoices, I suppose?

A. Yes, sir.

By the Court:

Q. By the invoices of lead?

A. Yes, sir.

By the Court:

Q. And then you compared it by the current rates in the market?

A. Yes, sir.

By the Court:

Q. Freights, and all that?

A. Yes, sir.

By the Court:

Q. You went into all those details?

A. We did.

Q. Did the committee you mentioned make a report to your Board of Directors?

A. They did.

Q. What date?

A. On March 5, 1903.

Q. Is that the report that you have in your hand?

A. It is.

Q. Who is it signed by?

A. Mr. R. Blodgett, Whitney Conant and E. A. Walton.

Mr. Corbin: I offer that report in evidence.

Mr. McCarter: I object to it. It is a scandal in Monmouth County, the building of that plant, and they endeavor to get around that scandal by this kind of proof and hold us to the cost.

Mr. Corbin: It is absurd, I think.

Mr. McCarter: A wheel within a wheel, both sides in both companies. Look at the companies; the same President signs both contracts.

The Court: That must all be shown.

Mr. McCarter: It appears already. The contract is there.

Mr. Corbin: I don't know what Mr. McCarter refers to; I admit right on the face of this we paid a Million four hundred thousand in bonds and a Million six hundred thousand in stock for this work, making Three million, but I don't pretend for a minute that is the cash value of it.

The Court: It is offered, and the report of Mr. Blodgett and the other two are offered, and the Court declines to accept it at present, because Mr. Blodgett is an available witness. This witness can say what he had to do with making the report, and how far it was based, if he knows, how far it was based on the figures that he has been testifying to.

Q. What, if anything, did you have to do with getting up this report?

A. I didn't have anything to do with getting up the report.

By the Court:

Q. Did you furnish the material?

A. Yes, sir; I verified these items in Scranton, and came back and reported that I had gone over them carefully.

By the Court:

They were based on the work of yourself and the other men?

A. Yes, sir; based on those calculations and my trip to Scranton.

Q. Did the two Companies come to a settlement?

A. They did.

Q. What negotiations, if any, and how long had the negotiations continued between the two Companies before the settlement was reached?

A. Several weeks.

Q. Were they given what they claimed, or more or less?

Mr. McCarter: I object.

A. No; they were not.

The Court: I suppose you made up a schedule of the cost?

Q. Did you make up a schedule of the items?

A. Yes, sir.

By the Court:

Q. Pretty heavy thing, wasn't it, bulky?

A. Yes, sir.

The Court: That schedule can be produced, I suppose?

By the Court:

Q. Where is that schedule?

A. I couldn't tell you where that is; I haven't it.

Mr. McCarter: Some criticism was made on Mr. Van Nyse yesterday because he didn't have the cost of the twenty inch pipe, &c., and he made the whole thing himself.

By the Court:

Q. You did have a schedule of cost, you had the result of your schedule?

A. Yes, sir; one statement I made there in regard to the cost of that item of One million three hundred and thirty-four thousand dollars, that included some payments, final payments to the Filter Company that had not been made and also to the Pump Company that had not been made.

By the Court:

Q. Contracting Company had not yet paid it?

A. Yes; that they were to put in after.

Q. Did your independent calculation of the value of these works, that is to say, what they—

Mr. McCarter: Please don't lead him.

Q. Wait a minute; I don't think I will. That is to say, what you thought they ought to have cost at the time they were built, did it cover the entire works, or did it leave anything out?

A. There were some details that had to be completed that they agreed to that it didn't cover.

Q. Did you cover all that had been done?

A. Yes; we tried to.

Q. Do you remember the figure that you arrived at as to what it ought to have cost?

Mr. McCarter: I think we are entitled to those schedules.

The Court: I should say so. He says he has got a schedule of items on that pipe, and all that sort of thing; but the prices that these gentlemen put on them is the important thing.

Q. How did you get at the prices of metal and so on?

A. Well, we took the price from the bill.

By the Court:

Q. Did you test that by correspondence with the manufacturers, or at the market rates?

A. Well, I will tell you—

By the Court:

Q. Did you see the checks for that?

A. Yes, I did; that is, they were made in partial payment, payments on account, and I saw the checks up to that time.

By the Court:

Q. Where did they buy their pipe?

A. Of the American Pipe and Foundry Company, United States Cast Iron and Foundry Company.

By the Court:

Q. They are all one trust?

A. All in one trust; I saw the checks as far as the payments had been made, but there was a balance then due that had not been paid.

Q. Refer to the next item on your schedule.

The Court: I will say to you, Mr. McCarter, there isn't the least difficulty about those things, cost of the pipe, cost of the lead, and all that sort of thing; I don't think there is any room for cheating there, and that isn't where they cheat. You have got to go and

lay in with the Pipe Company to get commission back, get rebate. That is detected right away, because everybody knows what those things cost. They don't do it there. And then when you come to the excavation, why, that is let out to Italians generally, and I don't think it is the practice of these people to make their money in that way. Probably the scandal in Monmouth County that you speak of was the stock and bonds—stock and bonds—that is where the scandal was if there was any. Mr. Corbin pretends, and I think so far I have no right to act upon the idea that he is not in earnest in his pretension, to unload that, to show it up right, how much of this was solid and how much of it was water. That shows right on the face of this statement that this gentleman makes up here, if I haven't mislaid it; it is about half water, the stock is all water as I understand it. I don't know what view Senator Blodgett takes of it. He got, for instance, for his Four hundred and Fifty thousand for the old Takanassee plant, he got Four hundred thousand stock and something like that for this.

Q. In investigating this did you hunt for commissions to see whether they had any drawbacks on this pipe and other things?

A. We did.

Q. Did you find any?

A. Yes, sir.

Q. On what?

A. On pipe.

Q. What did you do with that item?

A. Struck it out.

Q. How much was it?

A. My recollection from $14,000 to $16,000.

By the Clerk:

Q. On the whole purchase?

A. Yes, sir.

By the Court:

Q. Small percentage?

A. Yes, sir; small percentage.

Q. Look at your next item, new mains added to plant of Tintern Manor Water Company, cost $19,871.11; what does that refer to, and how do you know it has been spent?

A. Well, that I have disbursed myself from the earnings of the company for lateral mains that have been laid.

Laid when?

A. In the territory since the settlement with the Construction Company in March, 1903.

Q. Now, look at your next item, under head of N. B. You say that settlement is reckoned up to March 8, 1903, and day of that settlement the Construction Company was to finish and complete the work and also pay Fifty thousand dollars to the Water Company?

A. Yes, sir.

Q. Have they been finishing it?

A. Yes, sir.

Q. Is it entirely completed yet?

A. It is not entirely.

Q. How much do you imagine—

A. Well, there is one pump that isn't in.

Q. Can you give a rough estimate of the value of that to be completed?

A. There isn't very much to do but some small things.

New Jersey State Library

By the Court:

Q. What does that mean, Construction Company paying back Fifty thousand to the Water Company?

A. Well, it was taken; I can explain that.

By the Court:

Q. Stock, isn't it?

A. No; it is cash; we gave them a Million four hundred thousand in bonds, and the item paid at that date was a Million three hundred and thirty-four thousand—they had to complete the plant; we gave them a Million four hundred thousand in bonds and they paid us Fifty thousand in cash back.

By the Court:

Q. How can you put that into cost, Fifty thousand in cash?

A. Showing that the difference between the bonds that were issued by the Construction Company for the plant, a Million four hundred thousand, less Fifty thousand in cash, left a Million three hundred and fifty thousand which would about at that time cover the cash cost and the completion.

By the Court:

I don't see how cash paid you for bonds increased the cost of the company.

A. It made the plant cost so much less.

By the Court:

Q. Less, but you have added it, haven't you, you have added this Seventy thousand?

A. That is the cost to the Construction Company.

Mr. Corbin: I think we better put the agreement right in.

A. This is the cost to the Construction Company, to the Independent; that is your heading here; it cost them what they had paid out in cash, plus what they had to pay us in cash. We tried to get at the actual cost of this plant to the construction company. Is that plain now?

The Court: Yes.

Q. You paid Frank Pratt Fifty thousand dollars for services, you have got that in?

A. That is, in stock; here is the cash cost (indicating), but you see, Vice-Chancellor, they paid out these items in cash, then they paid us back Fifty thousand dollars, so that the cost of the Independent Telephone and Telegraph Construction Company was what they paid out for pipe, plus what they paid us in cash.

Q. Did these negotiations result in a settlement between the two companies?

A. It did.

Q. Was the agreement settlement signed?

A. Yes, sir.

Q. In this printed schedule on page 22, marked Exhibit F, settlement of March, 1903, is that the contract settlement?

A. It is; yes, sir.

Mr. Corbin: I offer in evidence the contract marked Settlement of March 6, 1903, between the Tintern Manor Water Company and the Independent Telephone and Telegraph Construction Company, which is on page 22 of the printed pamphlet.

Marked Exhibit D7.

With the endorsements on that contract there is endorsed on it this Fifty thousand arrangement, and minutes of the meetings.

Q. Now, there is an item there of one hundred

thousand Long Branch underlying bonds; those were there before the change of ownership?

A. Yes, sir.

Q. Are there yet?

A. Yes, they are.

Q. Bear interest, what rate?

A. At 5 per cent.

Q. Now, the next item, five hundred thousand of stock of the Tintern Manor to the Long Branch Water Supply Company; what is that for?

A. The original contract called for two hundred and fifty thousand in stock, but this was all doubled, the stock was all doubled; there was a quarter interest that is paid us.

Mr. Corbin: The price we paid them that for was not $425,000, it was $425,000 plus one-quarter of the stock of the new enterprise, and I say that quarter interest in the stock of the new enterprise is worth something, got to be considered; I don't claim it is worth par; they wouldn't sell and didn't sell for $425,000 cash.

The Court: That is understood.

Q. Now, the last item, Fifty thousand dollars, Pratt, engineer, for services. How came that about?

A. Well, that was to be his salary for designing and constructing the plant, overseeing it, that is, plus an item of so much a month for his expenses; the contracts there show it all in that schedule.

Q. Now turn on to your next Schedule B, entitled "Number of taps and gross revenue." Have you correctly stated there the number of taps and gross revenues for the use there indicated?

A. Yes, sir; I have been over the details very carefully.

Q. Have you separated those inside the Long Branch Commission from the rest of them? I see at the bottom you have made a note that no ac-

count is to be taken of the earnings for the Long Branch municipal uses after September 21, 1901—that is because that is now the matter that is now before the court?

A. Yes, sir.

Q. Not yet settled?

A. Yes.

Q. Now take Schedule C, entitled "Earnings, operating expenses and taxes for 1891, 1901, 1902 and 1903." Have you correctly set those forth?

A. I have; yes, sir.

Q. Where did you get the figures from?

A. From the books, and then, as I have stated before, on this item for 1903—

By the Court:

Q. You have got 1891?

A. I gave it ten years ago, but yesterday I gave it since the foundation of the company.

Q. You have excluded that item, what we may get from Long Branch by the Chancellor's decision?

A. Yes, sir.

Q. All the way through?

A. Yes, sir.

Q. Schedule D, operating expenses, classified; that has total operating expenses on the previous page?

A. Yes, sir; January 1, 1903, to January 1, 1904, excluding interest charges.

Q. It gives details?

A. It gives details, just as I kept them on the ledger.

By the Court:

Q. Let me ask some questions about that D. Do you mean to say all the salaries they pay is $3,452?

A. Yes, sir.

By the Court:

Q. That don't include laborers?

A. No; that is salary.

By the Court:

Q. Salary of the President and Secretary?

A. Well, unfortunately the President does not get a salary, but that includes the Superintendent and Secretary's salary and the engineer and office help, and the car fare in going to and from the works, etc., that is charged in that.

By the Court:

Q. Tell me what you pay your engineer?

A. I have an engineer that has taken a special course at Polytechnic, pay him Seventy-five dollars a month.

By the Court:

Q. He is a young man?

A. He is a young man; yes, sir.

By the Court:

Q. And the office expenses, that is rent and clerk hire, I suppose?

A. No; that is rent and stationery, and printing, letterheads, bills.

By the Court:

Q. Do you collect, make all your collections in that $3,452?

A. Yes; that includes the collector's salary.

By the Court:

Q. Very cheap. Miscellaneous expenses, $1,500, what is that?

A. Now, that includes the expenses of the Trust Company for registering bonds and doing those different things.

Q. Now, the next you have—here is operating?
A. Yes; at each pumping station.

By the Court:

Q. West End Station, that is Takanassee?
A. Yes, sir.

By the Court:

Q. You use alum for your filter?
A. Yes, sir; crystal alum, and this item is large this year perhaps on account of John A. McCall, President of the New York Life Insurance Company, has been putting up a very fine residence right close to the stream, and the stream goes through what is now his door yard, and he was all summer digging out that muck and had teams in there and stirred it up, so we had to use a great deal to clear the water.

By the Court:

Q. Newman Springs?

Mr. Corbin: That is the one started up in May.

Q. Next, Schedule E, details of income. Did you take that from your book too?
A. I did.

By the Court:

Q. That same year?
A. Yes, sir.

By the Court:

Q. 2,173 families?
A. This is the whole system.

By the Court:

Q. You haven't got it separated?
A. No; I haven't got it separated; that you see gives the income there $69,800, as per Schedule B.

Q. You have only forty water meters then in your whole system?

A. Yes; excepting a few we put on for test, we take no account of.

Q. Have you correctly stated mains and hydrants and sizes?

A. Yes, sir, just as near as I can get them.

Q. How many miles in all?

A. Seventy-three miles four hundred and twenty-eight feet.

Q. Have you separated the Long Branch portion?

A. I have.

Q. That is how much?

A. Twenty-seven miles three thousand four hundred and forty-eight feet.

By the Court:

Q. That is inside the Commission?

A. Inside the Commission limits.

Q. How long is that thirty-six inch main from the Intake at the reservoir to the Commission line?

The Court: 41,947—

Q. Oh, yes, we have got that?

A. Yes, I would say that second item there, the distance from the Reservoir to Broadway, Long Branch, is 41,947 feet plus half of 1,456 feet, because when we went under the river at Newton Springs we put in two twenty-four inch pipes, so if anything happened under the river to one pipe, we could shut it off for repairs and still supply the system.

By the Court:

Q. Very sensible thing. What is the width of the river?

A. 1,456 feet from the pumping station to the river; two 24-inch lines across the river from the pumping station.

Q. You have stated details of hydrants, have you, of Long Branch?

A. Yes, sir.

Q. Now turn to Schedule G, entitled "Capacity of pumping stations"; have you set forth there all your pumps and pumping facilities?

A. Yes, sir.

By the Court:

Q. But now you come to the Newman Springs; you haven't got them all in, have you, Newman Springs?

A. Well, I have marked the second item there "to be added," third item.

Q. What is your total pumping capacity at West End Station?

A. Eight million five hundred thousand gallons in twenty-four hours.

By the Court:

Q. All running?

A. Yes; that is the figure that the pump men put on it; that is, they built a pump to pump six million gallons in twenty-four hours.

By the Court:

Q. I understand, by revolutions?

A. Yes, sir.

Q. At the Newman Springs Station what is your total to be?

A. Total to be fifteen millions in twenty-four hours.

Q. Is that third pump delivered on the ground there?

A. No; it isn't there, some of the covers are, but practically not delivered.

Q. And are your filters installed, your twelve filters?

A. They are.

Q. And your Deal Station you have also described, have you?

A. Yes, sir.

Q. On your Schedule H, population, what is that taken from?

A. That is taken from—

By the Court:

Q. What year is that?

A. 1880, 1885, 1890, 1895, 1900, taken from Fitzgerald's Manual.

By the Court:

Q. 1900 has been separated?

A. Yes, sir.

By the Court:

Q. Ocean Township, Long Branch, Seabright and Deal?

A. Yes, sir.

Q. Now, Schedule I, printed annual rates and regulations; when did you put that in force in the form it now is?

A. June 1st, 1903.

Q. Had you made a printed one earlier?

A. We had.

Q. When?

A. June 1st, 1902.

By the Court:

Q. You changed it?

A. Yes, sir.

By the Court:

Q. Revised it?

A. Revised it; yes, sir.

Q. Was it materially changed?

Mr. McCarter: I think you better show it.

The Court: It will show for itself. You put forward this schedule, printed schedule, as what you claim to be the reasonable rates, which you ask the Court to adopt.

Mr. Corbin: Yes, sir.

The Court: Now, right there, I want to know what both sides think, whether either side will ask me to make a meter rate. The company has determined to not use meters on account of the difficulty of equalizing the rates to the population. I would like to know what counsel think about that. I am interrupting the line of examination. My own notion about it was that if you would take your meters at the middle of May and middle of September you would ascertain the amount consumed in the four months from the middle of May until the middle of September, which I understand from the evidence covers the months, four months for which the greatest consumption is found, commences latter part of May, I suppose, and ends latter part of September.

A. That is about it.

The Court: If you would do that and then have one rate for summer charged and an-another rate for winter charged for the other eight months you would equalize it, you might equalize the charges so that the inhabitants would not say that they were discriminated against; the summer people would pay a great deal higher rate and so would the people that live there, and they would pay in winter a rate which was a fair compensation for maintaining the plant and keeping supplied with water during the win-

ter time; but I don't want to decide anything that is not submitted to me.

Mr. Corbin: We have here a meter rate, and under certain conditions everything but dwellings—

The Court: I haven't seen that; that don't say when it runs to.

A. Until they have used two hundred thousand feet, takes all the year, they pay thirty cents a thousand gallons for all the year.

Mr. Corbin: We had thought an attempt to enforce meter rates upon everybody in Long Branch would make friction which it would be very hard to overcome.

The Court: I don't express anything on it, but if I had to advise it, with my personal experience, that is the way I would do it.

Q. Is this printed schedule, dated June 1st, 1903, the one you now have, in force?

A. It is.

By the Court:

Q. Is that the one that created so much muss with the barber or somebody, when he was sworn as a witness?

A. Yes, sir; that is the one.

Mr. Corbin: Rothenberg.

The Court: He was sworn in the Hicks case.

Mr. Corbin: He was sworn in both of them.

By the Court:

Q. I suppose it did create quite a disturbance?

A. It did.

Q. Before June, 1902, had you any printed schedule of rates?

A. We had not.

Q. Had you any rate charges?

A. No, sir.

Q. How much did they vary?

A. They varied all the way from fifteen to fifty dollars for the same service

By the Court:

Q. What had been the effect of enforcing these so far, this one, if you can tell? Has it increased or diminished?

Mr. McCarter: They only have forty meters, and there is no record.

The Court: Not meters; the tap rates?

A. Well, now, I had the boys in the office—no, I am mistaken; well, I couldn't tell you.

Q. Did you have a minimum rate before?

A. Yes, sir.

Q. What was that?

A. Ten dollars.

Q. What is your minimum rate now?

A. Well, if we put a tap into a store we put it in for Five dollars; I don't know that we have any less than Five dollars.

Q. Take a dwelling-house?

A. Eight dollars for dwelling-house.

Q. When did you begin to try to make the rates uniform and did adjust it all to a uniform schedule?

A. June 1st, 1902.

Q. Now, the next year your Schedule J, approximate number of gallons pumped?

The Court: The difficulty now is, as I understand it, is that the present government of Long Branch is not represented by you, is it? I heard somebody state here that Mr. Blodgett was now Mayor, and that the town had become incorporated.

Mr. McCarter: No; your Honor is mistaken. Mr. Van Note is City Solicitor of

Long Branch, and is solicitor of record of this suit; I am associated with him as counsel. We represent the Municipality of Long Branch. An election was held last fall and new Board—

The Court: I don't say you are not nominally.

Mr. McCarter: We are actually.

Q. Mr. McCarter asked you to get up the gallons of water pumped for the additional years?

A. Yes, sir.

Q. Have you added those here, too?

A. Yes; I have added last night from 1896 to 1900; I couldn't make but one copy and it took us very late to get that; I brought in yesterday 1883, 1884 and 1885.

By the Court:

Q. This runs from 1886 to 1889, inclusive, one sheet there?

A. Yes, sir. Now you have submitted all of the years the total pumpage up to date, up to the first of January.

Mr. Corbin: I offer these schedules in evidence, and do it with this qualifying statement, as to that item, cost of the plant, I expect to fortify it by still further evidence by Mr. Blodgett and Mr. Conant, if he gets here; but offer these schedules in evidence.

Mr. McCarter: I think Schedule A2 better be held off until proper proof of it is admitted.

The Court: I shall admit them, but the value of them depends on another thing. The schedules I will admit. The report I do not.

Mr. McCarter: All right; we will object to it.

Marked Exhibit C8.

Q. Have you made a calculation to see how much water the average sprinkling cart uses in a month?

A. I have.

Q. What have you assumed as the capacity of the cart?

A. 550 gallons.

Q. How many days a month?

The Court: Some of them smaller.

Mr. Corbin: That was agreed as the average; some of them 700.

A. The new ones that they are buying are all larger.

Q. How many days in a month do you assume?

A. Twenty-six days in a month.

Q. How many trips per day?

A. Twenty-six trips per day.

Q. How many gallons in a month would that make?

A. 371,800 gallons.

By the Court:

Q. A day or month?

A. For one month one cart.

Q. Have you figured the value on that?

A. Yes, sir.

Q. What rate?

A. Our last meter rate 15 cents per thousand gallons would make the revenue from one cart for one month $55.77.

By the Court:

Q. It hasn't been agreed that they run on an average twenty-six days a month.

Mr. McCarter: That is the highest.

The Court: About twenty-one or twenty-two.

Mr. Corbin: No; the testimony of the Superintendent here yesterday was they would

average about twenty-six to twenty-seven days a month in the summer when they were all on.

The Court: I know he swore to that, but I don't think his testimony was reliable. I don't mean to say he is intentionally unreliable, but you have got to take a period of ten years at least to get an average, and one year it will be twenty-five, fifty per cent. more than another; it depends on the amounts of rains, showers.

Mr. Corbin: I am not offering these figures as conclusive.

The Court: Twenty-six loads a day and twenty-six days each team.

A. Yes, sir; on this actual test it showed thirty-four.

By the Court:

Q. They can do it.

A. He didn't know we were watching him.

Q. You sent that young man Basley; he made that test last year, 34 carts, didn't you?

A. Yes, sir.

Q. What cart did you pick out?

A. Well, he was a young man living there in the Town working for the Company, and I wanted to get an independent record, so I sent him to the furthest cart from the office and from where he lived, and told him to go down there; the sprinkling ordinance called for them to start at seven o'clock in the morning; I told him to go down there early and get somewhere where he could watch that wagon and not let the man see him; I told him when he was sprinkling on Lincoln Avenue to be on Ocean Avenue, or keep far enough from him so he could get the exact minute the cart was filled and started from standpipe, and keep that record accurately, but not let the man know he was taking it.

Q. Did the man know, as far as you know?
A. No; the man did not; he told me he did not.
Q. Of course what the man told you—

The Court: That isn't evidence; but you took every means to prevent it?

A. Yes, sir; took every means to prevent it, because I thought he might sprinkle loose, because there was a great deal of agitation in the town at that time over the sprinkling rates and municipal contract which was then pending.

By the Court:

Q. This was two or three years ago?
A. Yes, sir.
Q. When was it?
A. 1902.

By Mr. McCarter:

Q. What date was that, what day?
A. I have the exact date.
Q. With regard to this schedule that you have got, have you any suggestions to make to the Court as to anything to be added to it or changes in it? I will call your attention to yard hydrants. What have you to say about those, outdoor hydrants?
A. Well, we prohibit it; we simply prohibit them, but, or course, there are a good many in there causing us a great deal of trouble.
Q. Why prohibit them?
A. Well, in the first place, they waste a great deal of water there, they have to leave them running often times in the winter to keep from freezing, and then people will go there and steal water, and we would like to put them out.

The Court: You don't have to give any reason for that. I think every person of experience most is against outdoor hydrants.

A. We would like to put a prohibitory price on those outside hydrants.

Q. Or else exclude them entirely?

A. Yes, sir.

Q. What have you to say as to Hopper water closets?

The Court: That is old fashioned?

A. Yes, old fashioned.

By the Court:

Q. They don't get shut tight?

A. Yes, a great many get old and water runs through them continually; we can't stop them.

Q. What is your suggestion as to them?

A. We would like to put a prohibitory rate on them.

Q. Why?

A. To make them take them out.

Q. Wasteful, you consider?

A. Yes, sir; very wasteful.

Recess.

Mr . La Monte temporarily withdrawn.

WHITNEY CONANT, sworn:

Direct-examination by Mr. Corbin:

Q. Where do you live?

A. Paterson, now.

Q. What is your occupation?

A. I am Secretary and Treasurer of the Jersey City Water Supply Company.

Q. Are you a Director of the Tintern Manor Water Company?

A. Yes, sir.

Q. Were you formerly located at Long Branch in connection with them?

A. Yes, I was with the Long Branch Water Supply Company.

Q. What years were you there?

A. I went there in 1886, and, I think, it was 1900 when I went away.

Q. In what capacity were you there?

A. I was Secretary of the Water Company.

Q. Are you the Mr. Conant that was appointed one of the Committee of the Board of Directors of the Tintern Manor to investigate the accounts of the construction company?

A. I am.

Q. I show you a report, dated March 5, 1903, and ask you whether you signed that report?

A. Yes, sir.

Q. Did the other two Directors sign it also?

A. Yes, sir.

Q. I show you a paper headed "Tintern Manor Water Company balance sheet as at January 15, 1903." Did you have that paper before you when you were investigating that matter?

A. Well, as I remember it, that is a copy; we had just such a paper though.

Q. Whose handwriting is that?

A. I think it would be in Mr. La Monte's.

Q. Did you have those figures before you at the time of your investigations?

A. Yes, sir; we had just such a balance sheet; yes, sir; that is it.

Q. Now, what did you do to ascertain the value of the work that had been done by the construction company for your Company?

A. Well, we first went over their bills and vouchers to see, satisfy ourselves that the bills had been paid, that they had paid, as well as we could on that statement.

Q. This is their statement is it?

A. Yes, furnished by their—I forget his name; the auditor they had came down from Scranton;

then from what I knew of my own knowledge and what I could find out from dealers and friends who were in the purchasing line, I tried to find out the prices, the going prices at the time.

Q. Prices of what?

A. Of pipe, and also for labor and for building, that is the dam out there.

By the Court:

Q. Pipe and lead?

A. Lead, oh, yes.

Q. At the time you made your investigation in the spring of 1903 was the prices of iron and lead then lower or higher than they had been at the time the work was constructed?

A. That I can't fix, but I do remember that the prices went up above the prices that prevailed at the time they started in on that; they went up considerably.

Q. What prices did you inquire for?

A. For a large pipe.

Q. I mean what time?

A. The time—I looked up the time they were to have bought that pipe or should have bought that pipe, when they started in to build; I had inquiries made independently by a friend who was in that line of these big dealers as to about what the prevailing price was for that size at the time.

Mr. McCarter: I object to that.

The Court: I think it is competent. It is the usual mode of ascertaining market values.

Mr. McCarter: It is hearsay testimony, and I object to it; I don't care if it is usual.

Q. Did you make an estimate of the value of the work from these independent investigations?

A. Yes, sir; that is what I undertook to do, tried to do, and did as well as we could.

Q. What did your committee conclude as to the correctness of the prices that had been charged you for the work that had been done?

Objected to.

A. We thought that they were as shown on that and were fair prices, were prevailing rates, fair rates.

By the Court:

Q. Did you hunt for commissions?

A. Well, there was a statement on the commission on the pipe and that we found, that was right in it on the statement, and that was allowed for, it was deducted. As far as the other things were concerned I couldn't find out.

Q. I show you paper headed "Tintern Manor Water Company, F. E. Pratt, Summary of Pipe laid." Did you have that before you in making your estimate?

A. As I remember it we had a statement.

Q. Who made that?

A. I got it from Mr. Pratt myself.

Q. Who is Pratt?

A. Pratt is the man who was engineer there in Red Bank.

Q. Whose engineer?

A. Well, he represents Mr. German, Dr. Wentz and those people that bought us out.

Q. He was the engineer that constructed the work?

A. Yes, of construction.

Q. At whose direction did he get up the estimate of the pipe laid?

A. Whether he had it—whether he had it already made or not, he took it from his own papers.

Q. Is this what your committee used?

A. I don't remember that exactly, but we had a paper from him.

Mr. Corbin: I will prove it by somebody else.

Q. This balance sheet, I see that the cost of the various items is—

Mr. McCarter: I think you ought to offer it before you use the balance sheet.

Mr. Corbin: I will offer it. I offer the balance sheet in evidence.

Mr. McCarter: I object to it.

The Court: I admit it as a memorandum. Marked Exhibit C9.

Q. In this balance sheet I see that the different items of cost of the work are set down, such as piping, $384,850, engineering $13,000, and so on. Did your committee take up those items for investigation?

A. Yes, sir.

By the Court:

Q. Item by item?

A. That is my remembrance of it now. I remember particularly some of the small ones, about pipe bills, for instance, we took those up and checked them up by the length as well as we could; we did pretty well, I think, because we had the maps there.

Q. Did you take up the land and right of way item?

A. We got the estimate of the land we had there in the reservoir and what it would cost and figured out how much more—I think that is in that report —how much the land cost.

Q. Did you take up the filter?

A. Only in this way; I knew about the capacity of it, what it was to be; as I remember it was less than our filter for the same capacity.

By the Court:

Q. You had all the bills and vouchers?

A. We had the contract for that; that hadn't been built then, it hadn't been finished then, hadn't been built, all of it; he was allowed for that, and I guess paid for it.

Q. Was this report of May 5 which you have identified and said you signed, was that laid before your Board of Directors?

A. Yes, sir.

By the Court:

Q. Had you any interest, directly or indirectly, in the company that built the works?

A. No, sir; that built the works? No.

By the Court:

Q. The whole works, the Construction Company?

A. No; I wasn't in that. German and Wentz Company, you mean?

Q. Yes; Construction Company?

A. No; I wasn't in that.

By the Court:

Q. Had no interest in it?

A. No; I was in the Long Branch Company.

By the Court:

Q. I understand that.

A. No; I wasn't in that at all.

By the Court:

Q. Who else sat with you there?

Mr. Corbin: Mr. Blodgett and Mr. Walton.

By the Court:

Q. Do you know whether Mr. Walton had any interest in that construction company or not?

A. No; I am satisfied he did not.

By the Court:

Q. You are satisfied he did not?

A. I am satisfied he did not.

Q. Was this report on which the companies finally came to their settlement?

Mr. McCarter: Almost every question you are asking is leading.

A. Yes; we submitted that report to that meeting, as I remember it, that meeting or the next one, then we came to a settlement; that was the report that was submitted.

Mr. Corbin: I offer this report in evidence.

Mr. McCarter: I object to it.

The Court: I will admit it.

Marked Exhibit C10.

Mr. Corbin: With your Honor's direction I will read it. (Mr. Corbin read report.)

Q. How long was this matter under examination and under negotiation before it was settled up between the two companies?

A. You mean when we begun on that report?

Q. Yes.

A. It was anywhere from four to six weeks as I remember it now.

Q. Were you present at the Board of Directors' meeting when it was finally settled?

A. Yes, sir.

Q. The Construction Company was given Fourteen hundred thousand dollars in bonds, was it not?

A. That is my memory.

Q. Do you know whether they made claim for anything different from that?

Objected to.

The Court: I don't think it is of any consequence the extent of the dickering they indulged in. What are those, four per cent. bonds?

Q. What rate of interest do they bear?

A. I don't remember now.

Mr. Corbin: They are fives.

A. That is my remembrance, they were fives, but I don't know.

Q. When you were Secretary of the Long Branch Water Supply Company and located at Long Branch, did the company have any printed schedule of rates for private consumers?

A. No.

Q. Did you have any regular schedule of rates?

A. No.

Q. How did you manage to tell how much to charge a man?

A. Those people that built those works—as well as I can get at when I went there, they said a beach cottage and stable is worth Fifty dollars a season, ordinary beach cottage and stable as they were then; of course now they are much bigger and finer and better plumbing, and on the basis of that I tried to make it fair for the smaller cottages, and in the back streets I made it even less in proportion.

Q. Did you have any minimum rate?

A. Ten dollars for a single faucet, a single opening, a single service, that is, cold water single service; but small house was Ten dollars; that was our lowest rate; I suppose in one or two cases some exception was made, five or six; but it was practically ten dollars, that was our limit.

Q. Well, with such a system as that, or lack of system, were your rates in fact uniform and equal to different people?

The Court: You need not answer the question.

It is common knowledge they could not have been.

A. No; we tried to do it as well as we could.

The Court: Of course; I understand it.

Cross-examination by Mr. McCarter:

Q. Prior to 1896 what was your occupation?

A. I was then disbursing agent for a railroad construction company.

Q. You had no experience in water companies?

A. No.

Q. And have you ever constructed a water plant?

A. No; I haven't; I done the construction work there to our extensions.

Q. That is, you superintended the laying of the mains in Long Branch that were laid while you were there?

A. Yes; we put in a filter plant and new engine.

Q. You are not a civil engineer?

A. Well, not a thorough—I haven't followed it; I studied it; I haven't followed it as a business, but I have been in engineering works.

Q. You have been what?

A. This of course was engineering work, so I was with engineer of the construction of a railroad, but I never was a practicing engineer, although I worked as railroad man, civil engineer that way.

Q. Have you ever constructed such a water system as the so-called Newman Springs system?

A. No I have not.

Q. Did you personally inquire of a single pipe

dealer as to the price of pipes when you were making this investigation?

A. No, I did not; I knew what the quotations were; I heard the quotation, but I didn't go to any special dealer and ask him.

Q. You heard it from somebody who said he had been there?

A. Yes; I suppose you might say that way; he knew all right.

Q. Now, you had some suspicions, didn't you, in regard to the propriety of this account?

A. Well, I don't know how you mean in that.

Q. You spent a month investigating it?

A. It took some time to get the things together; we didn't give our whole time to it.

Q. No, I don't suppose you were spending four to six weeks all the time at it, were you?

A. No; that was the limit of the time we were at it.

Q. All the time wasn't devoted to it?

A. Oh, no.

Q. Now, did you examine the vouchers yourself that they presented?

A. I did; there was a good many of them, I remember.

Q. Where?

A. They brought them down—up at their office—they brought them down here.

Q. What was it then that Mr. La Monte went to Scranton for?

A. There was a statement of the pipe; that is what I recall particularly; but he went up there and went over the checks.

Q. There was a statement of pipe. What do you mean? Did you ever see any other statement than this?

A. Yes, sir.

Q. Where is that?

A. That I don't know.

Q. You saw something else than this balance sheet?

A. Yes, sir.

Q. I see the charge for pipe is $384,850.43. Do you recall how much of that was the thirty-six inch pipe?

A. No; I don't.

Q. You first intended to supply Red Bank, did you not, and the plans were so designed to supply Red Bank?

A. That is what I hear; I had nothing to do with that part.

Q. Is the cost of all that work that was not used in this statement?

A. Well, as I remember it there was pipe on hand, that we had on hand that lay there, that the company had, lay there in the yard; that was of course paid for, and we supposed that was included.

Q. That was included?

A. Yes, sir.

Q. The company intended to put a standpipe on Lovett's Hill?

A. Yes, sir.

Q. And bought ten or twelve acres of land there and thought they had an auction on Lovett's Hill?

A. That is as I remember it; yes, sir.

Q. Is the cost of that included in this?

A. Well, I don't remember; the probability was what had been paid was included; we paid some.

Q. They bought a large tract of land of which there was no doubt about the title; didn't they?

A. There was a fuss about the title I heard afterwards.

Q. Title to the Hill, but not to the land below?

A. Don't you mean Newman Springs?

Q. No; over by Lovett's?

A. That I don't know; I know there was a piece of land on top of the hill and some of it was disputed, and some not, as I heard.

Q. Mr. Pratt lived at Red Bank, didn't he?
A. Yes, sir.
Q. Did you ever meet the gentleman?
A. Oh, yes.

By the Court:

Q. He is an old resident of Red Bank?
A. No; he was living there at the time of the doing of the work; that is where his headquarters were. I don't think—he wasn't a Red Banker I am satisfied.
Q. Do you know where he is now?
A. I do not.

By the Court:

Q. Did you see a good deal of his work there?
A. I saw them laying the pipe.

By the Court:

Q. You saw a good deal?
A. I saw them fixing the road; yes, sir.

By the Court:

What sort of business management did he display?
A. About his management I don't know; the pipe, it seemed to me, was a good job, what I saw of it before it was covered.

By the Court:

Q. The question was whether he was the kind of a man that did his work wastefully or economically?
A. As I understand had a contract with those people, they laid the pipe by contract.

By the Court:

Q. All sub-contract?
A. I forget the name; there was a sub-contract.

Q. Do you know much about it? As a matter of fact, you weren't connected with the Construction Company, were you?

A. No.

Q. And you don't know what they did and what they didn't do, do you?

The Court: He said he worked with them some.

A. No, I didn't work for them; I was Secretary of the Long Branch Water Supply Company.

The Court: I understand that. I thought you said—

A. No; that was a misunderstanding.

Q. You had nothing to do with it? A. No.

Q. You were a committee appointed to make an investigation, to look up those bills?

A. Yes, and to satisfy ourselves as to the prices.

Q. Does this credit for commissions or rebates appear on this Exhibit C9, this statement?

Mr. Corbin: He said nothing about rebates or commissions.

Mr. McCarter: Yes, he did, and he said that was one thing appeared.

A. There was a rebate on a bill, as I remember; it was taken off that, that I am not thoroughly clear, but there was a rebate showed which they accounted for; this rebate was on the pipe bill.

Q. On the pipe bill. Do you know whether they had any rebate on the lead bill?

A. No, I don't.

Q. Or the pipe laying?

A. The pipe laying was a contract job, as I remember it.

Q. Did you see the contract?

A. Yes; I think I remember it; I saw that con-

tract; what were the names of those people? Blood & Sherrell; yes, I remember the Blood & Sherrell—I saw that contract, saw their prices.

Q. What examination did you make into the alleged cost of the dam, $57,000?

A. I took the prices, the amounts, I didn't go and measure that up; I didn't go up and see afterwards; I was up there during a part of the work before it was finished, before they stopped, and I took Mr. Pratt's statement, which I remember now was sworn to, because I remember sending it back to him to have it sworn to, and compared this with the prices that the East Jersey Company had paid; I am up in their offices, have offices together, and found out from them what the going prices were for that sort of work, and it seemed reasonable.

Q. Was the dam at Newman Springs like the East Jersey dams?

A. Oh, no; it had a core.

Q. And then how were they comparable?

A. It was similar work, it wasn't exactly like it, it was more like a dike.

Q. Now I notice in this report a committee note that an item of $31,050 paid for interest gotten by the Water Company for which they claim the Construction Company should allow for is disputed by the Construction Company. Can you find that item on the balance sheet?

A. I don't know as it is on there.

Q. What is this balance sheet?

A. That is to show their disbursements; it may be there and may not; I know that is what they claim they made; there is interest $110,000; whether it is part of that or not I don't remember.

Q. That balance sheet you hold in your hand, Exhibit C9, then is not a complete statement of their alleged expenses and disbursements, &c.?

A. It is as well as I understand, if that interest is in here.

Q. I don't know anything about that. I am asking you whether it is or is not?

A. I took it to be at the time; I think it is.

Q. Where is the item of thirty-one thousand interest?

A. I don't find it in here, unless it is in there.

Q. You had no engineer on your behalf go over this thing, did you?

A. No; we didn't go over it.

Q. What examination did you make of the Deal plant to see what was paid on account of that?

A. I don't recall now.

The Court: The contractor didn't agree to build the Deal plant.

Q. That is in here.

A. I don't remember now; we had a statement, though, of it, as to what they had paid.

The Court: Oh, they did. The sale of the other plants went through that, the sale of the Deal plant and the sale of the old Takanassee plant passed through the hands of this contractor, that is all.

A. Mr. Blodgett knows about that, I suppose, about the Deal.

Mr. McCarter: I am only judging from this paper.

The Court: They were after their Fourteen hundred thousand dollars bonds.

Q. What was the market value of those bonds at that time?

A. Well, I don't know; I didn't consider them very high.

Q. Well, had they any market value?

A. Well, that I am not in shape to say.

The Court: Of course not; they were just first issued.

Mr. McCarter: Hasn't bonds of a new water company any market value? Were not the East Jersey Water Company bonds worth anything?

The Court: No, I don't think so; to say they have got any market value, they have got to be peddled out on the market; where bonds are issued that way, railroad or water plant are built on bonds, pure bonds, a water plant, nobody knows what they are worth; they haven't settled into any market value; it depends on whether the plant is going to pay or not.

Q. How long did you keep these bonds?

The Court: Who kept them?

Q. Have you any bonds in your treasury yet of the Tintern Manor Water Company?

A. Yes, sir.

Q. Have they ever had a market value?

A. Not that I know of; I never bought or sold any of them.

Q. Don't you know they haven't been able to sell them?

A. That is my understanding of it.

Q. Don't you know that they were considered worthless because there was a question as to their title and negotiability?

A. No; I don't know about that.

The Court: Can't go into that, Mr. McCarter. I think the question was raised before me to get an injunction, wasn't there?

Mr. Corbin: Yes, sir.

The Court: As to their issue, and all that. If you can show that this price was put on this work because it was going to be paid

in bonds of doubtful value, why, that is another thing.

Mr. McCarter: That is what I am trying to drive at exactly.

Q. Those bonds were not worth par, were they?

A. I shouldn't consider them so.

Q. What would you consider them worth?

A. Well, I don't know. They had talked—I am a poor hand to say what they would be worth; they figure, as I understand, the bonds ought to go for 85 or 90 when the thing gets going; that gives the banker a chance to make a profit for his time and trouble getting them off; you know yourself that is about what they figure on them.

Q. Now, you had no schedule of rates under the old regime when you were there, but you used to make pretty good money and pay dividends, didn't you?

A. Yes, sir; towards the end it was beginning—we did very well toward the end.

Q. I have before me a schedule of your operating expenses and taxes, and your income for several years. Do you recollect how many years you paid a dividend?

Mr. Corbin: You asked us the other day to make up a schedule, which we have done and have here, but you have not called for it.

Mr. McCarter: I would like to have it very much.

(Mr. Corbin handed Mr. McCarter paper.)

Mr. McCarter: I won't ask Mr. Conant about that, because we will get that in now in that way.

Q. Outside of Seabright and Monmouth Beach and the four or five miles of flat pipe that you had laid to cover that territory did you ever experience

any trouble in Long Branch proper, the Commission, with your Takanassee supply?

Mr. Corbin: I object to that as not a proper question, and calling for facts that are not proved, that is, that there are only four or five miles of pipe in the Seabright district.

The Court. You object to the form of the question because it assumes something that is not true?

Mr. Corbin: Yes, sir; and it is not cross examination.

Mr. McCarter: I understood him to say yesterday there was three or four miles between.

Mr. Corbin: Between.

Q. (Question read.) What I mean is this. I take it that it is about four miles, or three miles and a half, from Seabright up to the old North Long Branch or Atlanticville?

A. Yes, sir.

Q. Now, your pipes—you had two pipes as I understand it which run down from Atlanticville or North Long Branch to Seabright?

A. Yes, sir.

Q. Six inch and eight inch?

A. Yes, sir.

Q. Now, I am taking the distance, outside of the pipes, I don't care whether twenty miles or three hundred miles—outside of the pipes that went from North Long Branch down to Seabright, leaving that territory out, Club House and all that territory,—while you were there did you ever have any trouble so far as Long Branch proper was concerned in the quantity of water?

A. We had a few complaints in the town, not a great deal.

Q. Of course it is a difficult thing, I imagine for that question to be properly answered, for the rea-

son you were supplying all this territory with this water, I mean the Seabright territory as well?

A. Yes, sir.

Q. But do you imagine if that Seabright and Monmouth Beach territory was excluded and you had simply the Commission to supply with your Takanassee Lake you would have had any insufficiency of water—crediting Long Branch with Seabright and Monmouth Beach, that is what I mean?

A. Well, I don't know how much; of course it would have made it easier; it would have lasted a few years longer if we hadn't had those, but we run along there at times and just kept even.

Q. Now, a large part of your so-called cottage rate was in that Seabright and Monmouth Beach district, wasn't it?

A. No; I don't think so; you take Elberon and down there.

Q. I am not taking in South Elberon; that has been put in since.

A. I don't mean that; I mean old Elberon, old Mr. Brown's Elberon. Of course the Monmouth Beach settlement up there, that was a good business.

Q. And the Seabright settlement was a fairly good business?

A. Yes, sir.

Q. And Lohmar, all through there?

A. Yes, sir.

Q. Next to the Elberon end wasn't that the best and largest summer draft you had?

A. Well, we had of course all along in Long Branch proper from West End up, you know, hotels and all, there was a big consumption there.

Q. The hotels?

A. Yes.

Q. And they were quite good customers, weren't they?

A. I don't think they paid too much.

Q. I mean to say they took lots of water?
A. Yes, sir; they took lots of water.
Q. The West End?
A. Yes.
Q. The Hollands?
A. Yes, sir.
Q. United States?
A. Yes, sir.
Q. Ocean?
A. Yes, sir.
Q. And Mansion?
A. The Mansion wasn't much.
Q. All those hotels?
A. Yes, sir.

By the Court:

Q. It is too bad you hadn't any meters?
A. I put a few meters on before I left.

By the Court:

Q. It began to grow short in dry weather, did it?

A. Yes, sir; what hurt us worse, what was the worse consumption, take it on a hot day and the water carts all going, then we had trouble.

WELLINGTON LA MONTE, resumed for further direct-examination by Mr. Corbin:

Q. I show you this sheet that I showed the last witness, entitled "Tintern Manor Water Company, F. E. Pratt, Summary of Pipe laid." Do you recognize that part of that?
A. Yes, sir.
Q. What is it, when was it made, and who made it?
A. That was turned in by Mr. Pratt to the committee?

Q. When?

A. Previous to the settlement, March 8, 1903.

Q. Have you personally been over these pipe lines for the purpose of marking them down on the maps and so on?

A. I have; yes, sir.

Q. Have you scaled them?

A. Yes, sir.

Q. Can you say whether that is a substantially accurate statement of the pipe actually laid?

A. I think it is; yes, sir.

The Court: He has already sworn to that.

Mr. Corbin: This is one it had giving cost, feet laid, &c.

Q. Did the committee have this when they were in conference?

A. Yes, sir.

Mr. Corbin: I offer that paper in evidence.

Objected to; admitted; marked Exhibit D11.

Q. I will ask you who was Mr. Pratt, and what was his position at that time?

A. Mr. Pratt was the Civil Enginerr and had charge of the planning and construction of the new system and the new works.

Q. On this schedule I see down a column, cost of laying per feet. Whose estimate was that?

A. Well that was taken from the contracts, the contract price for laying.

Q. Was that on when Mr. Pratt gave the statement to the committee?

A. Yes, sir.

The Court: Sub-letting of his sub-let contract?

A. No; that was the price that the contract was let out.

By Mr. McCarter:

Q. How do you know that?

A. I saw the contracts.

Mr. McCarter: I object to any evidence what the contract—

The Court: The contract has been put in.

Mr. McCarter: No, sir; it has not.

A. This is the contract let by the construction company, not by the Water Company.

By the Court:

Q. Sub-contract?

A. Sub-contract; yes, sir.

By the Court:

Q. He said he saw it. You tested that by comparison with the sub-contract?

A. Yes, sir.

Q. Have you made up a statement of the dividends paid by the Long Branch Water Supply Company?

A. Yes, sir.

Q. Does that show all the dividends they ever paid?

A. As near as I can get it from the records.

Marked Exhibit D13.

The Court: I suppose Mr. McCarter, if you want to go into that, you will find the cost of building those works in 1880 or 1882, that pipe cost probably twice as much as it did later on.

Q. When was this new work built?

The Court: 1882 they commenced.

Q. No; I mean this work, this Tintern Manor work?

A. Commenced in 1900, the year 1900.

By the Court:

Q. When was the pipe bought?

A. In the year 1900.

The Court: I was jumping back calling Mr. McCarter's attention to the cost of these original works, $250,000 put down here, and then they borrowed a Hundred thousand afterwards, making Three hundred and fifty thousand. Now, the years when that work was done you can very easily ascertain what the ruling price of pipe was.

Q. While the old contract of Long Branch was in force did the Town ever order you to lay down new mains?

A. They did.

Q. I show you paper dated June 22, 1900; do you recognize the seal on the bottom of that? What seal is it?

A. It is seal of the Long Branch Commission.

Q. Was that paper served on your Company?

A. It was.

Q. Was the pipe mentioned in that paper laid by your Company?

A. It was.

Mr. McCarter: I object to it as immaterial.

By the Court:

Q. Was that the only time they ever made such an order?

A. I know they made them right along ever year, that is, I don't say every year, but they made them during the life of the contract.

Q. Communication from Van Brunt, Clerk of Long Branch, under seal of the Commission—

The Court: The contract provided for that, didn't it?

A. Yes, sir.

The Court: That isn't material here, except to show—

Mr. Corbin: It is the hydrant question. Directed to Long Branch Water Supply Company, dated June 22, 1900.

Marked Exhibit 14.

(Mr. Corbin read the paper.)

The Court: It don't say the size of the main.

Mr. Corbin: No, sir; it does not.

Q. I show you a similar communication dated June 10, 1901. Was that served on you by the Town?

A. Yes, sir; it was.

Mr. Corbin: Pipe laid. That was for setting the hydrants. I offer it in evidence.

Mr. McCarter: I object to it as immaterial.

Marked Exhibit D15.

Q. When did your contract with them expire?

A. On September 21, 1901.

(Paper read.)

Q. Have you received any other orders later than those dates?

A. Not for setting hydrants or laying mains.

Q. You say the old contract expired September 21, 1901?

A. Yes, sir.

Q. Did the Town pay up to that date what was due under the old contract?

A. They did not.

The Court: What have I to do with that?

Witness: That is one of the things we were going to shut the water off for,non-payment; they didn't pay up all they owed us under the old contract.

Mr. McCarter: I think that is utterly immaterial.

The Court: I don't recollect what the stipulation was about discontinuing suits.

Mr. McCarter: The point was this, as I remember. We filed our bill for this injunction. We stated that we were entirely willing to have the bill in arrears for the time between the expiration of the contract and the time that had expired, settled in the Court where they had chosen to have that settled, viz.: the New Jersey Supreme Court, Monmouth Circuit, and nothing was said then that I remember—this is the first I knew that there were any arrears due under the old contract. The whole thing their bill talked about, bill of complaint talked about, that I remember, was some money that was due between the expiration of the old contract and the then time. When we filed our bill it was apparently not taken in by Judge Collins, who consented to the idea that they give up that suit and come before your Honor with the thing; that that suit included something that was said to have been due under the old contract. I don't think it is before your Honor, because, as I remember the amendment to the bill of complaint, all that you are charged with finding out is the amount due from the expiration of the old contract down to the time that you undertook to commence for the old, the past transactions, and set a base for the new transactions. Now, if they have discontinued the suit, I don't suppose there is any trouble—I don't know anything about that at all, never heard there was any such thing, and don't think your Honor has anything to do with it.

The Court: I am inclined to refuse to have anything to do with it, for I think

if it is so it is a mistake, if the stipulation was for anything under the old contract it was a mistake, I think, Mr. Corbin, fallen into by Judge Collins. I am not sure now, Mr. McCarter, that something was not said about this; if there was a lap of that kind they should strike that out of the declaration.

Mr. McCarter: I have no recollection of seeing it before; it may be.

Mr. Corbin: There is no question but what it is due under the old contract.

Mr. McCarter: If it is it will be paid, I have no doubt; if it is due it ought to be paid.

Q. Just state what has been paid and the date of payments on account of public service from September 21, public service rendered since September 21, 1901, on the Chancellor's order?

A. Well, we have supplied them 146 hydrants for fire purposes, we have suplied them with water for street sprinkling from September 21, 1901, and from September 21, 1901, we furnished water to seven fire engine houses, and also from September 21, 1901, we furnished water to three public drinking fountains in the Town, and there have been paid us by order of the Court of Chancery on August 17, 1903, $4,000; on August 21, 1903, $4,000; on September 15, 1903, $350; on October 15, 1903, $350; on November 14, 1903, $350; December 15, 1903, $350, and January 15, 1904, $350.

Q. What is the total paid to date?

A. $10,800.

Marked Exhibit 16.

Q. They are paying you then $350 every month under the Chancellor's order?

A. Yes, sir.

Q. Now, you have spoken of seven fire engine

houses; do you know the fixtures there are in those fire engine houses?

A. Yes, sir; I do.

Q. Have you reckoned up your regular schedule of rates for the service you render there?

A. Yes, sir.

Q. I show you schedule; did you make that?

A. I did.

Q. Does that correctly show the fixtures in those engine houses and the value of them at your regular schedule of rates?

A. Yes, sir, I believe it does; I checked this; I had one of my clerks inventory the properties, and the City Clerk also got the record, and they checked within one or two fixtures; I think we had one fixture that he did not and he had one that we did not, and we made them correct.

Q. Went over it with the City Clerk?

A. Yes, sir.

Q. What is the total?

A. $193.

Mr. Corbin: I offer it as a memorandum of the extent of that service.

Marked Exhibit D17.

Q. Now, what are the fixtures in the streets which you have spoken of as drinking fountains?

A. Well, there are three public drinking fountains.

By the Court:

Q. For horses and people?

A. Yes, sir; horses and people and dogs.

Q. How is the water supplied to them?

The Court: Steady stream running all the time?

A. Yes, sir.

Q. What is the size of the stream?

A. They are supplied through three-quarter inch service pipes on the Number One, known as the Chattle Fountain, there is, I think, one three-eighth inch stream running continually and two one-quarter inch streams, and then there one spring faucet.

Q. That is only opened when you use it?

A. Yes, sir; that is the way it has always been.

Q. How about the other one?

A. Then there is one downtown near Broadway and Second Avenue, has two two streams running continually.

Q. What size?

A. Well, I couldn't determine.

The Court: You can't tell anything about it; the only way is to go and test them with a measure.

Q. About what is your ordinary pressure where those fountains are located?

A. About fifty pounds. We are more than willing to meter them.

Q. Do those run at nights as well as day?

A. Yes, sir.

Q. For how much of the year?

A. Well, about eight months.

Q. Would it be feasible to put a meter on those?

A. Yes, sir.

Q. Is there any other public service that you give that is not paid for by local rates?

A. I think not.

By the Court:

Q. What do you charge for those drinking fountains a year, what do you charge, what is your bill there, what has been your charge to the City?

A. It has gone in with the bunch. The contract was made on September 21, 1891, $4,000 for all service, that included ninety-two hydrants, fire engine houses.

By the Court:

Q. Never been any separate charge, never been segregated?

A. No; $4,000 was the flat rate on September 21, 1891, at the beginning of that contract.

Q. That was for how many hydrants?

A. Ninety-two hydrants.

Q. How much for additional hydrants above ninety-two?

A. Forty dollars each for all hydrants set after that date.

Q. What did your annuel charge to the Town amount to at the time during the last year for the old contract?

A. I think it had gotten up to $6,160 at the expiration of the contract per year.

Q. That included fire service, sprinkling and these troughs and the engine houses, did it?

A. Yes, sir.

Q. What was your business before you came down to the Long Branch Water Supply Company four years ago?

A. Why, I was working for the Scranton Gas and Water Company in Scranton, Pennsylvania.

Q. How long have you been in the business of actually conducting water companies for municipal supply? How long were you with them?

A. With them fourteen years before I came to Long Branch.

Q. Did you have to do with municipal water supply?

A. Yes, sir.

Q. I want you to make an estimate of the number of months of service that Long Branch has from you under present conditions for sprinkling carts, that is, the number of months one sprinkling cart would be employed to do a year's service. Begin

first with the seventeen carts that were spoken of yesterday. How many months are they working?

A. Four months.

Q. Take that, multiply four by seventeen; now, how many months—what four months are those?

June, July, August and September.

Q. Estimate how much service there is before June?

A. Well, I should say there was an average of four carts; I think Mr. Van Note—something compiled by the City Solicitor, four carts, say four carts in May, and perhaps six carts; say four carts in October—six carts, I think.

Q. Estimate, according to your best judgment, how many months' service are given?

A. That would be about seventy-six.

Q. Now, do you do any night sprinkling on your asphalt?

A. Yes, the street is swept at night, and they require it to be sprinkled before it is swept to keep the dust down.

Q. Is that done every night?

A. Yes, sir, that is, when it can be swept, unless it is very stormy; I think it takes about four carts to go over it.

Q. How much of the year is that done?

A. That is done eight or nine months; it is done continually through the year when we don't have to shut off the hydrant to keep it from freezing, about eight or nine months in a year.

Q. Now, estimate how much—you say four carts a night?

A. Yes, sir.

Q. Estimate how much that would amount to, how many nights a month do they sweep the street and sprinkle it for that purpose?

A. I should say an average of twenty-six.

The Court: You flush the whole street?

Mr. Corbin: The asphalt pavements every night of the year for about nine months, entirely outside of what we have been talking about.

The Court: What is that for?

Mr. Corbin: To lay the dust; before sweeping the asphalt have to lay the dust on it, or it will fly all over.

The Court: Asphalt has to be swept every night?

Mr. Corbin: Every night, Sundays and all.

The Court: Why?

Mr. Corbin: To keep the town clean.

The Court: They don't have to sweep the other streets. The asphalt makes a finer dust. Isn't the sprinkling enough for that?

A. No; droppings from the horses; they take that all off.

By Mr. McCarter:

Q. How many months do they do that?

A. I should say eight months at least; that would be eight hundred and thirty-two carts in a year.

Q. And how much would that amount to in months, say twenty-six loads a day, days or months?

A. Well, that divided by twenty-six gives thirty-two.

Q. Month and a quarter or something like that, month and a sixth.

A. Yes, sir.

Q. Add that with the other months, see how many months' single cart service?

A. Now, I don't know just—

Q. Four times seventeen is how much?

A. That is sixty-eight; then we add the eight made it seventy-six.

Q. Now, here is about one and a quarter more, one and a sixth more.

A. Call it one; that makes seventy-seven.

Q. Seventy-seven months' service?

A. Yes, according to months.

Q. At forty dollars per month per cart, how much would that amount to?

A. $3,080.

Q. You have the immediate charge of this, management of this water plant, haven't you?

A. Yes, sir.

Q. In your judgment, what is a moderate, fair price for the water used for sprinkling, suppose it were put through a meter on the carts?

A. Well, I think Forty dollars would be very reasonable.

Q. I am not asking you that. I am asking you what you think it ought to be; you think Forty dollars a month would be reasonable?

A. Yes, sir.

Q. What do you think it ought to be if it were measured?

A. What rate we ought to put on it?

Q. Yes.

A. Well, it seems to me that our lowest rate is a reasonable rate, 15 cents a thousand gallons; we have to distribute it to about sixty places all over the town.

By the Court:

Q. Fifteen cents a thousand gallons, but those other rates given were ten cents a hundred cubic feet.

A. That would be thirteen and a third.

Mr. Corbin: A Dollar a thousand?

A. Yes, sir; that is about thirteen and a third cents a thousand gallons.

Q. This amounts to how much per month per cart? You figured that already.

The Court: Let us see what rate per hundred cubic feet that is, or thousand cubic feet.

A. That is about thirteen and a third cents.

By the Court:

Q. Thirteen a thousand?

A. Yes, sir. The computation I made here was the average cart, five hundred and fifty gallons the average, twenty-six loads in a day would be fourteen thousand three hundred gallons of water one cart one day, and twenty-six days a month sprinkling, three hundred and seventy-one thousand eight hundred gallons one cart for one month.

By the Court:

Q. Just put that into cubic feet, divide it by seven and a half.

A. About forty-nine thousand five hundred and seventy-eight cubic feet.

By the Court:

Q. About fifty thousand cubic feet?

A. Fifty thousand cubic feet; yes, sir.

By the Court:

Q. Fifty thousand cubic feet for one month?

A. Yes, sir; one cart for one month.

By the Court:

Q. At ten cents, that would be Fifty dollars?

A. Yes, sir.

The Court: Ten cents. You said you were willing to make it eighty-three; that would be about Forty dollars.

Mr. Corbin: We offered to do it for Forty dollars per cart per month, which would be eighty-three cents instead of a dollar.

The Court: It seems to me they use a great deal.

Mr. McCarter: They take the highest day; they have taken the extreme, and they say that is used every day.

The Court: I don't think it will average any twenty-six, take it one year with another; some years it will be as much as that, but I don't think it will average twenty-six; that is, according to my own experience as a juryman.

Q. Before recess I was asking you if you had any suggestions of alterations of the fixtures, and we spoke then of the yard hydrants which you thought then were wasteful and ought to be prohibited, and Hopper water closets of which you had a similar opinion. I ask you now if you have any suggestion to make to the Court with regard to the installing of meters where the owner demands that one be put in, that is, a large taker, or where you force it to be put in yourself. Have you any suggestion as to how that cost should be?

The Court: The cost of the meter?

Mr. Corbin: Yes, sir.

The Court: I have but one suggestion; I want to hear counsel very strongly to induce me to hold anything else, but that the water company should be at the expense of the meter. In regard to the cost of installing, that is generally done by the owner, common knoweldge, I suppose, that is.

A. We have had a good many meters froze up and burst this winter, and I should think those ought to be paid for.

The Court: That is a horse of another color entirely. The owner must furnish a proper place to set the meter.

Q. Have you cases where owners claim to have an independent supply of water and who install yours to eke out their own supply; have you those cases?

A. Yes, sir; we have.

Q. Have you suggestions as to how that should be?

A. I think we should charge them, and we do, under our rules, charge them for full rates,—not to be used as an accommodation, and not to have them make a convenience of us.

Mr. McCarter: Pay for it whether they use it or not.

The Court: Pay for it whether they use it or not. Those things are not debatable.

Q. What is the nature of that soil you sprinkle there so much?

A. Well, it is gravel, sand, takes quite a good deal of water to keep it right.

Q. Have you observed when they are sprinkling what the Street Commissioner requires, as to whether their practice is to empty the carts quickly and make the street very wet, or to sprinkle it sparsely over the ground?

The Court: They can do it either way.

Q. What do they do as a matter of practice?

A. They make it wet; they try to keep it so not a particle of dust is blowing in the air when the people are driving along with their nice carriages; there have been two or three times in the summer when there would be dust flying and you would see it come out in the papers, complaints against the Street Department, the papers kicking about

dust. And I have also watched the carts filling and emptying, but I have never watched them for for a whole day.

Q. In figuring the expenses of the operation of your plant in these schedules, do you put in, have you reckoned anything there for depreciation of plant?

A. No, sir.

Q. Does it not depreciate?

A. It is constantly.

Q. What parts of it depreciate?

A. Well, the pipe in the ground, the filters, the pumps get old, the boilers, in fact, the whole thing depreciates.

By the Court:

Q. Not at the same rate?

A. Oh, no, not at the same rate.

By the Court:

Q. If your pipes are put in, well coated, isn't it understood they are pretty near immemmorial? Nobody knows that yet.

A. We have actually had to take some pipe out of the ground down there because it was filled in with—

By the Court:

Q. That is old pipe?

A. Carbuncled.

By the Court:

Q. Yes, carbuncled to death, but have you ever taken up any pipe laid within ten years, coated pipe, that had the least carbuncle on it?

A. Well, yes, we have taken out some that was laid within eight years and found it quite rough, and our gate valves get that way.

The Court: I will want to hear evidence on that subject. The modern doctrine is that if you have the right kind of water and your pipes are made of iron, of homogeneous iron, and they are coated, that they deteriorate very little. Undoubtedly if you will put your pipes only two and a half or only three feet deep where they are exposed to variation in heat and cold, that must effect them sooner or later, but if you put them down five or six feet deep where they are not exposed to a line of variation in heat and cold shrinkage and swell, made of homogeneous iron, good iron and well coated, I have seen them taken up ten or fifteen years old and there was not the least change at all.

A. I was going to say, our pipes are only down three feet on an average, sometimes less where they scale off the streets.

The Court: Radical mistake in the first place.

Q. From your experience what do you think ought to be reckoned in the expense, annually in the expense, for depreciation of plant for the purpose of maintaining it to its full efficiency all the time?

A. I think five per cent.

By the Court:

Q. That includes pipe and all?

A. Yes, sir.

By the Court:

Q. What would you say to the engine plant, the engines and boilers? Now, any good engineer will tell you, any good boiler or engineer maker will tell you what it is—George Phillips will tell you.

A. I should think perhaps a little more on boilers and engines, especially on filters; I should think ten per cent. on the filters would be little enough.

The Court: I should be very much surprised if anybody would say a boiler don't depreciate more than ten per cent. a year, the best you can get, and an engine that is working all the time, ten per cent. won't cover it, but I would be very glad to know it does. This gentleman can't tell, Mr. Corbin.

Q. Do you know how often the filters have to be renewed?

A. Well, I will tell you; we have got filters that have not been in ten years, that we are laying out a great deal now, more and more every year for repairs to keep them up until we get to our new plant there, becoming very expensive; the manhole plates are cracking, giving out, and the shelves are giving out—haven't been in ten years.

By the Court:

Q. But do any of your statements show how much of this plant is invested in engines and boilers, that kind of wearable, I will say that kind of plant that is exposed to serious deterioration, how much of it?

A. No; it does not; the schedules do not.

Cross-examination by Mr. McCarter:

Q. Turning to your Schedule D, the item of general expenses. What is meant by the item Miscellaneous Expenses, $1,500?

The Court: That is for the year ending January 1st, 1904.

A. Well, I can't give you the details of it right here, but you want the principal items, I suppose?

Q. That is, with one exception, the largest item

in that bunch, and I would be glad to know, roughly, what it includes.

A. Well, the matter this morning was spoken of as a matter of salaries, and it was asked if it included the President's salary. Now, the President of the company never has had a Dollar's salary, a Dollar's compensation; he has given a great deal of time for three or four years, and at one of the meetings of the Board of Directors he was voted a Thousand dollars in order that they might show their appreciation for what he had done and was doing for the company and his services that he had given to it. Now, that, of course, makes up the principal item for the miscellaneous expenses.

Q. That isn't an annual charge?

A. No; that is not an annual charge; no.

Q. Now, turning to Schedule E. Number of Families, one faucet, 2,173?

A. Yes, sir.

Q. How many of them are summer families?

A. I couldn't tell you that, Mr. McCarter.

Q. Well, are there not a great many of these houses that are referred to on your Schedule E wherein the water is absolutely shut off during the winter months?

A. Oh, there are a great many of them.

Q. How many?

A. Well, I couldn't tell you.

By the Court:

Q. That are absolutely shut off?

A. I couldn't tell you how many.

Q. They are absolutely shut off?

A. Yes. but where they are absolutely shut off, but not nearly as many as you would think for.

Q. I am trying to find out how many there are.

A. Because a great many of those people who have nice properties put a care taker in, either in the stable or the house.

Q. Who shuts off the water?

A. Plumbers.

Q. Have you any record of it, whether the water is off?

A. Know nothing about it whatever, never tamper with it.

By the Court:

Q. Unless you have a meter?

A. Unless we have meter; then we don't know.

Q. Have you ever made an estimate of how many of the houses that are used there—there are 2,173 houses—how many of them are closed during the winter?

A. Well, I made an estimate at one time of our total consumers, as to the number that you might call summer consumers, and all the year around, and I think it was nearly half perhaps.

Q. About evenly divided?

A. Yes; at least one hundred per cent.

Q. Were summer consumers?

A. What we call summer consumers; at the same time, many of them, as I say, have caretakers, use a little water.

Q. In how many of these places that are referred to in this Schedule E are there two families located?

A. How do you mean? I don't understand the question.

Q. Well, I observe by your schedule of rates, "Number 3, in cases where fixtures supplied with water are used by more than one family each family will be charged for at above dates." Now, how many of those places do you have where with a single set of fixtures, we will say, there are two families, and, therefore, double rates are charged?

A. Oh, there might be a very small number, very small.

Q. Where are the hotels from which you derive a revenue of $4,123?

A. Well, let us see. Two quite large hotels in Seabright, the Octagon and Peninsula, the Monmouth Beach Club.

Q. Neither of them is within the Commission thus far?

A. No; then the Lemmix?

By the Court:

Q. All these are outside?

A. No; these are in the Commission.

By the Court:

Q. I understand this list on Schedule E includes everything, includes what are in the Commission?

A. Yes, sir; in and out.

Q. I was trying to find out where the hotels were located?

A. Several at Long Branch, different hotels at Long Branch, principally West End, Holleywood; Ocean was open last year; the Holland, the Scarborough, and then some hotels in Deal, the Half Way Inn, quite a large hotel.

Q. That isn't in the Commission?

A. No.

Q. Now, the furniture, &c., of the Ocean Hotel is now advertised for sale at auction, is it not?

A. It has already been sold.

Q. It has been?

A. Yes, I think it has.

Q. And the Holleywood closed, I think, about August 7th last year?

A. Well, it closed.

Q. Right after the horse show?

A. Yes; soon after the horse show; yes, sir.

Q. These forty-nine hotels that are named there —twenty-nine hotels—are not nearly all of them in the Commission, are they?

A. No; of course, that includes a good many that you might term saloons; Flanagan's Hotel, for instance, more run for the bar than anything else; Third Avenue Hotel, Imperial—they are in Long Branch.

Q. How about the boarding-house item, twenty-eight of them, where are they located?

A. Well, they are scattered over the whole system.

Q. Not all of them in the Commission?

A. No; these are mostly in the Commission, the boarding-houses, because I don't remember very many outside, don't have any record.

Q. Have you ever estimated or had estimated the capacity of these two areas, the Takanassee and the Newman Springs?

The Court: The water shed?

Q. Yes.

A. No; I never have estimated it, and I can't remember the figures that were given us, I can't tell you.

By the Court:

Q. You mean to say those figures on there showing forty-nine miles and four miles, all that, haven't been computed?

A. The flow of the water?

Q. Capacity, I said.

The Court: The word "capacity" is water product.

Q. Run off, I meant.

A. That is the way I understood him. I know one time in Scranton they were estimating the flow of the water from one of the reservoirs in one part of the State, and they put a meter on, one of these made in Providence, I have forgotten the name, one of those, the flow reduces and then increases; what is that?

The Court: Contracting.

A. Yes. It was less than half of all the estimates we had, the flow of that water.

The Court: There is no difficulty about proving the flow of a stream of water that has got any fall in it, for one particular day, but what does that amount to? You have got to have three hundred and sixty-five days a year for about ten years.

Q. Your table that, I think, was given us this morning, Earnings, Operating Expenses and Taxes from 1882 to 1899, includes, does it not, the revenue from the municipality as well as from the private consumers?

A. Oh, yes.

By the Court:

Q. Total?

A. Yes, sir.

Q. Taking up Exhibit C17, which is the schedule of the fire houses, is there a family living in each one of those fire houses?

A. No, sir.

Q. And do the men live in all of them?

The Court: Sleep in them?

A. Well, now, I can't tell you about that.

Q. Well, you have put the rates on as if there were people living there, have you not?

A. No; only in cases where there is a family,

By the Court:

Q. You put them on for just what they are, don't you?

A. Yes, sir; for instance, there is a meeting room or a public room, I charge it the same as an office or store rate, office rate, perhaps.

Q. You have in your schedule no such thing as fire engine houses as being a classification?

A. No.

Q. So you have had to apply other rates?

A. Well, yes; yes.

Q. What rates have you applied?

A. Well, that is what I told you, I applied the water closet rate; I have applied the horse rate for horses at private stable, and for meeting rooms I have applied, as I say, an office rate. That is the reason I made it up in that way in order to submit it to the Chancellor.

Q. I observe in the Phil Daly Hose Company, on Second Avenue, you have charged the City with one sink and a barber shop?

A. Yes, sir.

Q. Well, does the City get a revenue from that barber shop?

A. I couldn't tell you; it is in the fire engine house, new brick building just built there to take the place of an old one we have always supplied with water for nothing; that is under the contract, I would say.

Q. Who owns the building?

A. I couldn't tell you that.

Q. Never took any pains to ascertain that that was a private enterprise, the Phil Daly Hose Company?

A. I always supposed it was owned by the Town, but, as I say, I never inquired, but it is occupied, they keep the horses, fire engine there, whatever they had, the chemical engine.

Q. Referring to this Exhibit No. 11, which is said to be a report received by you from Engineer Pratt, when did you check this up, after the pipe was laid?

A. Yes; I didn't have so much to do with the checking up.

Q. Well, I thought you hadn't.

A. As Mr. Conant.

Q. How could you check up the correctness of this list as to length and depth and weight of the

pipe, and as to the tons of iron and as to pounds of lead, after the pipe was all laid?

A. Well, as I say, we saw the bills for the pipe and saw the bills for the lead, and we also had our maps showing the plan of the system, and we knew about the weight of the pipe.

Q. For instance, how did your investigation after the pipe was laid enable you to check up that Exhibit 11? That is what I want to know?

A. Well, it was checked up from the bills of the Company that we had, from the known measurements that we had, and the maps we had, and the known weights of the pipe; at that time there was considerable of it out of the ground.

Q. Which part was out of the ground?

A. Well, I saw considerable of the thirty-six inch and twenty-four inch and eighteen inch, different pieces out.

Q. Well, how did you know what was laid on the maps? You took Mr. Pratt's statement about that, didn't you?

A. Oh, no; I have been over the ground continually seeing them lay it, for instance, if I knew where the pipe laid, where it begun and where it ended.

Q. How do you know how much lead he put in?

The Court: I said you could tell that, Mr. McCarter; that is a matter of computation.

Mr. McCarter: I haven't any doubt that is so, but I have a right to test this witness' means of knowing.

Q. I want to know how you checked up that list? The pipe was now laid, wasn't it, when this list was made out? You said in reply to Mr. Corbin, in reply to a question of Mr. Corbin's, you had gone over the maps and personally checked up that list, with the pipes laid. I want to know how you knew how much lead was in there?

A. That list was not produced when I was on the stand before. Yes, I beg your pardon, it was; I was thinking of this morning's testimony.

Q. Now, I show you Exhibit 11, and ask you how you were enabled, with the pipes laid and the bill rendered from the construction company to your Company for what they had done, how then you were enabled to take that list and check it up?

A. Well, I don't say that we checked it up.

Q. Well, you did say so on your direct-examination.

The Court: The examination is all right, but I want to say to you frankly that I know before he answers it just how it could be done, and I understand how he did do it.

Mr. McCarter: He don't seem to understand it.

The Court: Yes, he does, and if he should answer it entirely wrong it wouldn't have any effect on my mind.

Mr. McCarter: Mr. McCarter would like to have it noted on the record at this time he was prevented from pursuing his cross-examination.

The Court: There won't be any such thing, because it isn't true.

A. I can't tell you how many ounces of lead were put in every joint of pipe, but we knew about what it took to put in a thirty-six inch joint; I have stood on the ditch and seen them do it; I knew about how it run, and we took it to our own satisfaction; we checked that up, the Board of Directors of the Tintern Manor Water Company were settling for this plant, and they didn't want to pay any more than was right; as I say, this was checked up to the satisfaction of the Board.

Q. How did you know whether or not it was true there were four hundred and thirty-six thousand

and four and five-tenths feet of pipe laid, which cost One million one hundred and fifty-four thousand two hundred and twenty-nine dollars, and which included four hundred and sixty-eight feet of flexible pipe?

A. Well, what we did, we took the records of it, knowing where the pipe started and where it finished, and where we didn't have the actual measurements we took it from the maps.

Q. And who made the maps?

A. We had the maps made by the engineers.

Q. The same man that made this saw you check him up by himself, didn't you?

A. We had two or three engineers there; I have an engineer in my office who is working for the company now, I have his maps and measurements.

The Court: It has been assumed for a great many years in New Jersey that the State Geological map made by the department—it has been used in courts without question, the ordinary map of a county which you find hanging around on people's walls, has come to be known to be about right and are used for that purpose. Of course you are liable to make variations. I will tell you what I know—that is the reason why I am a little impatient—my own son is an engineer, and for the measurement they have of every kind of work he relies on George Howell's maps every day; they all do. This gentleman swore to that before.

Mr. McCarter: Your Honor is missing the point altogether. I am asking him how Cook's map, or Howell's map, or Fred Pitney's map, or any other fellow's map is going to let him know when it is under ground, when there is four hundred and sixty-eight feet of flexible pipe there. That is what I want to know.

The Court: That is submerged under the water, couldn't get there without being inflexible; that, I suppose, is the answer.

A. Yes, sir.

Mr. McCarter: He may know it now, that the Court has told him.

Q. I was trying to ascertain—

A. I told you that we took these maps that we had, and the measurements that we had actually before, and checked them up in that way, so we were satisfied to pay that amount.

Q. In other words, you took Pratt's maps and validated Pratt's statements by Pratt's maps; that is about the size of it, isn't it?

A. No; we didn't.

Q. What other maps did you have that showed the details on here?

A. I had an independent map of my own that was made from surveys made by the Consolidated Gas Company of New Jersey in Long Branch, going from Red Bank to Seabright, to Long Beach, to Asbury Park, and I put all of these on that map and made them from that.

Q. And put all of what on?

A. All these pipe lines on as they were laid.

By the Court:

Q. From recent actual survey?

A. From recent actual survey; yes, sir.

Q. How did you know anything about the cost of repairs to roads?

A. I don't recollect just that, but I know in going over the roads we put them in, a great many of the roads were gravel and they had a great deal of trouble in getting those back to the satisfaction of the Township Committees, had to buy gravel.

Q. But you had to take Dr. Pratt's statement about it, didn't you?

A. Yes; I suppose we did.

Q. Suppose you did?

A. Yes, and the receipts from the Directors.

Q. How did you know anything about the pile bridges?

A. Well, I had been over the pile bridges a good many times.

Q. Had you measured them yourself?

A. I don't know that I actually ever put a tape on them; no.

Q. So that after all you largely assumed that Exhibit 11 was correct, did you not? You had confidence in Mr. Pratt and you assumed it was correct?

A. Oh, no; we went over it in detail; as has been said before, we spent a good deal of time on it.

Q. On Exhibit 11?

A. On all of those things.

Q. I am not asking you about all those things I am asking you about Exhibit 11?

A. I don't remember about that particular exhibit; I don't remember about the time put on that particular exhibit.

Q. Nor how much you assumed was right and how much you did not assume?

A. No; I can't tell you.

Q. You have been a member of the Board of Directors of the Tintern Manor Water Company, I believe you said?

A. Yes, sir.

Q. This Exhibit C10 provides at the end of it—which is the report signed by the three members of the committee—"The settlement with the Construction Company having to be made in the bonds of the Water Company, the price of the same must be

agreed upon by this Board." What price was agreed upon, if any?

A. Well, I think they intended to turn the bonds over at about par.

Q. I didn't ask you that. I asked you what price was agreed upon?

A. Well, par.

Q. Par?

A. That was the consideration.

Q. Sir?

A. That was about the consideration, yes.

Q. Then the bonds were turned over as if they were worth par?

A. Yes, sir.

Q. There is no rock excavation down there at all, is there, though that territory through which you laid your new pipes?

A. You wouldn't call it rock excavation, but there is some of this iron ore in the soil.

By the Court:

Q. Bog ore, you mean?

A. Yes, sir.

Q. Where did you strike that?

A. Several places.

Q. Well, where?

A. Well, more particularly up around Newman Springs.

Q. Have you any idea how much?

A. No, I can't tell you now.

Q. Do you know where Mr. Pratt is?

A. I can't tell you; no, sir.

Q. Made no effort to find him at all before coming here this time?

A. No. He was living at Red Bank; he moved away; he was trying to get some position with the government; I don't know whether he got it or not.

Q. How old is he?

A. Oh, I would say—well, I couldn't tell you; perhaps thirty-five years old.

By the Court:

Q. I will just ask you one question—whether the number of the different sizes of different pipes laid, as contained in the statement Mr. Pratt furnished you, corresponded with the bills and vouchers he produced before you?

A. Well, it did, yes, sir, very closely; we footed up the number of tons charged in the bills, the number of lengths of twelve foot pipe, and those things tallied.

By the Court:

Q. Tested it in that way?

A. Yes, sir.

By the Court:

Q. Didn't the invoices show the size of those mains in each case, the bills?

A. Yes, the size of the pipes, so many lengths of thirty-six inch pipe, and such a weight; yes.

By the Court:

Q. You had the bills, showed you how many were charged to him?

A. Yes, sir.

By the Court:

Q. You had no reason to suppose they were forged?

A. No.

By the Court:

Q. Then you found out how many were laid by measurement on the ground by scaling on the map, tested it that way?

A. Yes, sir.

By the Court:

Q. Flexible pipe was a globular joint?
A. Yes, sir; we call it ball and socket.

By the Court:

Q. That is Mr. Werts' plan in Jersey City?
A. Yes, sir.
Q. What check did you put on the approximate pounds of lead used in the thirty-six inch pipe?

The Court: I don't think he could put any without getting a hydraulic engineer who was experienced, by using some table. There are tables, to my certain knowledge, which tell you just how much lead it takes to each one of these joints, if they used that table, but I don't believe this gentleman knew.

Mr. McCarter: The trouble is he claimed he did.

A. Oh, no, I didn't.

The Court: He said he had seen when it is poured in. I don't count on that at all. I think Mr. Sherrerd's opinion will be valuable. If this gentleman has used a recognized table of the amount of lead required to fill one of those joints, then his criticism is that is of some value.

A. I have one right here, if Mr. McCarter would like to see it.

By the Court:

Q. You have one that you used?
A. Yes, sir.

By the Court:

Q. You didn't say so in the first place, and I distrusted your judgment. Did you use a table when you were going through this computation?

A. Yes; I have always used a table in all my calculations.

Q. I don't care anything about what you have always done.

A. Now, Mr. McCarter, those things were done a good while ago and I have done a great many of those things since, and I can't give the details as I could if that happened yesterday on those things, because I had a great many other things to attend to when I was doing those; we haven't had smooth sailing down in Long Branch by any means.

The Court: Mr. Sherrerd is the man who could tell all about this. I would take his judgment a great deal quicker than I would this gentleman.

Q. You anticipated when this plant was designed and partially built supplying Red Bank with water, did you not?

A. I believe that was the intention.

Q. And it was built with that view in some respects, was it not?

A. Well, now, I can't say that it was built, because when I came with the Company the Red Bank idea, I think, was given up.

Q. Didn't you say something this morning?

A. The original design was to put a pumping station in Red Bank and come through the streets, but I can't say that they did intend to supply Red Bank, but they arranged it to come through their streets.

Q. How much land was actually bought and still owned by the Company, having been purchased either in the name of Mr. Sherman or Dr. Wentz, on the level near the so-called Lovett Hill?

A. Well, now, my recollection of that is that there was about ten acres bought running from the road up to the top of the hill.

Q. There was no failure of title in that, was there?

A. No; they paid in all, I think, Nine thousand dollars.

Q. For that?

A. And there was an option out on three and a fraction acres.

Q. Up on the hill?

A. Yes; up on the top of the hill, for which the Company had to deed to someone else, and for which they received in return Four thousand dollars; that left, I think, the cost of the land on the side of the hill Five thousand dollars; that was afterwards deeded back by Dr. Wentz to the Company; the Company now retain it, don't want to sell it, thinking perhaps they may have to utilize the side of the hill as far as they can go and put a standpipe on the side and extend it up higher than they would have had to if they put it right on top—so the Company still own that land.

Q. And the expense of that is charged into this cost?

A. Yes, sir; and it is deeded to this Company, the balance that it stands them in.

Q. I understand that the plant is not yet completed and the work that they were required to do and expected to do even on the settlement, has not yet been perfected, has it?

A. Not entirely.

Q. What remains to be done?

A. Well, the principal thing is the one pump that hasn't been put in yet.

Q. Where?

A. At Newman Springs Station.

Q. Now, you have talked about a hydrant rate, &c. Of course, the hydrants, outside of the street sprinkling, are used entirely for fire purposes?

A. Yes, sir.

Q. What is your idea that there should be nothing definite in regard to the required pressure?

The Court: That isn't for him to say. Now, I am going to ask a question about that before we get through—what provision the decree should contain, Mr. McCarter, as to the pressure, that is the reason I have asked the question. The pressure fails the moment you open a fire plug, and it is going to be a very troublesome question. Of course, I have no doubt Mr. Corbin has understood that there may be some risk on the part of this Company, in case a heavy fire occurs they may be held liable for damages if they don't have the supply of water, all that sort of thing. I don't say it is not possible for the Court to make some decree on that subject, but I do say that it is exceedingly difficult to arrive at any kind of a standard or basis. You better formulate what you think there ought to be about that, and see what is practical. It was that thing that called my attention to the fact that where the present system thirty-six inch main lets into the Long Branch system they are very small mains, but that has been explained to me by what the intention of the Company is to do.

Mr. Corbin: One thing we could find out here by this witness, what head they pump against.

The Court: That he has sworn to; 150; but the question is, have they got pumping force to keep that up, because if it is 150 up there as Newman Springs with thirty-six inch pipe it will be pretty near that at the end of that thirty-six inch pipe if they keep

it up, but you have got to have a good many pumps to do it probably.

A. We are getting pumps enough to do that.

The Court: You have got to keep fires up all the time.

A. Yes; we do.

The Court: You have got to have boilers banked to keep steam, because it will take a great deal more steam.

Adjourned until Friday May 20, 1904, at Chancery Chambers, Newark, N. J.

June 3, 1904.

Between
LONG BRANCH COMMISSION,
Complainant,

and

TINTERN MANOR WATER COMPANY,
Defendant.

Continuation of examination, pursuant to adjournment on June 3, 1904, at Chancery Chambers, Newark, N. J., in the presence of the parties as before.

STEPHEN A. NELSON, sworn on the part of the complainant:

Direct-examination by Mr. McCarter:

Q. You live where?
A. I live in Long Branch.

Q. And what official position do you hold there?

A. I hold the Assessorship.

Q. How long have you lived in Long Branch?

A. A little over thirty-three years.

Q. Have you made an estimate, to the best of your ability, of the summer population of Long Branch?

A. I have formed an opinion of what the summer population is.

Q. What is it?

A. The summer population does not exceed twenty-five thousand, I don't think.

Cross-examination by Mr. Corbin:

Q. How do you form your opinion of the summer population of Long Branch?

A. I base it on—I think it would not exceed twenty-five thousand.

By the Court:

Q. He asked you how you figured it out?

A. Figure it out this way: I am pretty well acquainted with the property in Long Branch, being assesor for the last ten or twelve years, and the permanent population is between eight and nine thousand, the old lines.

Q. That is, it was that in 1900?

A. Eight or nine thousand, I don't think it would exceed at the present time much over ten thousand.

Q. Ten thousand at the present?

A. I don't think it would exceed that.

Q. How do you get at the summer population?

A. At the different cottages and different hotels, we have really only three or four hotels on the shore —small.

Q. It really is a guess?

A. Certainly it is a guess, only estimate; I wouldn't swear positively to it.

By the Court:

Q. There is no swearing positively about it; he wants to ask you on what basis you estimate it, what reasons you give, what grounds you go on, how you figure it?

A. I figure it by the number of the cottages in Long Branch, and estimate it in that way; you can't do it any other way.

Q. Did you ever make any enumeration of that sort?

A. I have been asked several times before this to make an estimate of that sort.

By the Court:

Q. Have you ever counted up the number of cottages and number of people they hold?

A. I have not.

Mr. McCarter: I suppose it is as good a guess as Senator Blodgett's fifty thousand.

Mr. Corbin: Senator Blodgett knows how many tickets he sells.

WELLINGTON LA MONTE, resumed for further cross-examination by Mr. McCarter:

Q. Referring now to this question of the cost, on which you were testifying at the last day—is it not true, Mr. La Monte, that about five thousand feet less of thirty-six inch pipe was laid than the original contract and specifications required?

Mr. Corbin: Of what pipe?

Mr. McCarter: Thirty-six inch.

A. Now, I couldn't say, Mr. McCarter; the route was materially changed, and I should say there was less, but I can't tell you how much less.

Q. Were you present in Court in the case of Hippel against the Tintern Manor Company?

A. Why, I was at certain times.

Q. Did Mr. Pratt, the engineer, testify in that case?

A. Well, now, I couldn't say; I don't think so, Mr. McCarter; I don't think there was testimony taken in the case; my recollection is that there was no trial of the case.

Q. Did he make an affidavit?

A. I believe he made an affidavit; yes, sir.

Q. And didn't he in that affidavit—

The Court: That shows for itself.

Mr. McCarter: If your Honor please, they don't produce a party here that did this work.

The Court: The affidavit was on file.

Mr. McCarter: I am going to reserve leave to produce his affidavit.

The Court: You may ask the question.

Mr. Corbin: It isn't a question of what the contract required; the question of cost is the cost of what was actually done.

Mr. McCarter: The original contract called for your getting Two hundred thousand dollars less than you got.

Mr. Corbin: I simply say that is a mistake of counsel on the other side.

Mr. McCarter: The point is that the old contract, the original contract, required all this work to be done.

Mr. Corbin: That is not in evidence.

Mr. McCarter: Yes, it is, both in evidence.

Mr. Corbin: The construction contract?

Mr. McCarter: Yes, the original contract is in evidence and marked Exhibit C20, and it required a payment on the part of the water company to the contracting company

of Twelve hundred thousand in cash—of its bonds, and 7,965 shares of its capital stock.

The Court: That is, Twelve hundred thousand in bonds—that is Two million dollars in stock and bonds?

Mr. McCarter: Yes, sir. Now, the new contract, substituted contract, called for Fourteen hundred thousand in first mortgage bonds, and 5,465 shares of stock.

The Court: That increased the amount they paid in bonds by Two hundred thousand?

Mr. McCarter: Yes, sir; by Two hundred thousand.

The Court: And reduced the amount—

Mr. McCarter: They paid in stock from 7,965 to 5,465.

Q. Now, you can't say whether or not there was not about a mile less of thirty-six inch main laid and accepted than the contract called for?

A. I can't give those figures, no, Mr. McCarter, without looking the matter up; I didn't testify in regard to it.

Q. You testified last week that you had gone over the figures and had verified the number of pipes, the pipes, and extent of it, &c.

A. Yes, sir.

Q. Now, I want to know whether or not it is true that instead of there being 47,500 feet of thirty six inch main there is only 42,609 feet?

A. Well, I couldn't testify to those figures; the figures we went over was the actual pipe laid.

By the Court:

Q. That is when you made your estimate?

A. Yes, sir; when we made our estimate of the cost; it was the actual work done; I don't know that we took up, compared the amount of work done with the old contract.

Q. Well, don't you know whether or not there was a similarity, or whether there had been less or more?

The Court: Said he didn't compare them.

A. I don't think we compared them at all.

Q. You knew what the old contract called for didn't you?

A. Well, in a way.

Q. How much twenty-four inch pipe did the old contract call for? None at all, did it?

A. Well, I couldn't tell you; I never had a copy of that contract, the old contract.

By the Court:

Q. You haven't studied it at all?

A. No; until it was brought out in those cases; then I saw it.

Q. I don't understand yet then what you did in the way of measurements to ascertain the number of feet of the different style of pipe?

A. Well, Mr. McCarter, we took their statement that they had laid so many feet of thirty-six inch pipe, so many feet of eighteen inch pipe, so many feet of twenty-four inch pipe, and from measurements, and knowing the routes that they had taken with these pipes, and, as I tell you, we had this map, large map six hundred feet to the inch, we laid it on that and scaled it, and by actual measurements, and records that we had, comparisons, and, as I say, from my investigations in Scranton, we considered that they had done what they claimed.

Q. What did your investigation in Scranton have to do with your measurement of the pipe?

A. It didn't particularly with the measurement of the pipe.

Q. We are confining our attention to the pipe measurement.

The Court: Let me see if I understand it. I did understand it the other day. You satisfied yourself in some way that the thirty-six inch main had been laid from a certain point to a certain point over a certain route?

A. Yes, sir; I knew that.

By the Court:

Q. Did you dig down to see it?

A. I had seen it while it was being laid.

By the Court:

Q. And you measured that, not with a tape, but by scaling on a map of a large scale which you believed to be accurate?

A. Yes, sir; which I found accurate.

Examined by the Court:

Q. You found so many feet of thirty-six inch pipe. Did you examine their bills for thirty-six inch pipe which they had got from the pipe makers?

A. I did.

Q. How did they correspond?

A. They corresponded.

Q. They corresponded?

A. Yes, sir.

Q. And those were the ordinary bills that were sent in the regular course of business?

A. Yes, sir.

Q. Were paid?

A. Yes, sir.

Q. Now, the same way with the eighteen inch pipe?

A. Yes, sir.

Q. Went over them?

A. Yes, sir.

Q. Have you seen that while it was being laid?

A. I had.

Q. Didn't dig down to see whether it was eighteen inch pipe?

A. No. We were digging that up constantly, tapping it and seeing it.

Further cross-examination by Mr. McCarter:

Q. Who was it discovered the fifteen thousand, or whatever it was, rake off, was that you, on the pipe?

A. Why, when we started to go—

Q. Answer that question, can't you? Was it you, or somebody else?

A. Well, it was a memoranda on the statement that they submitted.

Q. Now, is it not true that there was about one-fifth as much pipe laid in Shrewsbury Township as the contract called for?

A. I couldn't say that.

Q. You can't say that?

A. No.

Q. You voted as a member of the Board of the Tintern Manor Water Company in favor of ratifying this modification?

A. I did.

Q. And you voted to pay on a basis of two hundred thousand in bonds more than the original contract called for?

A. Yes, sir.

Q. Had you seen the orginal contract up to that time?

A. I had at that time.

Q. At that time?

A. Yes, sir.

Q. And yet you don't know whether or not in voting two hundred thousand more in bonds there was or was not one-sixth as much pipe laid in Shrewsbury as the original contract called for?

A. No; I couldn't tell you; no.

Q. Do you know whether or not it was true, and

did you know before you made this deal and voted for it as a Director, that instead of having 10,315 feet of twelve inch main there was only about 4,385?

A. Well, I verified whatever there was, but I couldn't tell you.

By the Court:

Q. Couldn't tell the difference between what there was there and what the contract called for?

A. No.

Q. Were you aware at all of any discrepancies in pipe between the old and new contract when you made the settlement and voted for it?

A. Well, I should say that I knew in a general way that there were discrepancies; yes, sir.

Q. You knew, for instance, did you not, that instead of getting for you a thousand acres of land, they had only obtained for you about six hundred acres?

A. Something like that.

Q. Six hundred and sixty-one acres?

A. Yes, sir.

Q. You knew that instead of building a dam sufficient to give a pumping capacity of twenty million gallons, they had only given you a dam sufficient to give you a pumping capacity of fifteen million gallons?

A. No; the dam was sufficient for twenty million.

Q Was the dam as high as it was intended?

A. No.

Q. You knew the foundation was built for a much higher dam than the contract called for?

A. Yes, sir.

Q. But that a much less height dam was built?

A. Yes.

Q. How much less heighth?

A. From 20 to 30 feet.

Q. You knew that instead of building a dam of sufficient height to give you a gravity supply of water at your pump, they built it only high enough to require you to pump it to your filters, did you not?

A. Yes, sir.

Q. That was extra cost, was it not, in operation?

A. Yes, sir.

The Court: Let me interpolate there to say: That would be when the dam was full, but if the dam got down to where it is now, if the pond got down to where it is now it wouldn't run by gravity; it would only run by gravity a certain height above the pond?

A. Yes, sir.

Mr. McCarter: The original contract—

The Court: I understand called for a higher dam, and all water above a certain height would run by gravity.

Mr. McCarter: And the original contract provided and had the the idea that they would have a gravity supply.

Mr. Corbin: That is a mere construction of it.

Mr. McCarter: That is what your contract calls for.

A. The water now runs to the pumping station by gravity.

Q. But it doesn't fill your filters by gravity?

A. No.

Q. Did not the original contract contemplate that?

The Court: It will speak for itself. It contemplated undoubtedly, if the dam was to be twenty feet higher, it contemplated the ability to draw by gravity in depth more

than it is now; that is the logical result of two and two makes four.

Q. How high is the dam now at Newman Springs?

A. How do you mean?

By the Court:

Q. From what point?

A. Where is your base to start with?

Q. How much does it raise the water?

A. Why, I think it raises it about twelve to fourteen feet.

Q. Now, how high would it have raised the water had it been built to its contemplated height by the first contract?

The Court: How much higher?

A. Twenty to thirty feet; I couldn't give you just—

Q. Higher?

A. Higher; yes, sir.

Q. Flood just that much more land?

A. Yes, sir.

Q. Do you know the relative cost of construction of dams of those two different heights?

The Court: He don't know anything about it, or nobody knows, except by examining the conditions of a particular dam. If you have some expert, he goes there and examines it and finds where the material was to come from, and all that sort of thing, the facilities for making the dam; then you can get at it.

By the Court:

Q. How long is the dam?

A. Now, I couldn't give you the answer.

The Court: Does anybody here know? Is there anything anywhere, any plans?

A. Five or six hundred feet across the valley, the foundation.

By the Court:

Q. The higher you get the longer it was, of course?

A. Yes, sir; well, not very much.

By the Court:

Q. Steep sides, eh?

A. Yes, sir; very steep sides.

Q. Do you know what the cost of that stand pipe such as was contemplated to be put on Lovett's Hill would have been, that was abandoned?

A. No, sir.

Q. No idea at all?

A. No, sir.

The Court: How big was it to be by the contract?

Q. Do you remember the height?

The Court: No, you tell me what you say it was. He don't recollect, and you are talking about the contents of a paper and asking the witness about it.

Mr. McCarter: The trouble is, I have never seen the specifications. I suppose this witness knows something about it; he knows an awful lot when he is talking on direct-examination.

The Court: I understand there was to be a stand pipe on this hill; the height of the hill would count as part of the height of the stand pipe.

Mr. Corbin: Thirty feet by a hundred stand pipe, thirty feet broad and one hundred feet high.

Q. You never had any idea what the value of that was?

A. No.

Q. When you were remitting the obligation to do that?

A. No.

The Court: A few thousand dollars to build it.

Q. Notwithstanding the fact that you didn't know the difference of the amount of pipes that had failed to be constructed, notwithstanding the fact that the dam was one-third as high as it was to have been, notwithstanding the fact that instead of getting a thousand acres of land they got about six hundred and fifty, notwithstanding the fact that they did not have to put up a stand pipe on Lovett's Hill, you still voted to modify the contract and pay them the modified sum?

A. Yes, sir.

Q. Who constituted the Board of Directors of the Construction Company at the time of the making of the first contract and the making of the second contract?

A. Why, I couldn't answer; I don't know who the Directors of the Construction Company were; I believe there were some Syracuse men in it originally, and I don't know whether they were in then.

Q. Were there any members of the Board of Directors of the Water Company on the directorate or in the official board of the construction company?

A. Yes, sir.

Q. Who were they?

A. Dr. John L. Wentz and Mr. Joseph J. German were members of the construction company, of the Board of Directors, and also of the Water Company.

Q. They had practically all the stock of the Water Company at that time, did they not, that is, they were the largest individuals interested? A. Yes, sir; the largest part stood in the name of the Independent Telephone, Telegraph and Construction Company.

Q. Is it not true that in Long Branch whereas the original contract called for extensions of twelve miles in length, or thereabouts, there was completed at the time of the settlement and allowed for an extension only about three miles?

A. Well, I have those figures with me.

Q. Well, I wish you would get them; of course, you cannot carry all those figures in your head, that is sure.

A. This list is the same thing that I was asked in Long Branch that first day as to the amount of pipe that had been laid in the Long Branch Commission, and I scaled it roughly; now I have the—

Q. The question I put you the stenographer will read you.

The Court: You say it was included in an answer made the other day?

Mr. Corbin: Mr. McCarter called Mr. La Monte as his witness in Long Branch.

A. Yes, and asked me the amount of pipe laid in Long Branch. Now, I think I can give you about the number of feet.

By Mr. Corbin:

Q. Can't you tell by scaling the lengths of new main that have been laid?

A. About four miles, I should say, that is, in the Long Branch Commission; not in the Ocean Township.

By the Court:

Q. You mean in the limits of the Long Branch Commission?

A. Yes, sir.

Q. Now, wasn't it true that that was about a third only of what was contemplated by the first contract?

The Court: The contract will show, won't it.

A. I couldn't give figures on that other contract.

The Court: He has already stated he don't recollect the figures.

Q. Do you know whether or not it is true that about one half the quantity of ten inch main was laid that was provided for?

A. No, I couldn't tell you that.

Q. Well, there was very much less, wasn't there?

A. Well, I know there is ten inch main laid in Eatontown, and I don't know where else there was any required.

The Court: He is guessing at the contents of a contract. You can ask him—he gave the amount of the ten inch pipe on his direct, didn't you?

A. Yes, sir.

Mr. McCarter: I do not seem, with perfect deference to your Honor, to be able to impress your Honor with what I am driving at.

The Court: You are testing his good faith.

Mr. McCarter: I am testing his accuracy of measurement, and his judgment and good faith in making that settlement by which he agreed to pay, and voted for a resolution to

pay these people two hundred thousand bonds more.

The Court: Read to him then the clause of the contract that you refer to.

Q. I will ask a general question. Did you at any time before voting for the resolution making the settlement with the largest stockholder of the Tintern Manor Water Company, to wit, the Independent Telephone and Telegraph Company, ever investigate the question as to whether or not in voting that two hundred thousand more of bonds than you were under obligations to give them; they had done anything like the work that was to be done by that contract?

A. Now, I will tell you how the settlement was made.

The Court: Just answer that question.

A. On the basis of the actual work done.

By the Court:

Q. Did you compare the work they had done with the work they had contracted to do?

A. No.

The Court: Simply took up the work they had done, and cost of the material, as I understand him, and satisfied themselves by measurements that the bills for materials correspond with what material they got and amount that these people had paid for, and settled with them as if there had been no contract at all.

A. Yes, sir.

By the Court:

Q. That is about it.

A. The contract called for them to go through certain streets in Red Bank, and we couldn't get

the privilege of going through, absolutely impossible, and the whole thing was changed.

By the Court:

Q. That is to say, you went on the idea it was impracticable for the contractors to carry out that contract because you didn't get your right of way?

A. They couldn't do it.

Q. They could have carried out—they could have made a dam same as required, couldn't they?

A. Yes, sir.

The Court: Yes; he admits all that; it is all palpable.

Mr. McCarter: I wish you would take my place here and have no judge here. I think as cross-examination counsel I have some rights. Note on the record that counsel gives up cross-examining this witness. I have twice been interrupted.

The Court: We won't have any trouble; there is no occasion for it. The counsel must direct his cross-examination under direction of the Court. He wishes, as he says, to test the sincerity and, if you will, the honesty and reliability of this witness. The witness has stated he paid no attention whatever of the requirement of the contract, but made a new bargain on the basis of what he thought, what they thought, the Commission, the Committee, the work was worth. He stated that, and counsel has a right to repeat it as often as necessary in order to get it thoroughly on the record; but I think the counsel has no right to flare up and say he won't go on with the cross-examination because he is not permitted, in the discretion of the Court, to repeat the same question over and have it on the record half a

dozen times. Now, I must protest against counsel putting himself on record in that way.

Mr. McCarter: I have no further questions. I am not permitted to cross-examine the witness.

Defendant rests.

Mr. McCarter: I want to offer in evidence —I didn't know it was in that form of affidavits—the record, and particularly the affidavit of Mr. Pratt, engineer, in the case of Hippel against Tintern Manor Water Company, on file in this Court. I haven't it here, because I thought it was in the form of evidence; but I am informed that the affidavit contains statements by Mr. Pratt, under oath, of the variations in the length and style of pipe that were put in as compared with those that were required by the contract.

The Court: What have you got to say to it?

Mr. Corbin: If it were here, and I could see it, perhaps I wouldn't object; but, as it is not, I think I ought to object. I presume I drew Mr. Pratt's affidavit, but I can't recall now what was in it; I don't recall at all what Mr. Pratt swore to in that case. It seems as though I ought to see it. Perhaps I could make an admission that covers all counsel says. I will admit freely that these works are not built in accordance with the details of that contract, and I do not pretend that they were, and what I have been trying to show is what the works were as constructed and what

they are worth as constructed; I don't pretend they are according to the contract.

The Court: I don't think, Mr. McCarter —I will hear you—that your are ready to offer an affidavit in evidence unless it is here present for the Court to see; and the other question of counsel is, whether it would be binding at all or not. If it is the engineer it may be that it is competent; I don't pass on that; but the objection is well taken. But the Court, of course, will give counsel an opportunity to get it in by sending to Trenton for it before the case is finished, because I take it that the statement of counsel that he supposed the evidence was taken orally is made with sincerity.

Mr. Corbin: Rather than have any question about it I will consent that Pratt's affidavit go in; whatever it is is the truth.

The Court: All right. The affidavit is then in.

MORRIS R. SHERRERD, sworn for complainant.

Direct-examination by Mr. McCarter:

Mr. McCarter: Before examining Mr. Sherrerd, I want to offer in evidence a copy, not a certified copy, but a copy as published in the Sea Bright News of the ordinance of the Borough of Seabright, granted to the Tintern Manor Water Company as a condition of their being permitted to enter that borough, which fixes the rates therein. I don't suppose you object to the fact that it is not certified. The point is that the hydrant rate is fixed, and also the rate to private consumers. I wish to show in these small

municipalities, adjoining Long Branch, in which this Company has entered under license from the governing authorities, the rates have been fixed, as we shall show, with possibly one exception, and that a very small municipality, a less rate than the rate they try to impose on Long Branch.

Mr. Corbin: I don't think it has any bearing; still, I don't object to it. This is the old Long Branch Water Company, wasn't it?

Mr. McCarter: No, I think not.

Mr. Corbin: I understand that is not an ordinance in force as against the present Company, or it is not the arrangement by which they are working under.

RUFUS BLODGETT, re-called by Mr. McCarter.

Direct-examination by Mr. McCarter:

Q. I show you a copy of an ordinance granted to the Borough of Seabright to the Tintern Manor Water Company. I will ask you if you are familiar with that ordinance and if there is any new or more recent ordinance than that in operation licensing the Tintern Manor Water Company to enter the Borough of Seabright and lay its pipes?

A. I am not familiar with this ordinance; it was never granted when I was connected with the Tintern Manor Water Company.

By the Court:

Q. What is the date of it?

A. I don't know; the date of the paper in January 13, 1900; I presume it is a recent ordinance; I had no part or lot in the passage of any such ordinance;

the Long Branch Water Supply Company at that time.

Q. You haven't answered my question, senator.

(Question read.)

A. I answered very directly, that I am not familiar with it; I had nothing whatever to do with that ordinance.

By the Court:

Q. Do you know whether there is any other in force?

A. No other in force, except the original agreement with the Long Branch Water Supply Company.

Q. Is there any more recent ordinance than that that you are aware of?

A. Not that I am aware of; no; I have no knowledge of it.

Copy of ordinance received in evidence.

Cross-examination by Mr. Corbin:

Q. When the Long Branch Water Supply Company was chartered in 1882, Seabright was a part of Ocean Township of which it was formed, wasn't it?

A. Yes, sir.

Q. Did it at that time, or soon after that time, extend its pipes into Seabright?

A. Yes, sir.

Q. Been there ever since?

A. Ever since.

Q. At the time that ordinance was passed who got that through, this Tintern Manor Water Company ordinance of 1900?

A. Some promoters of the Tintern Manor Water Company.

Q. Did the Long Branch Water Supply Company have any part in it?

A. No part or lot in it.

Q. Did they have any connection with the Tintern Manor Water Company at that time?

A. None whatever at the time.

Q. Are the mains that were laid there twenty years ago still there?

A. Yes, sir.

Q. The Township of Ocean, as I understand it, assented to the formation of the Long Branch Water Supply Company, didn't it?

A. Yes, sir.

The Court: Appears by the record.

Q. Was any water ever supplied by the Tintern Manor Water Company under that ordinance?

A. Not a drop.

Q. Was anything ever done by that corporation?

A. Nothing.

Q. Did the Long Branch Company have anything to do with the operation of the Tintern Manor Water Company previous to the consolidation, July 2, 1901?

A. Nothing; we had nothing to do with it.

Redirect-examination by Mr. McCarter:

Q. The Tintern Manor Water Company laid their pipes along Rumson Road across the Shrewsbury River into Seabright, didn't they, within a year or two?

A. Yes, sir.

Q. Did they have any other ordinance than this to do it?

A. The construction company laid them there.

Q. They had to have an ordinance to get into Seabright?

A. Yes, sir.

Q. Did they have any other ordinance than that that you are aware of?

A. Not that I am aware of.

By the Court:

Q. Has that ordinance been enforced against you?

A. No.

By the Court:

Q. I mean has the ordinance that is now in evidence of 1900 been enforced against the Tintern Manor Water Company?

A. They have raised the question, the Seabright authorities have raised that question; we have held, and hold now that we are furnishing water to Seabright under the old agreement.

By the Court:

Q. Was there an agreement?

A. Under the old concession—that perhaps is a better word—made by the Township of Ocean.

Mr. Corbin: Not only our pipes are laid in the streets, but our operations in that part of Ocean Township are and must of necessity be by the Long Branch Charter; this township has no authority to lay pipes in the streets. The Tintern Manor Water Company as generally formed—it has no general formation of law.

Mr. McCarter: The Tintern Manor Water Company is now a consolidation and claiming under this ordinance.

Mr. Corbin: The Tintern Manor Water Company is nothing but a name; it isn't the Tintern Manor Water Company that then existed.

Copy of ordinance in Newspaper marked Exhibit D A.

Q. Now I show you an ordinance, copy of an ordinance of the Township of Shrewsbury, passed December 16, 1899, giving to the Tintern Manor Water Company the right to enter that Township. Are you familiar with that ordinance?

A. Yes, sir

Q. Has the Tintern Manor Water Company laid any pipes in Shrewsbury Township?

A. Under this ordinance?

The Court: No. Have they laid any there?

A. I don't recall that we have laid, the original Tintern Manor Water Company laid a number of pipes, all the pipes through there, but you are speaking now of the present,—under the present management.

Q. No, I am not.

A. Oh, yes; there is lots of pipes laid in Shrewsbury Township under the Tintern Manor Water Company.

Q. Under that ordinance, I presume?

A. Yes, sir.

Q. And the present Company are using those pipes?

A. Yes, sir.

Mr. McCarter: I offer this ordinance in evidence.

Marked Exhibit D B.

Q. Can you roughly guess it, if you will, or estimate the relative populations of Shrewsbury and Red Bank?

A. The Township of Shrewsbury?

Q. Yes.

Mr. Corbin: Can't we get the census, Mr. McCarter?

A. I should suppose the Township of Shrewsbury

would be fifteen or twenty thousand inhabitants, including Red Bank.

Q. Senator, why won't you answer my question?

A. I haven't ever enumerated the Township of Shrewsbury; I am only guessing.

Q. I asked you the difference between Shrewsbury Township and Red Bank, and you include Red Bank.

A. I didn't understand you. The difference between the Township of Shrewsbury and Red Bank?

Q. Yes, sir.

Mr. Corbin: You mean the whole of Shrewsbury Township, or the part outside of Red Bank?

A. He wants to know the relative population of both places, as I understand it, or the difference between them, which is the larger and which is the smaller?

Q. Yes.

A. I am under the impression that the Township of Shrewsbury outside of Red Bank contains a larger population than Red Bank, but perhaps not much.

Q. Very sparsely settled, is it not?

A. Yes, in some portions

Q. Well, what is the largest portion outside of Red Bank?

A. Oceanic, Rumson Road, round about, quite a considerable settlement, two or three little villages.

Q. I show you a copy of an ordinance granting rights and franchises to the Tintern Water Manor Company for Eatontown Township. Please look at that. Are you familiar with that ordinance?

A. Never read it.

Q. Never read it?

A. No, sir.

Q. Has the Tintern Manor Water Company any pipes laid in Eatontown Township? It already appears that it has; I won't ask you that question.

A. Yes, sir.

Copy of ordinance last shown witness offered in evidence and marked Exhibit DC.

MORRIS R. SHERRERD sworn:

Direct-examination by Mr. McCarter:

Q. You hold what position in the City of Newark?

A. Engineer and Superintendent of the Department of Water.

Q. What training and experience have you had as a hydraulic engineer, civil engineer?

The Court: You can put down that the Court is entirely satisfied that Mr. Sherrerd is an accomplished and thoroughly educated hydraulic engineer, familiar with the construction of all kinds of water works.

Mr. McCarter: I want to take up some little matters first, before I forget.

Q. The so-called standard schedule in this case, Kellogg's standard schedule for dwellings, fixes the standard for Newark at $16.75 for the standard, Kellogg's standard. Have you examined to see whether that is accurate or not?

A. It should be Fifteen dollars.

Q. What arrangement does Newark have in regard to sprinkling its streets?

A. It makes a rate for each wagon by the week.

Q. What rate is that?

A. It is Six dollars a week.

By the Court:

Q. Do you limit the number of runs they make in a day?

A. No; it isn't limited.

By the Court:

Q. As many as they can do with one team?

A. Yes, sir.

By the Court:

Q. Don't allow them to change horses?

A. The question hasn't been raised. We issue a license to each cart, tack to each cart, and the question about changing horses has never been raised.

By the Court:

Q. Nor the size of the wagon?

A. No; they are practically standard size.

By the Court:

Q. I don't suppose you mean to put that forward as a compensatory rate for a private company, between a private company and the City, do you? You don't mean to put that forward as a compensatory rate between a private company and the City, do you?

Mr. McCarter: I only know that Newark in trying to run its water on a business basis—

The Court: Wants to pay interest on its bonds.

Mr. McCarter: It is a pure business operation, sprinkling streets, and they are satisfied to do it for that much money.

The Court: In Morristown we get about Six hundred dollars a year from each wagon. Have you any idea how much that would

come to on the average for a hundred cubic feet?

A. I estimated it several years ago. I think it came to about our meter rate under normal conditions of use.

By Mr. Corbin:

Q. Which is what?

A. Which is fifteen cents a thousand gallons, One dollar twelve and a half cents for a thousand cubic feet.

Q. I call your attention to Schedule E, mains and hydrants, connected with Mr. La Monte's schedules, and ask you—

The Court: You mean his schedule upon which the appraisement was made?

Mr. McCarter: No, sir; this Schedule E, total pipe in Long Branch. I am referring now to the Long Branch Distribution system.

Q. Assuming the figures of pipe, length and size, to be accurate, have you made an estimate of the value of that distribution system of pipes?

A. I have.

Q. What is it?

A. Its present value, say $115,000.

The Court: The present value is not the test; the test is the value when it was built

Mr. McCarter: They paid Four hundred thousand dollars, and I want to see what they get for it; that is all.

The Court: For what?

Mr. McCarter: For that Long Branch Company. They are trying to hold us.

The Court: All right. I see. You have got to take it at the time they bought it.

Mr. Corbin: You don't mean Schedule E?

Mr. McCarter: Yes; I think that is right.

Mr. Corbin: You can't mean Schedule E.

Mr. McCarter: I had the proper schedule. It is F; I didn't read it right. I had the proper schedule; it is F instead of E. That is how much?

A. $115,000 in round figures.

By Mr. Corbin:

Q. That is for what, pipe in the commission?

A. The pipe in—hydrants and valves.

By the Court:

Q. When was the valuation taken?

A. This would be the time of the sale.

By the Court:

Q. You went back and took the price of pipe at that time, and cost of laying?

A. Yes, sir.

By Mr. Corbin:

Q. Give us the date?

A. About two years ago; these figures for pipe laying are taken from some other work I did about that time, so I estimated on the basis of about two years ago. Twenty-seven miles in Long Branch Commission.

By the Court:

Q. That includes the pipeage?

A. That includes pipes, valves and hydrants.

Q. Have you visited the locality in which this water system is laid and in operation?

A. I have.

Q. Just describe to the Court what territory you visited?

A. I visited Long Branch proper and went out

on the source of the Takanassee supply, through a large portion of that water shed.

By the Court:

Q. Which is that, the old supply or the new one?

A. The old supply; and then over to the dam of the new supply, and the pumping station of the new supply passing through Eatontown.

Q. Are you familiar with the evidence in this cause?

A. I have read all the evidence, and have heard most of it—the last two days.

Q. In your examination of the shed of the Takanassee supply did you investigate the question of the feasibility of increasing the supply at that point?

A. I found that at a point called Ocean Mills Pond there is a very good chance to construct a large storage reservoir, which could be used in increasing the supply from this source.

By the Court:

Q. Do you think it a good plan to use stored water when you can get running water?

A. Most of the cities do.

By the Court:

Q. I am asking you whether you think it is a good plan?

A. I think it is a good plan if you can get a proper reservoir.

By the Court:

Q. Isn't there always an objection to stored water?

A. The practice in that respect seems to have changed in recent years. Boston is trying—now uses no water unless it has been stored for a year.

If the stored water is kept in a clean reservoir it improves rather than deteriorates.

By the Court:

Q. How are you going to keep a clean reservoir unless you clean it out every once in a while?

A. If the seed of bacterias is removed at the beginning you keep it fairly clean.

By the Court:

Q. Doesn't it wash in?

A. There isn't so much—

The Court: I can say to you my own judgment as a juryman and experience in reservoirs is that it has got to be kept clean.

A. These are flat streams, and they carry very little silt; it is all a flat country.

The Court: You might as well know the state of my mind on that. I use a reservoir that don't have any streams at all, water all runs in underground drains; it fills up and has to be emptied and cleaned every few years.

A. Long Branch has been supplied for many years from a reservoir.

The Court: I understand that. I am stating the difference between stored water and water from running stream.

Mr. McCarter: There is about a six hundred acre reservoir up at Newman Springs, twice the size of the one that Mr. Sherrerd is going to project, if we can ever project it.

The Court: Of course in modern times and the modern style of wasting water why cities are resorting to reservoirs and obliged to depend upon them. William E. Worthing

said—he was as thoroughly versed a man as I ever had anything to do with—he said stored water is bad water.

A. All this water is filtered before it is served to its consumers.

The Court: I suppose the filtering system now in vogue has changed the whole theory about water.

Q. Won't you tell us what your idea was and is in regard to the availability for a storage reservoir at this point near Ocean Mills?—what supply it would give, and whether or not under the conditions you found in connection with the calculations you have made it will be sufficient, and for how long, for Long Branch?

Mr. Corbin: I object to that as calling for conclusions that have not any basis in the evidence before us.

The Court: I think, though I haven't exactly kept up with this case since the last adjournment, that the complainant is entitled to ascertain the best he can by evidence how much of the total cost of this big system which the Tintern Manor Water Company owns ought to be attributed or distributed or allotted to the supply of Long Branch.

Mr. McCarter: That is exactly the point.

Mr. Corbin: I don't deny that, but we don't know anything about this reservoir.

The Court: He is going to lay out a plan.

Mr. Corbin: I think he ought to do it before he begins to tell its results.

The Court: If he brung here a map with the reservoir laid out on it—

Mr. Sherrerd: I have it; it is on the map.

Q. Now, go to the map and show what you have projected there.

The Court: You have tinted a place on this map near Oakhurst, backing water up to what is a pond now?

A. It is called Solomon Matts pond.

By the Court:

Q. Which you think could be made available for a storage reservoir?

A. Yes, sir.

Q. Describe the plan as you have outlined it and projected it, please?

A. At a point on the branch that feeds the present Takanassee supply called Ocean Mills pond, which is about one mile west of Norwood Avenue, in Long Branch, there is a site for a feasible site for a large storage reservoir, which could be flooded to contour 40, giving a dam at the lower end of some twenty-five feet of water; such reservoir would be about three hundred acres in surface area and contain six hundred and thirty million gallons, on a conservative estimate of its available capacity.

By the Court:

Q. What would be the average depth?

A. The average depth would be about twelve feet, ten or twelve feet.

By the Court:

Q. Is the land so situated that you wouldn't have to excavate to prevent having shallow water?

A. It is quite adapted for a good reservoir; the banks are steep.

By the Court:

Q. Have you gone over it?

A. I have been over at least half of it, so as to see one-half of the site.

By the Court:

Q. What is the minimum depth? How much of that twelve feet would you use?

A. Would be available?

By the Court:

Q. Yes; fit to use?

A. The entire twelve feet could be drawn out; at least that much.

By the Court:

Q. Is it good engineering to make a dam, a reservoir, which you would use practically, and have it only one or two feet deep in various parts?

A. If the reservoir is not kept below flow line for too long a period it would be safe to use it. This reservoir would be practically serviceable to make up for the extreme heavy drafts in Long Branch during the summer; it wouldn't be necessary to draw it down at other periods of the year, so it would only be drawn on for a few months.

By the Court:

Q. Isn't that the very time when shallow water in a reservoir is noxious?

A. I don't think there would be trouble from this location on account of the fact that Long Branch filters all its water in any event.

Q. Now proceed.

A. The water supply from this reservoir could be used in two ways, to supplement the present Takanassee supply by piping from the reservoir to the pumping station; the water could be used directly from the storage reservoir, or it may be allowed to run out as it may be needed to supplement the flow of the stream and taken in at the present pumping station.

Q. I want to ask you whether or not—the Vice-

Chancellor isn't familiar with it—that is to say, there is a small dam there now, a dam which feeds this stream which now supplies the Takanassee Lake?

A. There is a mill pond at this site.

By the Court:

Q. That is at Oakhurst the mill pond is?

A. Near Oakhurst; the mill pond is called Ocean Mills Pond.

By the Court:

Q. It is on that map as Oakhurst?

A. Oakhurst is marked on the map near the pond. I would say that this dam would give a greater depth of water than the present dam being used by the Tintern Manor Water Company at Newman Springs, according to the height that was testified to in this case.

By the Court:

Q. How much drainage area is there in the stream feeding that?

A. There is about four square miles tributary to this reservoir.

By the Court:

Q. You have taken that altogether from the State geological—topographic map?

A. Yes, sir.

The Court: I don't know that the Courts have ever said so, but I am inclined to hold, if there is no objection here, that that is sufficiently reliable for present purposes.

Mr. McCarter: We are taking their figures. The other side have put it in.

Q. Now, have you made any calculation, and, if so, have you showed it on this curve, of the quan-

tity of water used and to be used in Long Branch?

A. I made a diagram of consumption and probable consumption on different assumptions for Long Branch Commission for the past and for a series of years in the future.

Q. Is that shown on this?

A. That is shown on what I will call tabulation of water consumption of Long Branch based on pump records.

Q. In evidence in this case?

A. Taken from Mr. La Monte's tabulations. This diagram starts at the year 1883; the upper line shows the average number of gallons pumped per day for the maximum month from the year 1883 to the year 1903.

By the Court:

Q. What do you mean, maximum month?

A. They show on all their tabulations July is the maximum month; this is the average per day.

By the Court:

Q. This wave line shows entirely the maximum month?

A. Daily average for the maximum month; the quantities are shown by the dot line underneath.

By the Court:

Q. Are these in millions?

A. Decimals are million gallons—million gallons in decimals; the decimal figures under the curves are decimals of million gallons per day; each heavy horizontal line represents half a million gallons per day; each heavy vertical line represents a year, starting from 1883 and running to 1922.

Q. Now proceed. Now describe what is your first curve, that is the highest curve?

A. The upper curve is the plotting of the average number of gallons pumped per day for the maximum month for each year from 1883 to 1903.

Q. Those maximum figures being taken from Mr. La Monte's table?

A. Taken from the pump records, from which should be deducted at least twenty per cent. for slip to get at the actual number of gallons furnished in the pipes.

Q. Now, that would show on that curve a consumption of how much?

A. It shows for 1902 a consumption of 3 4/10 million gallons per day.

By the Court:

Q. Actual or theoretical?

A. Well, the figures are pump records.

Q. That is the maximum?

A. That is the maximum average for the month, not for the year; for the highest month; it also shows for 1903, after the Newman Springs supply was added to the Long Branch 4 and 2/10 million gallons.

By the Court:

Q. A greater consumption—you say that your table, your wave line shows a greater consumption after the new water was put in?

A. I would like to say that this question of curve is a graphic way of showing—

The Court: I understand.

A. The practical method of showing the tabulation, which cannot be very well described so as to put it on record—

The Court: You don't have to describe it to me; I understand it thoroughly.

A. My point is that this year, 1902, when the additional territory was added by the Tintern Manor Water Company, shows a decided break in the curve which should be disregarded in considering what

the continuation of the amount of water necessary for Long Branch Commission should be.

By the Court:

Q. Why?

A. Because they are supplying a great deal larger territory than Long Branch.

By the Court:

Q. In other words, their pumping record cannot apply to Long Branch, because they are supplying other people?

A. But if we will take the preceding years and continue the curve I estimate that the pumping records would give, on the continuation of the present conditions the dotted line which is produced on the upper right hand part of the diagram.

By the Court:

That is founded on the idea that the consumption will increase after 1902 at the same rate that it did before?

A. Well, not exactly at the same rate. We have found by looking up the records of the consumptions in different cities, that the rate where the conditions remain consonant increases more rapidly than the population, so that the curve always tends to an upward direction, and that is shown by this dotted line would also come directly in line by averaging the points in the years 1883 to 1902.

By the Court:

Q. That is to say, you have allowed in estimating the present and future consumption an element which is found to have prevailed in other cities, that is, that the consumption increases more rapidly than the population; you have allowed for that?

A. Yes, sir.

By the Court:

Q. Then you have made another line there I see, which shows what the consumption, as you think, will be if they introduce meters?

A. Yes, sir.

By the Court:

Q. That is, it will be very much reduced?

A. Yes, sir; it would practically hold the consumption consonant for a period of from five to seven years, when it would then tend to increase, but not quite as rapidly as the former diagram.

The Court: That commends itself to the knowledge of the Court as a juryman.

Q. Confining your attention still to the upper curve, about which we have first been talking, on this projection on the basis that you have just made, what do you estimate the consumption to be at 1915?

The Court: It is all marked there.

Mr. McCarter: We would like it on the record.

A. I estimate the consumption to be six and three-quarter million gallons a day by pump records for the maximum month.

By the Court:

Q. That is for what year?

A. This is for the year 1915, and I would like, would also like to use these figures in connection with the storage capacity which could be obtained at the point near Oakhurst, and that if the storage capacity of six hundred and thirty million gallons were available at that point, that at least three million gallons a day additional to the present Takanassee supply could be drawn from that course for two hundred days, which would cover the maximum

draft of the summer time, even though the present conditions existing at Long Branch continue. The other lower curve, or rather lower branch, of the upper curve would show the effect of the general introduction of meters, which in my judgment would hold the maximum daily consumption for the highest month down to four million gallons per day for the year 1915, so that it may be possible for the Takanassee supply to be continued as it is now operated, or was operated prior to 1902, without the necessity of additional storage, and supply Long Branch by putting in meters, or by supplementing that supply by a portion of the storage capacity referred to near Oakhurst, which would certainly supply Long Branch for a period of ten years.

By the Court:

Q. Mr. Sherrerd, what per capita consumption is your estimate based on?

A. Well, of course this particular estimate is based on the actual amounts that the pump records show at Long Branch, but without the use of meters this really resolves itself to about a hundred gallons per capita, and there is no doubt that in a community similar to Long Branch that that consumption could be reduced from fifty to sixty gallons per capita by the introduction of meters without any difficulty at all.

By the Court:

Q. Could you do that with such a lavish use of water for sprinkling as the evidence in this case indicated?

A. Well, the lavish use of water for sprinklers seems to have been continuous during the past and is already included in this curve. Of course it would be possible to take care of your fire protection, for instance, in case of sprinkling by having

some regulation that the sprinklers should cease the use of hydrants at times of fire. It seems to be their heavy draft, concentrated draft, that is dangerous in Long Branch with the sprinkler system; but we would be able to take care of even that excessive use for sprinkling by a limited amount of storage on the upper reaches of this stream which supplies the Takanassee plant.

By the Court:

Q. I do not understand you to mean to say that the introduction of the meter system would reduce the amount used for sprinkling, if they sprinkled as lavishly?

A. I would like to answer this way. You would of course reduce the waste of your normal consumers. Then the amount of the sprinklers would practically remain consonant; so if you had a line in here that represented the actual amount for sprinklers it would be a parallel line, that would remain consonant for the next ten years.

By Mr. Corbin:

Q. The sprinklers would not of course?

A. The evidence seems to be that the whole of Long Branch is sprinkled now. The lower line represents the average consumption per day, taking the total consumption for the whole year as the one which really develops what this supply could be made available for with a reasonable expenditure of money, because this shows the actual amount of water according to those pump records which was used during those years.

A. And the pumping of course includes the sprinkling?

A. This includes all the water taken for sprinkling.

Q. What have you to say, therefore, as to the suf-

ficiency of the reservoir that you speak of, the probable needs as shown by this curve?

A. It would be ample to meet the needs for ten years.

By the Court:

Q. And have you figured out the total amount of drainage area which that Takanassee has?

A. I have assumed that this map which is in evidence is correct in regard to that.

By the Court:

Q. Does that show it?

A. Four and nine-tenths.

By the Court:

Q. Four and nine-tenths?

A. Yes, sir.

By the Court:

Q. Square miles?

A. Yes, sir; four and nine-tenths square miles.

By the Court:

Q. How much do you put in that new reservoir?

A. About four.

By the Court:

Q. It covers the whole stream then?

A. You will see from the looks of the map that the water shed is very narrow down toward the Long Branch end of it, and I do not eliminate the use of the water from the lower portion of this water shed.

By the Court:

Q. You take then four miles?

A. I take four miles practically tributary to the new reservoir. Vice Chancellor, I call your atten-

tion to the suggested reservoir, that it comes in just above on the little arm of the water shed near Long Branch, which would only eliminate something over three-quarters of a square mile from the total drainage area.

The Court: I understood your answer entirely. The place where you cut it off only leaves out a small portion of the water shed, and that the less desirable?

A. That is the point.

Q. What basis have you for your curve on the supposition of the use of meters?

The Court: It stops waste, reduces the quantity consumed; everybody knows that.

Mr. McCarter: I want to find out what scientific foundation there is for it, for the curve.

The Court: It is a mere estimate.

A. I have the actual curves of the result in Newark from the forcible introduction of four thousand meters within two years.

Q. Will you produce that?

(Witness handed Court paper marked "Diagram showing daily average water consumption by months for the city of Newark.")

The Court: This line shows arrest of the increase in January 1st, 1899; the greatest consumption in the month of February, 1899, when the frost was operating.

A. This diagram runs from the year 1892 to 1903.

The Court: The greatest consumption here was in the months of January and February when the frost was—when people were feeling the result of not putting their service

pipe deep enough. We don't allow them any less than five feet.

Mr. McCarter: I offer that in evidence.

Q. What is that?

A. It is a graphical representation of the actual result on the consumption in gallons per tap from the forcible introduction of four thousand meters during the years 1898 and 1899.

By the Court:

Q. Immediately reduced the consumption of this —that is, you divided it, you divided the consumption between what was measured and what was not measured?

A. Not exactly. The lower line indicates the percentage of the total number of taps metered in the year 1898. Ten per cent. of the consumers were metered; two years afterwards thirty per cent. of the taps were metered, and the result was that the number of gallons consumed per tap was reduced from eight hundred and forty odd to seven hundred—

By the Court:

Q. The lines crossed each other; as the number of meters introduced increased, the amount of consumption diminished and the lines crossed each other?

A. The other diagram to the left hand of the same sheet shows the effect on the total consumption. The upper line shows the continual constant increase in the number of consumers, whereas the middle line shows the daily average consumption in gallons as going up in the year 1893 from twenty million gallons to seventy-seven million gallons in 1898, and then dropping to twenty-four million gallons in 1900.

By the Court:

Q. And then gradually increasing?

A. Then gradually increasing, practically parallel with the previous consumption. And the result of this work in the City of Newark has been to extend at least six or seven years the period for which the present water shed development will be available for the city.

The Court: And if you put in more you have got—

Mr. Corbin: That I object is volunteered as a mere guess. He tells us what the result is going to be in the future. I can guess too.

By the Court:

Q. What proportion of the water supply in Newark now—this may not be pertinent—how much is metered and how much is not?

A. The diagram shows the percentage; forty per cent. of the total consumption of 1903.

Mr. McCarter: I offer those two diagrams in evidence.

The Court: Any objection?

Mr. Corbin: Oh, no.

Marked Exhibits CC and CD.

Q. Have you estimated the cost of the improvement with the reservoir near Oakhurst and Ocean Mills, the necessary pipe and dam, &c.?

A. I have estimated the total cost of construction of this reservoir.

Q. What is such cost?

Mr. Corbin: I object to it unless we know what he has estimated.

The Court: He must give the details of it.

Q. Proceed.

A. $222,500 is what I have estimated for the ad-

ditional supply from this source, including an additional pump at Takanassee.

By the Court:

Q. And the pipe to lead the water down?
A. A pipe to lead to it.

By the Court:

Q. What size pipe?
A. Thirty-six inch pipe.

By the Court:

Q. When did you make that estimate, at what date—at present cost of materials?
A. Practically; yes, sir.

By the Court:

Q. The cost of pipe, for instance, only about two-thirds of what it was a year ago?
A. I am using tile pipe in this case.

By the Court:

Q. Tile pipe?
A. Just to feed the pump.

By the Court:

Q. Run by gravity?
A. This development, however, can be made without the use of this pipe, and the amount estimated for that, deducted from the estimate would leave the total cost of this development $197,500.

By the Court:

Q. Without anything for right of way?
A. I had $4,000 for the right of way for pipe.

By the Court:

Q. Anything for the cost of the reservoir, cost for the ground for the reservoir?
A. Estimated that at $250 an acre.

By the Court:

Q. What sort of dam have you estimated for?
A. Earth dam with concrete core.

By the Court:

Q. Have you made any borings there to see whether that is practicable?
A. I made no borings of course in the limited time I have had to look at this matter; but I have added an extra depth, fifteen feet, on the concrete core, and estimated the concrete core very much higher than is usually necessary for such construction of a dam that would retain less than twenty-five feet of water.

By the Court:

Q. Have you allowed anything at all for clearing out the bottom of the pond?
A. I have allowed in the price per acre for the land enough, I think, to cover that. There is a small portion of this tract that has a swamp; that would be the only portion that would be troublesome.

By the Court:

Q. How many acres?
A. About three hundred acres, and I have estimated at three hundred and fifty acres.

By the Court:

Q. Do you mean to say that that three hundred and fifty acres presents by nature such a surface that there would not have to be any large removals, humps, and all that sort of thing?
A. I don't think there would be very much.

By the Court:

Q. An excavation at the edges to keep the water from being very shallow there?

A. I don't think it would be necessary to go into that phrase of it, the removal of shallow flowage, because this land is principally sand and there is very little growth on it, and I would not anticipate any serious trouble, except perhaps for a portion of the bottom where it is swampy; there is a portion of that reservoir site that is swampy; that would need to be cleaned out.

By the Court:

Q. I should think a large amount of money would be required to keep the water pure?

A. Where the town is supplied by filtered water the necessity for such expenditure of money is not apparent, isn't so pressing, and I do not imagine that the Tintern Manor Water Company have expended very much in that respect. I wanted to take this estimate somewhat on the basis of what the Tintern Manor Water Company went into, to show what could be done by the Long Branch Water Company to supplement their supply in a reasonable way.

By the Court:

Q. Did you allow anything for increased main, larger main from the pumping station to distribute the water through the town?

A. I did not allow anything in this estimate for that because I don't understand that it is in the other—it isn't in the other estimate.

By the Court:

Q. The other estimate has nothing to do with the question, Mr. Sherrerd. The other estimate includes the putting through the town of a large main connected with a large main of that company; that isn't the question. The question is whether the present main leading from the pump into the city is large enough for the increased—

Mr. McCarter: They say so. There is no contention.

The Court: I am asking him.

A. This estimate brings the water to the present pumping station from which the distribution system of Long Branch has been built up. I understand that the claim in the case is that from that point the piping is sufficient. The additional main that is necessary—

Mr. Corbin: I stated to the contrary in addressing the Court.

The Court: I think not, sir.

A. (Continuing): The additional main that seems to be projected is the one leading from the thirty-six inch line into this very point that runs from the Takanassee pumping station; that is the additional main.

Mr. McCarter: That is the way I understand it.

A. And the criticism of the present operation is when the water is entirely taken from Newman Springs it brings the water into the small end of the system and not into the central part unless that additional main is laid.

The Court: I don't understand it so.

Mr. Corbin: Nothing is estimated for any new main. It is only a question of getting at what is in his estimate; that is all.

The Court: That is all. My own recollection is, the judgment I formed hastily at the time, is that the main from the old pumping station Takanassee into the City, is entirely insufficient for any serious increase, and would require a large additional main, and large amount of money spent in the City for mains to properly distribute it; I think

everybody that has ever had any experience knows that—

Mr. Corbin: It may be mains may be different capacity if water is brought from a different direction, but substantially new main has got to be laid any way.

A. This map shows sixteen inch line coming from this old Takanassee plant.

By the Court:

Q. You wouldn't say that is big enough, would you?

A. It is big enough unless the whole system beyond this point is supplemented, the whole system of distribution. We found as a result of the introduction of meters that we were able to postpone for a number of years the time when it was necessary to increase these features to supply fire service, and I think that a general introduction of meters at Long Branch at this time would result in the present system of mains being sufficient for at least a period of five years, provided they have enough water at the pumping station to pump into those mains. It works both ways, Vice-Chancellor.

The Court: I understand that.

A. Every system of this kind must increase as its consumption increases; there is no getting away from that situation; that is common to all systems.

Q. Senator Blodgett was asked how long a time in planning the present system they looked forward to—

The Court: I don't permit that. I have a fad on that subject, to read the evidence of one witness to another, or call one witness' attention to what another has sworn to; it may be quite right in this case, but I have a system on that subject. You may ask him

any question, what he thinks on a certain subject, but you cannot tell him on the stand now what another witness has sworn to; that is my general rule; I am not disposed to vary it.

Q. In planning a water supply, water system, how long a time is customary and proper to look forward to?

Mr. Corbin: I object to that. The witness has not qualified for any such question as that.

The Court: I will let that question be put. I doubt—your objection may be good.

Mr. McCarter: Your Honor wouldn't let us qualify him—said he was thoroughly qualified.

The Court: He is qualified to speak from what the general sentiment of hydraulic engineers in this country is as to the time, the length of time you should look ahead in laying out water works, are you not?

A. Yes, sir.

By the Court:

Q. Are you a member of the Society of Hydraulic Engineers?

A. American Society of Civil Engineers.

Mr. Corbin: I will admit he is a hydraulic engineer of the very first rank; there is no question about that. The character of the question is what I object to.

The Court: Matter of judgment and practice of engineers. I think it has very little weight with the Court, ought to have very little weight; still, I ought to have it.

Q. Mr. Blodgett says they provided for fifty

years; I want to know whether that is not excessive?

A. Thirty years is the usual practice, and that is qualified, too, in the case of obtaining a water supply by storage reservoirs, you want to obtain a drainage area which would be sufficient for some such period, but the other portions of the work need not to be at first installed.

By the Court:

Q. Put in by degrees—I understand you.

A. So the pipe line won't ordinarily go in for as long a period as thirty years, because you would lose your interest on your first investment before you would need that capacity pipe.

The Court: Quite right, sir; lay another pipe thirty years from now on half the interest you would save on the first—lay another alongside if you had the right of way big enough for it.

Q. In view of the evidence in the case, with which you say you are familiar, to the effect that Belmar, Asbury Park, Freehold, Red Bank and Atlantic Highlands are able to secure apparently an unlimited—a perfectly sufficient supply of water by the use of driven wells—what have you to say as to whether or not in your judgment a supply of water sufficient to supplement the present supply at Long Branch could be had from the same source in that vicinity.

Mr. Corbin: I object to it as stating premises which are not proved, and cannot be assumed. There is no evidence that there is an unlimited supply of proper water. Six men have been here from villages, say they are getting from pumps; some have abolished half their wells, others all.

The Court: I believe there has been some evidence given that water was found by driven wells in the City of Long Branch. I wouldn't want to refuse to hear the evidence.

Q. (Question read.)

A. It is the general opinion of engineers, and it seems to be borne out by the geological survey work, that all along this portion of the Atlantic coast it is possible to get good water in large quantities from deep wells, and it would seem to me that it would be very feasible to supplement the supply at the Takanassee plant from such a source.

Q. I observe that Schedule I, attached to Mr. La Monte's report, being the schedule of rates in force June 1st, 1903, has an item for each additional faucet to be used by the same family, Two dollars—the first faucet being on a basis of Eight dollars. What have you to say from your experience as to the fairness of the charge of Two dollars for each additional faucet being used in the same family?

Mr. Corbin: I object. Conditions are everything. It seems to me the question is an abstract question. Is it a proper question of comparisons?

The Court: I think the question may be put, but Mr. McCarter, my own observation as a juryman is that all these charges by the faucet and house, all that sort of thing, are entirely arbitrary, and never act equally, and you never find any two systems, charges adopted by the different towns, that are alike in that respect, and I think it may be an insoluble problem; but certainly it is well known that the more opportunities people have, chances to draw water, the more they draw.

Q. The question is whether they ought to be

charged Two dollars for every additional one, that is the point, from your experience?

A. I think that is a high charge; it seems to me that if there is to be a charge for additional faucets it ought to be on some sliding scale, and even the first faucet ought to be lower than that charged in that schedule; the basis of the charge ought to be something for the convenience for using water in different parts of the year. The fact that there are more faucets in the house—same number of people in the house—does not mean that more water is going to be used, but people ought to pay something for that convenience.

The Court: I disagree entirely with you right here now. The house owner puts in all those additional conveniences, the householder puts them in, he pays for them; it is nothing to the water company; the water company is to be paid by the amount of water that is used, taking into consideration the fact that the party—the house occupies a space on their line and would prevent somebody else from having a house there that would use more water.

Mr. McCarter: The point I understood Mr. Sherrerd made was that the fact that there were five additional faucets would not necessarily imply that five times as much water would be used.

The Court: No.

A. But here is Two dollars for additional faucet.

Q. Each one.

A. Our custom is not to charge for additional cold water faucets and not to charge for additional hot water faucets, except that the kitchen boiler is charged for, so that these additional conveniences are not charged. I think a water company might probably be justified in making some charge for the

additional faucets, but it seems to me making that charge Two dollars for each additional faucet is out of proportion for the balance of their rate.

The Court: You are getting into an insoluble problem, and I make this remark right here so that you can see. As I understand those rates that are proposed, they are all optional; the party can have a meter if he wants it, and I should say that a water company who wished to encourage the use of meters was justified in making a pretty high charge for faucets without meters, to encourage the introduction of meters. At any rate, I shall hear counsel in the end on the question whether or not everybody ought not to be permitted the privilege of putting in a meter, having a meter put in if they wish to, but of course when they have a meter in they must have a minimum charge. I will say here that my own judgment is, subject to what Sherrerd may say, that in every instance the city or water company should own and set the meter, and control it, and watch it, so as to keep it in repair. Now, they cannot do that without having something for it, and cannot watch it without having something for it, and there should be a minimum charge; but if the party thinks he can save money by having in a meter at the minimum charge he ought to have the privilege in every case.

Mr. McCarter: Your Honor is mistaken in the view that there is an option to have meters here.

The Court: If I was to fix that, subject to what counsel may say, my disposition is very strong to make it.

Mr. Corbin: I don't think that question is before your Honor.

Mr. McCarter: We don't know. We have got to put our case in. Your Honor is mistaken in the view that we have an option to have meters now, and therefore I think this evidence is important.

The Court: I thought they had.

Mr. McCarter: No, sir.

Mr. Corbin: There is an option to those like livery stables, hotels and large users; they have an option to have a meter; but private dwelling houses, that is not under our present arrangement; they have no such option.

Mr. McCarter: That is the way I understood it, and I didn't want any misunderstanding about it.

The Court: I don't know as that question is before me, but I think it ought to be so.

Mr. McCarter: We shall contend that it is.

Q. Now, I direct your attention to another item: For each additional water closet pan or tank, Three dollars. What have you to say as to that charge?

A. I think it is quite customary to make the charge for additional water closet about half the charge for the first closet.

Q. Now, I observe that they have on the second page of the schedule some meter rates which are available under certain conditions to large consumers. I observe that is at the rate of thirty cents a thousand gallons for the first two hundred thousand gallons. What have you to say as to making the minimum quantity two hundred thousand gallons as a minimum rate?

A. It seems to me that their sliding scale of reduction is postponed to too high consumption—that they ought to start at some lower quantity.

The Court: Let me see that I understand the scheme of this now. We talked it over the other day. I have got a very nervous headache and don't know where I am at exactly all the time; you must be a little patient with me, and I wish very particularly to get Mr. Sherrerd's views of this case. Now, the plan that I had in my mind was to make a sliding scale at the end of a year; charge for all that was consumed at the end of the year; that is the plan of Morristown. But I see these gentlemen have commenced with the first of June and make a sliding scale from that time on down, which in the end amounts to the same thing, don't it?

A. It amounts to the same thing, but their deduction starts at such a quantity, you know.

The Court: I understand. Now, the point that you are inquiring about is whether the reduction does not commence so far off that it don't—

Mr. McCarter: Don't reach anybody.

The Court: Yes.

Mr. McCarter: Chosen few.

The Court: As I said, counsel will be a little—I am suffering. You say two hundred thousand gallons. Now, let us see—how many days do you estimate the two hundred thousand gallons should last an ordinary family before they would get any benefit of that?

A. Well, fifty thousand gallons a year would supply an ordinary household without any question.

By the Court:

Q. How much do you count a day for an ordinary family?

A. We make our allowance under the minimum rate five hundred cubic feet a quarter, which would be only two thousand feet a year, fifteen thousand gallons; we allow a use of five hundred cubic feet a quarter for the minimum rate.

By Mr. Corbin:

Q. Two thousand cubic feet a year?

A. Yes.

By Mr. Corbin:

Q. What is your price for that?

A. Six and a quarter dollars a year for the two thousand cubic feet.

By the Court:

Q. You compute seventy-five cubic feet a quarter? A. Five hundred cubic feet a quarter.

By the Court:

Q. That is three hundred and seventy-five thousand gallons in a quarter?

A. No, no; five hundred cubic feet would be only five times seven and a half.

By the Court:

Q. That is three hundred and seventy-five thousand?

A. Yes; three thousand seven hundred and fifty, not thirty-seven thousand—three thousand, three thousand seven hundred and fifty gallons a quarter.

By the Court:

Q. Take a family of six people, that is how much a day, that is three hundred gallons a day, isn't it?

A. There would be ninety days in the quarter, so that would be forty gallons a day; forty gallons a day, that is what it is, per house, about forty-five gallons a day. The point at which the sliding scale

should begin of course should be higher, somewhere around fifty thousand gallons, instead of two hundred thousand. We are taking now about the minimum rate.

By the Court:

Q. You allow thirty-seven thousand five hundred?

A. No, sir; it is only three thousand seven hundred and fifty gallons a quarter. This sliding scale might fairly start at fifty thousand gallons; that would be three times this rate we are just figuring at.

Mr. Corbin: This minimum he has got is two thousand cubic feet per year, which is fifteen thousand gallons a year; that is his minimum rate. Now, divide that by three hundred and sixty-five and you will find that is forty-one gallons a day.

The Court: Yes, I have made that already.

Mr. Corbin: That is all the water that goes to that household. Divide that by six and they have got about seven gallons apiece.

The Court: Three hundred gallons a day multiplied by ninety days, three months, is twenty-seven thousand.

Mr. Corbin: Six people in a family, fifty gallons, three hundred gallons per day, one hundred and nine thousand five hundred gallons in a year.

The Court: Yes; and you make your limit two hundred thousand; take him two years before he got any reduction.

Q. I observe that in the same Schedule No. 3, on the top of the third page, is the provision "In a case where the fixtures supplied with water are used by more than one family, each family will be charged for at above rates." What have you to say to that?

A. The general practice is to give a reduction on additional families; it is generally somewhere around half the rate for the first family; two families using the same fixtures cannot use as much water as two separate houses, and it would seem high to charge double the price for two families in the same house.

By the Court:

Q. The idea is to discourage that kind of thing, I suppose, for two families to use one fixture; two families use more water than one, that is very certain.

A. Their Eight-dollar minimum rate at thirty cents would allow 26,666 gallons a year at their rate of thirty cents, and they do not give a discount until the two hundred thousand.

The Court: It is avowed by the counsel for the water company, and I understand that these rates per meters for metered water are not intended to encourage people of small families to take; they are certainly not adapted to that?

Mr. Corbin: No, sir.

Q. Now, turning to item No. 7 on the third page: "When the water is turned on and used any part of the year the annual rate will invariably be charged". What have you to say to that?

A. Of course conditions at Long Branch are peculiar in that respect; it seems to me that there ought to be some flat basis for a rate which would cover the most of maintenance of the plant for a whole year. We find that the interest on the plant here in the city approximates about Four dollars a tap. That ought to be a flat basis, that ought to be collected from each connection before you charge for the water, so I would say that there ought to reasonably be some payment for service that only

takes water half the year, continually, but it doesn't seem to me right that that charge should be the full rate for the whole year. I would think three-quarter of the whole year rate would be fair, instead of a full rate for half vacancy.

The Court: I am not surprised at your answer, and don't know as I am capable of criticising it, but you don't mean to fix what the flat rate ought to be; it ought to be, you say, half or three-quarter, something like that?

A. I don't think they should charge for the full year where the use of the water is less than six months; it seems to me that three-quarters of the annual rate is fair. There ought to be some additional charge for the maintenance of this plant during the winter.

By the Court:

Q. They have got to have a plant there and got to have plants going?

A. Yes, sir.

By the Court:

A. And the only reduction is in the small amount of coal used?

A. There is a reduction in that of course, but the cost of operation is not as high.

By the Court:

Q. Wouldn't they get in everlasting trouble? Say I was only here a month or two months or five months. Is it practicable to keep account so close?

A. I think the meter would solve all that problem; if they were metered they would get away from that.

By the Court:

Q. After all they ought to have a minimum then?

Yes, sir; ought to have a minimum; yes.

By the Court:

Q. Isn't it one of the serious elements in taking into consideration, in maintaining a water supply large enough to supply in the summer time one of these summer resorts when water is used extravagantly and when it is used very little, if any, in winter, isn't it one of the serious elements to determine how to graduate the charges?

A. I would like to say on that point, our experience, for instance is that our maximum draft is often thirty-three and a third per cent. over our average, in February, so we have practically got to provide for a maximum draft in cold weather, which brings cities in the colder latitude somewhat in the same position as cities in the sea shore; they have got to provide a maximum draft in summer time; the others have also got to have some kind of help in the winter period, but this plant is so provided to take care of their summer population that one balances the other to a certain extent; so you don't want to lay too much stress on the fact that they have such a minimum in the summer.

By the Court:

Q. Is there any necessity for this great flow in the winter if the water company in the City of Newark, city company, water department, insists upon having the service pipes and cocks so fixed that there is practically no danger of freezing in winter?

A. Well, on a winter like last winter where unusual conditions existed you could hardly expect that the whole distribution system of the city would meet such an extraordinary condition.

By the Court:

Q. But I see by one of your diagrams that you had it for years?

A. It has been so until the meters were intro-

duced, but that is very materially reduced since then.

By the Court:

Q. Now, isn't it a fact in your experience that a great many taps in your city service pipes—I call them taps, service pipes, were put in in such a manner that they are pretty sure to freeze out in the winter, that they were not put deep enough?

A. Yes; too shallow.

By the Court:

Q. You didn't have sufficient regulations on that subject?

A. Not years ago; we have had the last ten years, because we have put them in ourselves, five feet deep. The conditions of our buildings account for it here more than with you. We have a large population, large number of buildings where the plumbing is rather in exposed places.

By the Court:

Q. But it has no business to be there.

A. It ought not to be there, but that is the condition.

By the Court:

Q. You haven't quite answered my question—whether the element of the water being used—the element that in a place known as a summer resort the greatest quantity of water is used in the short season of the summer, one that is necessary for taking into consideration summer and fixing water rates?

A. I think that certainly has a bearing on this case, and I think what has been presented here in the way of a supplement to the supply for that very period would show that it could be obtained at a reasonable expense.

By the Court:

Q. That isn't it; in fixing rates?

A. The question of cost of plant and ease with which a supply can be obtained ought to be taken into consideration in fixing the rate.

Q. Can you tell me what would be the fair cost for a standpipe thirty feet by a hundred—thirty feet in diameter?

A. I don't know whether I could tell you that offhand.

Q. Well, approximately?

A. Why, I would say Twelve thousand, Fifteen thousand dollars; of course, its foundations and location have bearing on it.

Q. What would be a fair figure two years ago per mile of thirty-six inch iron pipe?

A. About Eight dollars a foot, laid.

By the Court:

Q. You mean laid?

A. Yes; laid.

The Court: Have the details of the Committee's estimate been put in?

Mr. Corbin: Yes, they were put in. Mr. Mr. McCarter, I see, has it.

A. The price of iron was fluctuating very much just at that time; a month or two in placing a contract would make a material difference in the price. We have laid it down to about $7.20 a foot.

By the Court:

Q. Thirty-six inch pipe?

A. Yes, sir; laid.

Q. That would be, roughly, how much a mile?

A. That was with the low cost of iron. Forty-five—

The Court: I can do that. It depends on the weight of the pipe?

A. It depends on what pressure you expect to use it under.

Q. I observe that the so-called Hicks contract—that is the later contract of the two—between the City and the Company, had no provision in regard to the pressure. What have you to say as to that being left entirely unprovided for in any kind of a contract?

The Court: Does that make any difference here, Mr. McCarter? Of course, I don't know what has been submitted to me; I don't recollect. If anything of that kind is submitted to me, one of the terms will be that the pressure will be so and so. You say there is a big element comes in there, which has not escaped or won't escape a gentleman like Mr. Sherrerd, and I don't suppose it escaped either one of you gentlemen. Here is a certain distance of pipe from the pump and certain size of pipe into the City. Now, if that pipe was opened, if one fire plug was opened and there was nothing else running from it, the pressure at that fire plug, when opened, could be easily calculated, couldn't it?

A. Yes, sir.

By the Court:

Q. Then you have got to calculate in that all the other openings there in the system at that time, because everybody that is drawing water may open the faucet just at that time and draw a pail full, bucket full of it, in case of fire, or wash-tub full, and then the number of fire plugs that are open at once must be taken into consideration, so that the problem is substantially insoluble—but there must be some standard, I take it.

Mr. Corbin: I think static mode is all you can prescribe for us.

The Court: That depends on the size of the pipe. If you have hydrostatics and hydraulics are quite a different thing.

A. Hydraulic grade is quite a different thing.

By the Court:

Q. Hydraulic grade is different thing; friction will make hydraulic grade then.

A. I think we can get over it in the answer to this question.

By the Court:

Q. I haven't got to the question yet. I am stating a problem that may be submitted to me, and that would be some test at some particular part of the City and at certain points of the City when so many, such a number of fire plugs were opened; and then if the fire plug is open and no hose attached to it, that is one thing, but you put a hose on and raise the end of the nozzle up or what not, that produces a different effect, but I suppose it would be proper to have some kind of a standard in the City.

Mr. Corbin: The question will be whether that is a question for this Court. We have got to give a suitable, proper service.

The Court: Then again if they use engines it don't make any difference, so there is water there, it makes very little difference; if there is pressure, if they take the water under pressure the engine can do more work with less steam, but if it don't suck air, if it gets water all the time, then it don't make much difference except a little bit in the amount of coal it consumes; that is right, isn't it?

A. There are possible to be conditions of spreading your engines where one will draw from the other.

The Court: That depends on the size of the mains through the streets.

Mr. McCarter: Here is my difficulty about it, and that is the reason why I ask it. I am perfectly frank to say that I don't know exactly what we are here for. Of course, we are here to settle rates, but to settle rates for what, and how long? And it is because we are somewhat in the dark about it that under Mr. Sherrerd's guidance—he has been very helpful to me, as, I think, he has been to the Court—it might be judicious to have some light thrown on that question—so if a new contract is to be formulated by your Honor, not only fixing rates, but time and pressure and one thing and another, there should be something before the Court on the record to enable the Court to do that. I am frank to say I don't know how far the Court is to go under the direction—under the order.

The Court: I don't know what the order is.

Mr. McCarter: The order is that rates are to be ascertained. I don't think it is before the Court to make a new contract for us.

The Court: I can't do that, that is certain. I can only say what I think are reasonable rates.

A. It would seem to me that a rate for hydrant without some condition being imposed as to what the fire service should be would be a wrong sort of a contract for a city to enter into for fire protection.

The Court: I don't require your statement on that.

A. And I agree with the Vice-Chancellor practi-

cally in his statement about there should be some point in the City, perhaps the City Hall, at which a record and gauge should be maintained which would show the pressure constantly on the mains, and that a contract for an adequate fire service should provide that a certain pressure should be maintained at that point at all times, even during the use of certain number of hydrants. Now, the local condition and the necessity of each town in regard to its fire protection should determine the number of hydrants that might be opened and still have that pressure maintained, and the location and capacity of the plant should also be taken into consideration in determining what that pressure should be. It seems to have been the custom at Long Branch, as far as I was able to ascertain on inquiry and investigation of the plant, that they maintained sixty pounds pressure. If sixty pounds pressure were maintained at the City Hall while four fire plugs were in use in any portion of the City it would seem to me that it would be fair condition for a contract.

By the Court:

Q. Sixty pounds pressure would be—how many feet is that?

A. About 130 something.

By the Court:

Q. Well, now, what is the height of your standpipe?

Mr. Corbin: There is no standpipe; it is the Holley system.

The Court: Oh, I see, yes.

Mr. McCarter: Been abandoned; yes.

Mr. Corbin: The Fire Underwriters require about 140 actually.

The Court: But I think sixty pounds is very heavy pressure.

A. I am not quite familiar with how many engines they use.

Mr. Corbin: Seven engines in the town.

A. A variation of that in this respect, lower pressure with more hydrants in use would be a fair change; I only spoke of four hydrants, sixty pounds pressure; that would allow quite a number of locations for the fires to be handled without engines; reduce the required pressure; it (contract) ought to provide a larger volume of water, that is, more hydrants open without affecting the pressure.

By the Court:

Q. You say the Underwriters require thirty-five pounds?

Mr. Corbin: Underwriters of New York, thirty-five pounds.

A. They make all sorts of requirements for different places; they wanted twenty pounds on top of the Snyder Building for outside sprinkling system.

The Court: Mr. Sherrerd makes a very sensible suggestion—I want to hear about this now—that there should be some standard when no fire plugs are open, and then another when fire plugs are open, reducing down according to the number of fire plugs opened.

A. That is right.

The Court: Might go down to almost nothing so there is always water there.

A. I would say that each plant ought to be judged on its capacity, and no company ought to be asked to do something that is impossible, and that the way to get at it would be to test what is

fair capacity for this plant and establish that as a basis below which they should not go.

The Court: Even that might be a good deal less than what it ought to be.

A. You can judge that.

By the Court:

Q. Included in the element, important element I think Mr. Sherrerd will say in the problem, is the size of the mains through the streets?

A. Yes; capacity.

By the Court:

Q. You couldn't do anything at all, you couldn't keep up the pressure with small mains—you have got to have large mains.

Mr. Corbin: Your Honor will see what extraordinary conditions we have, seventeen sprinkling carts drawing from the hydrants.

A. I think the condition of the use of those hydrants for sprinkling service ought to be under restriction, that they are not used in case of fire.

The Court: I think so too. If you agree, or if it is within my power or duty to fix the standard pressure, and that be kept up to a certain point according to the number of fire plugs that are open for fire purposes, that it should be on condition that sprinkling should stop immediately on the alarm of fire; that would be certainly almost necessarily a condition, and Mr. Sherrerd suggests it, and of course it don't require much suggestion.

A. I am free to say that sixty pounds is perhaps high under the conditions down there.

By the Court:

Q. Fifty pounds is high?
A. Sixty, as I stated.

By the Court:

Q. Then you can't have static pressure of that kind if there were fifteen or twenty fire hydrants going all the while in the summer time—I mean water sprinkling carts; they would take it off, because one or two of them would be drawing water all the time. I will suggest this just here, before the cross-examination commences, that I am not sure that Mr. Sherrerd's suggestion is not good. Go down and test this some day and put a registering guage, water guage, pressure guage somewhere on the pipe, it don't make any difference where you put it. Then just see what the pump, ordinary work, is doing; and then see what it does with so many sprinkling carts going in the ordinary way on a hot day in summer, as many as are needed, all at work, hot day in summer; see what the pressure is then; and then at night, when they quit, see what it is, you understand, and the consumption for family use is going on after the sprinkling carts stop, with a good deal of industry, you know, about that time of the evening; make the experiments and have them produced to the Court, if the Court has got to enter into that thing at all. Have a fair experiment made. Then of course that is all liable to change by the additional mains which some witness on the stand swore they intended to put in and showed on the map where they intended to put it in. You put a big—what is it, twelve-inch or something like that?

Mr. Corbin: Twenty or twenty-four.

The Court: Twenty-inch main proposed to be pushed through the city in some place and of course connected by branches with

the present system, why it would increase the pressure at once.

A. I only understand, Mr. Vice-Chancellor, that that connection is to come in from the new plant into this present distribution system.

By the Court:

Q. It would have its branches?

A. It would help, of course.

By the Court:

Q. It ought to. It would be a very foolish thing not to do that; as soon as it touches the present system it should be branched in. I suppose Mr. La Monte now indicates by his gesture that is the idea.

A. Of course it ought to be done that way.

The Court: He may not have been asked the question, but I took it for granted they were going on common sense principles down there.

Cross-examination by Mr. Corbin:

Q. State the details of how you make up fifteen dollars for Kellogg's standard house under your Newark schedule of rates. One kitchen sink with hot and cold water?

A. That is a dollar and a quarter.

Q. One water closet?

A. One water closet Two dollars and fifty cents.

Q. One bath tub?

A. Hot and cold water, Five dollars.

Q. One washstand in bathroom?

A. No extra charge for that.

Q. Three laundry tubs?

A. No extra charge added for this; the family rate is $6.25, as just stated.

Q. That makes a total of Fifteen?

A. Yes; $6.25, $1.25, $2.50 and $5.

Q. You charge nothing for laundry tub?

A. Nothing.

Q. You know it is usual in most cases to charge for them?

A. I know they charge for the first tub often, or for just one set of trays, something of that kind.

Q. Are you familiar with the water companies around here, for instance Elizabeth Water Company?

Objected to.

The Court: You only corrected a single error.

Mr. McCarter: That is all; we have not gone in the fairness and propriety of it.

Q. Now sprinkling carts—you charge Six dollars a week to each licensed cart?

A. Yes, sir.

Q. And they sprinkle your public streets, do they not?

A. Yes, sir.

Q. Are they paid by the city?

A. No; they are paid by the lot owners.

Q. Lot owners contribute?

A. They make contracts for sprinkling.

Q. But your rates at Six dollars a week for that are intentionally low for the purpose of stimulating the sprinkling of your streets, aren't they?

A. I wouldn't say that.

Q. Isn't that a fact?

A. I don't know; they were made years ago.

Q. You don't consider that rate remunerative at all, do you, to the city?

A. It is practically our meter rate, as I stated.

Q. Several years ago—

The Court: Let me ask you, have you estimated how many hundred gallons a day they use?

A. Yes; based on that, practically our meter rate for their ordinary use two or three years ago when I made this estimate. The reason I made the estimate was to see if this amount charged was fair.

Q. You thought then it came to about fifteen cents a thousand gallons?

A. Yes, sir.

Q. You think it came to that two or three years ago when you made the estimate?

A. Yes, sir.

Q. Do you know any other place anywhere that charges as low as that for the use of water for sprinkling?

A. I don't know what the ordinary charges are in other places.

Q. Now, as to mains, hydrants, you reckon the present value of all pipes with the hydrants and valves if laid two years ago in Long Branch at $115,000, that is seventy-three miles, about that?

A. Twenty-seven miles.

Q. Twenty-seven miles and a half?

A. Yes, sir.

Q. What do you reckon the value, per mile, we will make it?

A. I got it by the foot.

Q. Value per foot then, twenty-inch pipe?

A. $3.20.

Q. Sixteen-inch pipe?

A. $2.25.

Q. Twelve-inch pipe?

A. $1.50.

Q. Ten-inch pipe?

A. $1.50.

Q. Eight-inch pipe?

A. 90 cents.

Q. Six-inch pipe?

A. Sixty cents.

Q. Four-inch pipe?

A. Forty cents.

Q. Do you remember anything for restoring pavements?

The Court: And laying them?

A. These prices would be practically an average price.

Q. That would be a price for laying it in a country road, wouldn't it?

A. No; not that exactly; I understand a good deal of this system was laid before the pavements were put down.

Q. I am asking you whether you estimated anything for the relaying of pavements?

A. This includes something for relaying pavements.

Q. How much, in the first place, for asphalt pavements, per foot?

Mr. McCarter: I don't see how that is material.

The Court: I think it is very material, Mr. McCarter. I was going to ask the gentleman some questions on that subject myself. If you are going to buy a plant of that kind you have got to take it as it is. Here is a company that comes into a town that is yet so small; it lanuches out and builds its water works, and it lays its pipes when there is nothing, no pavement on top at all; and it pays for those pipes four times what they cost now; but it saves the diggging of, the repaving of this—go along with an iron pounder and pound it down when you can. Afterwards the price of pipe is reduced very much; but those streets are paved and

covered with asphalt, &c. A man comes along and says I want to buy you out. Well, he says, I can buy those pipes now for one quarter what you paid for them and allowing you for what it cost to dig and lay them, then you see I don't pay more than so much; but the man says you have to take them as they are now; if you had to dig it now it would cost you more than the cost of the pipe to dig the trench and relay the expensive pavement over it.

A. This is based on some estimates I made for reconstruction work of the city amounting to the same number of miles which was telforded with teleford pavements over it, so this would allow for a certain amount of repaving; it would not allow for asphalt.

Q. You have estimated this as if you built this all two years ago at one time?

A. Yes, sir.

Q. You couldn't build that through a series of years, putting in a hydrant here and hydrant there, for any such rate, could you?

A. Not quite, but it ought not to run much over it.

Q. What do you allow for 145 hydrants to set and place?

A. $6,570.

By the Court:

Q. How much is that a hydrant?

A. Forty-five dollars a hydrant.

By the Court:

Q. Do you think you can buy them and set them for that?

A. We are buying them for $23.50; I can set them for that.

Q. Three way hydrants?

A. Yes, sir.

Q. The City of Elizabeth is paying seventy-five—
A. You better look into your contract.

The Court: Ours cost a great deal more than that in Morristown.

A. We have a very good hydrant with four and a half inch steamer nozzle and two hose nozzle, paying $23.50, have been for the last four years.
Q. What make?
A. A. P. Smith Manufacturing Company.

The Court: They cost a great deal more than that years ago.

Q. What does it cost to get one of those in the ground, set complete, in Newark, connected up?
A. We can do it for Twenty dollars easy enough.
Q. You mean Forty-three?
A. Forty-five is what I have allowed for the hydrant, and I think it is high.

By the Court:

Q. What company is that?
A. A. P. Smith Manufacturing Company.

By the Court:

Q. Where is that?
A. Newark.
Q. What do you allow for our gates and valves?
A. Forty-five hundred.
Q. For all over the city?
A. Yes, sir.
Q. Do you imagine they were built for three times that much?
A. They should have been.
Q. You don't imagine they were put in for Forty-five hundred?
A. I am taking the value of the plant two years ago.

Q. You don't mean the cost of construction two years ago?

A. No.

Q. You mean the cost of the plant with deterioration taken off?

A. Yes, sir.

Q. How much do you take off for deterioration?

A. Thirty thousand.

Q. And your estimate is that it would have cost two years ago to have constructed it about One hundred and forty-five thousand?

A. Yes, sir, One hundred and forty-five thousand.

Q. Of which you have taken off Thirty?

A. Yes,sir.

Q. What do you allow for the pumps?

A. I have only estimated on the piping.

Mr. McCarter:We have got their value, Ten thousand dollars apiece.

Mr. Corbin: How easy it is to fix our pumps for us.

Q. What weights of pipe did you estimate on?

A. Thirty-six inch, you mean.

Q. I mean take that in the Long Branch Commission.

A. For pipe that would be serviceable for sixty pounds ordinary pressure.

Q. Take twelve-inch pipe; how much per length?

A. I haven't got the details in front of me.

Q. Sixty pounds pressure; that means what?

A. Serviceable pressure on it, that would stand the test of that; I can give it to you.

Q. Give us the weight of the twelve-inch pipe you figured on?

A. One thousand to eleven hundred pounds per length.

Q. And eight-inch?

A. Would be eight hundred to eight hundred and fifty.

Q. And six?

A. And six would be thirty pounds to the foot. Wait; I have got on the wrong line; excuse me. You skipped down. Do you want ten?

Q. Ten?

A. Take the eight hundred for the ten and six hundred and twenty-five for the eight.

By the Court:

Q. Six hundred and twenty-five pounds per length?

A. Yes, sir, for the eight.

Q. And four?

A. Four would be about two hundred and forty to two hundred and fifty pounds. These figures are based on what is the usual practice to order for weight pipe for distribution system.

Q. You visited Long Branch to see Takanassee; how long were you there?

A. I was there all one day.

Q. How much time did you spend up on the site of this new proposed reservoir or lake?

A. About an hour and a half, two hours.

Q. And you went where the existing dam is, didn't you?

A. Yes, sir, and drove along one side of the proposed reservoir; we went through the fields.

Q. I observe by this map you have produced that the dam you have placed at the point where contour line twenty crosses the stream; is that right?

A. Yes, sir.

Q. And that contour line 20 seems to cross the surface of the water that is there now; that is about right, isn't it?

A. Yes, sir; seems to be.

Q. Now, you then propose to raise the lake enough to take in all of contour 30 and up to contour 40?

A. Yes, sir.

Q. Just look at this map and tell me how much acreage you go below contour 30?

A. Estimated?

Q. Yes, you can tell within—

A. Why, I should say about forty acres.

Q. Put your rule on it and tell.

A. It is about forty-one acres, about forty acres, say.

Q. Then the remainder of your reservoir, or two hundred acres, would be above the thirty-foot contour line, wouldn't it?

A. Yes, sir.

Q. And the two hundred and sixty acres of your reservoir would all, when the dam was full, have a depth of ten feet or less, wouldn't it?

A. Yes. No, I wouldn't say that.

Q. My question was whether the two hundred and sixty acres of the reservoir above contour 30 must not be necessarily ten feet or less in depth even when the dam is full?

A. My answer is right in saying yes, but the average of that whole section wouldn't be half of the depth, not five feet, because the contour of the sides of this stream are rather steep.

Q. Ten feet would be the greatest depth?

A. Ten feet would be the greatest depth on that part of the reservoir.

Q. But if you drew the dam down five feet—

The Court: I want to interpose here to say that those contour lines established by the geological survey when they come down to a fine point like that are not reliable, are they?

A. They are not reliable perhaps within a foot or so.

By the Court:

Q. I know; but they don't follow the contours closely. I know Mr. Howell, how he made them, and I know how they work out in Morris County. They show substantially certain points, but you can't rely on them. For instance, if you want to ascertain the amount of drainage area in a section they would be a little wrong in one place, they would be a little wrong in another way, and if you have a drainage system you can tell with substantial accuracy, but for particular work, or coming down to fine work like this, I don't think the Court is bound to accept an estimate of this kind.

A. I would like to say in this connection, Vice-Chancellor, that I have probably looked at between twenty-five and thirty reservoir sites, and when I looked at this spot I was agreeably surprised to see what a good location it would be.

By the Court:

Q. But you found you thought it was good without regard to the contour lines that the geological survey showed?

A. Yes, sir; and when I took it up on the map it confirmed my judgment.

Q. You think that a dam of the height you said over the reservoir, with extreme depth of ten feet, would be desirable or suitable development for water works for the town?

A. I think under the conditions of Long Branch, where you filter all your water, it would be.

Q. You think the water would have to be all filtered?

The Court: He said that before.

A. Yes, sir. (It is now.)

Q. Your specifications for your Newark water

works required that no more than one-fifth of the area should have a depth as little as eight feet?

Mr. McCarter: He didn't make that.

A. The specifications required that there should be a limited amount of shallow flowage, but we were never able to enforce that on the company.

Q. It was substantially enforced?

A. No, sir.

Q. Jersey City?

A. I don't know what Jersey City did.

Q. Don't you know when the settlement was made there was no question made by the City of Newark in regard to shallow flowage?

A. I know we got a thousand acres of land from the East Jersey Water Company because they refused to remove the shallow parts of the reservoir.

Q. Don't you know that the City of Newark never raised the question of shallow flowage?

A. Shallow flowage?

Q. Yes?

A. I know this, in all reports I have referred to since I have been in the office; it was brought up about every year.

Q. Jersey City specification required a small area of shallow flowage, didn't it, too? Isn't that universal good engineering practice to require a small proportion of shallow flowage?

A. Certainly.

Q. It is generally about like that, isn't it—not more than one-fifth shows a flowage of eight feet?

A. Where it is contemplated to filter all the water that comes from the reservoir I think that point is not as important as it would be otherwise.

Q. Would you advise Long Branch to have such a work?

A. I think it would have been very good policy for the old company to entertain.

By the Court:

Q. You don't answer the question. Would you as a hydraulic engineer, adviser of Long Branch, if it had not its own water works, have advised it to adopt that reservoir?

A. Yes; under the conditions that exist there.

Q. Did you look at this water shed with a view to its possible contaminations?

A. I did. I went over a large portion of the drainage area above it.

Q. Don't you think that the lower part of it, that you propose to use also, is already threatened with contamination?

A. I do; yes, but it could be eliminated by putting in the pipe I spoke of.

Q. When the population is so great you get up to your six million daily consumption, don't you think it would be still greater?

Mr. McCarter: Not over in that direction very much.

A. I think the State laws ought to protect the drainage area.

By the Court:

Q. Is that practical? Do the State laws amount to anything at last? Can it be enforced? Is there any way to make this water up here in the Passaic good except to depopulate? I think that 47 and 7/10 square miles ought to be depopulated. Is there any safe way to deal with water except depopulate? That is the question I am asking you.

A. That is a debatable question. With good policing of a water shed and limited population together, I believe you can protect it. Of course, there is a limit up to which you cannot protect it with safety.

By the Court:

Q. I don't want to say anything against the Jersey City Water Works, but I think of all ridiculous and absurd operations that anybody ever went into, the building of those water works there with a drainage over those large towns—

A. We feel pretty safe with our sixty-two square miles.

The Court: You can depopulate.

Q. In your estimated cost of Two hundred and fifty dollars an acre for the purchase and preparation of these lands, how much of that do you reckon per acre for the preparing of those lands and that swamp for reservoir site?

A. I looked at it in this way, that the average of $250 per acre would pay for the uplands, say at $250, where there would be very little preparation necessary, and that the difference between the value of the swamp land and $250 would take care of it; that is, the more work you have to do in cleaning up the swamps the less valuable the property is.

Q. Drop the question of price of land, how much do you think it would take per acre to prepare that land?

A. I didn't separate them that way.

Q. This map you show indicates nearly a hundred acres of swamp land, doesn't it?

A. I think about thirty or forty; about forty or fifty, about, swamp.

Q. Wouldn't it take about two or three hundred dollars an acre to prepare that site alone for proper reservoir bottom?

A. The whole site?

Q. Yes; on the average?

A. No, sir.

Q. How much then do you think? Of course it is a guess.

A. There might be forty acres that would cost a

Hundred dollars to a Hundred and fifty dollars an acre.

By the Court:

Q. What is growing on it?
A. A kind of shrub, bush.

By the Court:

Q. Bushy land, is it?
A. Down in these swamps it is bushy.

By the Court:

Q. What does it consist of?
A. Most of the sides there are sandy fields, partly, partly cultivated, but the portion that runs down toward the stream doesn't seem to be cultivated to any extent.

By the Court:

Q. Nothing growing on it?
A. No, sir.

By the Court:

Q. No trees to be removed—any stumps on it?
A. In these swamps are these bushes.
Q. You didn't get within a quarter of a mile of these swamps did you?
A. I think we got nearer than that; I think we get within a thousand feet of the swamps, and up in the upper road near this side we got right down to the swamp.
Q. On this four miles of drainage area which you propose to avail of in this way about how many inches on the water shed do you propose to store. I haven't figured it out, but you can tell us; you say that is six hundred and thirty million storage; how much on the water shed is that?
A. Could store about eighteen inches if necessa-

ry by raising the dam higher, but this would be about twelve inches on the water shed.

Q. Don't you know it is about seven inches on the water shed is the utmost that is figured as available for that purpose?

A. Not for this kind of land.

Q. That is Vermule's estimate, isn't it?

A. Not this sandy soil where the run off is high

Q. You think the run off is very high?

A. It is constant.

Q. The present time is no greater?

A. No, but it runs off.

Q. This land you got figures for twelve inches on the rain shed, isn't it?

A. I wouldn't like to say; I think it is less than that.

The Court: I had supposed that the twelve inches was the excess that had ever been allowed.

Mr. Corbin: Vermule puts it at seven.

A. It runs from about eight to twelve or fourteen

Q. Now, you think this so planned would give an ample supply to the Long Branch Commission for ten years to come, this reservoir so planned would give a sufficient supply for ten years to come; that is what you said?

A. I said it would supplement that summer draft.

Q. So as to supply for ten years to come?

A. Yes.

Q. Would you think it a wise thing to plan works for only ten years?

A. No; I think it would be well to plan them for more, but this is supplement to old works.

Q. But you get no additional water shed by this device, have you?

A. You have utilized what you have instead of throwing away.

Q. Get more storage capacity, that is all?

A. And you get your water just when you need it; it seems to be these maximum drafts that was bothering the old company.

Q. In your estimate you made no estimate for the new filters?

A. No, sir.

Q. Or new machinery of any kind, except one pump, did you?

A. No, sir.

Q. What did you estimate for that one pump?

A. Twenty thousand dollars.

Q. And that was included in your Two hundred and twenty thousand, was it?

A. Yes, sir.

Q. You think that if meters were generally introduced in Long Branch that would make the present supply sufficient for five years? That would cost about Fifty thousand, wouldn't it? There are 1,363 taps now, or were the first of last April, and many of the supply pipes to houses are two inches.

A. Twenty-five to thirty thousand.

Q. How much a meter on the average do you reckon?

A. About Eighteen dollars a meter, set.

Q. What size meters for houses?

The Court: What range sizes are those?

A. Well, of course I don't know the different sizes; they are a few big sizes. We metered the ordinary house at a cost of about Fourteen to Fifteen dollars.

Q. You have five inch tap, don't you?

A. Yes, sir.

The Court: The tap don't determine it.

Q. You say the Town should look forward about thirty years in building a new supply, that is, as

to drainage area. If you followed that rule you wouldn't advise this development of this new reservoir, would you? Four square miles wouldn't be enough for four years?

A. I suggest this as a supplement to Long Branch alone.

Q. For a new supply you wouldn't advise it?

A. I should think the old company that was operating so successfully on a financial basis—

Q. Won't you answer?

A. I say, no; of course not.

Q. Now, you spoke of these family rates, and the two family, and so on, being high. Let me call your attention to these facts, and then say if they are high. The permanent population of this Town is proved to be, 1900, 8,872.

The Court: Substantially nine thousand.

Q. We will say now nine thousand, or ninety-five hundred; we will say the population now is about ninety-five hundred—

Mr. McCarter: I don't think that—take the proof about the population.

The Court: He supposed it would be five hundred more now.

A. And the total taps April 1st were 1363—assuming the population to be ninety-five hundred, that is one to every seven persons. Schedule E shows that the total number of families, 1363, or one to every seven persons. Now, if the estimate of Mayor Reed is right, that there are a hundred population in the summer, seventy-five to a hundred, that would be seventy-two persons to every tap. If Mayor Blodgett is right, that the summer population is fifty thousand, thirty-six persons to every tap; and if the gentleman who testified this morning is right, it is eighteen persons to every tap in summer. With that phenomenal change in

population, do you think the house rates are unreasonable?

A. This population is for a very limited time, isn't it—three months? This is the maximum.

Q. The maximum in summer is testified to be from seventy-five thousand to a hundred thousand persons.

The Court: Take it at seventy-five.

Q. That would be about sixty-two persons for every tap, if you take that. I will take the minimum, thirty-six persons.

A. I understand most of these people are in the hotels.

Q. No; boarding houses.

A. Boarding houses; they are not in private families where these rates apply.

Mr. McCarter: You have got thirty-nine boarding houses on your list. All the rest are.

A. Of course, there are conditions there that are different that ought to be taken into consideration in comparing rates; I admit that; but how far that particular question of increased population affects that household rate I wouldn't be prepared to say, unless I knew just how that population was taken care of.

Q. My suggestion to you is this: That if these households are in summer for a few months very large households, not six or seven people, but anywhere from twelve to twenty or thirty people, wouldn't that change your view with regard to what is a fair household rate?

A. I see that your rate is higher than the usual flat rate for household.

Q. Higher than Newark, you mean? Why do you say "usual"?

A. The average is six, under eight; the average is under eight.

Q. Average what?

A. Average rate for household.

Q. Minimum?

A. No; for house.

Q. Where?

A. The basic charge, the average charge; that is what your Eight dollars and what our Six and a quarter is; it is basic charge for family.

Q. You mean in many places it is less?

A. Yes.

Q. You know many places where it is Ten dollars, don't you?

A. Yes, many places it is ten.

The Court: I didn't understand Mr. Sherrerd to say anything about Eight dollars.

A. I didn't mention Eight dollars.

The Court: The point Mr. Corbin is making is this. He charges for one family or two family, that is, two distinct classes. But here is one family takes boarders in the summer for three months and has six or eight or ten boarders, and after all only gets for one family.

A. I will answer this way. Where a house is arranged to take care of so many extra people and got all these extra fixtures, it is wrong to charge these fixtures for the whole year if they are only put in there for the three months' use.

Q. Suppose you find they haven't got any extra fixtures, but extra people?

A. Then I think your basic rate would be right.

Q. Now, you have told us about the City of Newark, and I want to ask you what your average daily consumption was in 1892?

A. About eighteen million in 1892.

Q. That was the year the new supply was put in, was it not?

A. Yes, sir.

Q. 1893?

A. This diagram is not figured out to give the averages for the year.

Q. You know from memory, don't you?

A. No, not exactly; it is about twenty in 1893.

Q. 1894?

A. About twenty and a half in 1894.

Q. 1895?

A. 1895 it was about twenty-three.

Q. 1896?

A. It is about twenty-three.

Q. 1897?

A. 1897 about twenty-four and a half.

Q. 1898?

A. About twenty-seven.

Q. 1899?

A. 1899 it is about twenty-six.

Q. 1900?

A. 1900 it is about twenty-four.

Q. Now, these latter years you better give us accurate figures. 1901?

A. These give it to you practically; oh, no, it is million gallons. What do you want, 1901?

Q. Daily average for the year?

A. Twenty-five in 1901.

Q. 1902?

A. 1902 was twenty-six and a half.

Q. 1903?

A. Was 26.8 about.

Q. What was it in January of this year?

A. I haven't got those figures here.

Q. What was it in February?

A. Somewhere around thirty-two.

Q. March?

A. March; about twenty-nine in March.

Q. April?

A. About twenty-seven and a half.

Q. May?

A. Twenty-six or seven; between twenty-six and twenty-seven.

Q. What do you estimate the population of Newark now?

A. About two hundred and sixty thousand.

Q. How long do you reckon your fifty millions which you have provided would take care of the City of Newark from the year 1892?

Mr. McCarter: He didn't design that scheme.

The Court: He is testing his judgment.

A. About thirty years from that time.

By the Court:

Q. You expect to reduce it somewhat by putting in more meters?

A. We can extend the life of the plant by the further introduction of meters as we reach the present development.

Q. You mean without meters you judge it would about be reached in thirty years, from now on, from 1892, the fifty million limit would be reached from that?

A. As maximum draft it would be reached before that, but average draft would be good for about that period, between twenty-five and thirty years from 1892.

Q. So in putting in the new works Newark planned for about thirty years, did it?

Mr. McCarter: I object. I don't think that is competent.

The Court: No; he didn't have anything to do with it.

Q. Have you figured to see how many years the Jersey City supply of fifty million is?

A. No; I haven't figured on that.

The Court: I thought that was seventy million?

Mr. Corbin: Seventy million is the ulti-

mate capacity of the water shed, conduit and tunnels, but the pipe only fifty million.

A. Of course, the territory that will be added to the City of Newark during that period effects the number of years the plant would be available.

Q. Your plant in Newark is paid for by bonds, is it not?

A. Yes.

Mr. McCarter: Is that material?

Q. About three and three-quarter per cent.?

A. Four per cent.

Q. Sells for price which makes them worth about $3.75, don't they?

A. $3.60 about.

Q. The water works pay the interest on the water debt?

A. The City pays a portion; the Water Department pays all but about five per cent.

Q. Ninety-five per cent. of the interest on the bonds?

A. Yes; but they have no revenue from hydrant rentals.

Q. Some of your bonds were retired by operation of your sinking fund some years ago, quite a large proportion?

A. They were (refunded).

Q. Some two or three millions were actually retired, were they not?

A. They were (refunded).

Q. I don't mean present.

A. We are carrying—

The Court: Answer the question.

A. I answered; I said no; Mr. Corbin insisted it was. The original bonds had no sinking fund provision; the present water plant is carrying the debt.

Q. All the cost of the Newark water works for half a century practically is still outstanding?

A. It has been taken care of in the way of refunding.

Q. Is the principal still outstanding?

A. Practically.

Q. What width is the ordinary lay-out of lots for the City of Newark houses?

A. Twenty-five feet.

Q. Some of them less, are they not?

A. They won't average less; few less.

By the Court:

Q. Population much more dense than Long Branch?

A. Yes, sir.

Q. Do you know what the area of the City of Newark is?

A. Twenty-four square miles, I think, it is.

Q. Now, with regard to the pressure to be maintained in the City for fire service where fire engines are used—doesn't sixty pounds per square inch for mains afford pretty good fire service?

A. Yes, sir.

The Court: He said so; he said sixty pounds was high.

Q. And when the engines are in use throwing water upon the fire if that plug pressure of thirty pounds were maintained you would have plenty of water, wouldn't you?

A. Yes, for fire engine service.

The Court: If your pipe is big enough you have plenty of water.

Q. You don't wish to be understood it would be reasonable to require of us to maintain sixty pounds while the fire was in progress, do you?

A. No, I wanted to qualify that; I think I did qualify it in my direct evidence.

Q. Do you think it would be reasonable to require us to maintain sixty pounds while seventeen water carts were drawing, say ten at a time?

A. Not all of them; no.

The Court: If your pipes are big enough and you use steam fire engine, any pressure is sufficient that keeps you from sucking air, if the water is there, that is all; I don't want this record to state at sixty pounds; I don't think Mr. Sherrerd meant that.

A. No; I didn't mean that.

Q. Sixty pounds is a good static pressure, isn't it, generally, this size of low buildings?

A. Yes, sir; you want volume as well as pressure.

The Court: Put that down; the volume of water that is produced is quite as important as the pressure.

A. If not more so.

Q. Now, in regard to the number of additional taps in a house. Isn't it a fact that where the number of taps in a house—isn't it a fact that where the number of taps is multiplied the likelihood of many people drawing at once is increased, and, therefore, you must keep up a larger volume, a greater pumping capacity?

A. If they draw from very many fixtures some of them won't get the water they want.

The Court: That all depends on the service pipe.

Q. But the more the taps are multiplied the harder it is for the water company, isn't it?

A. If they are all in use, of course.

Q. Now, you spoke of standpipe 30x100 costing $12,000 to $15,000; that is a guess?

A. Yes, sir; just estimate.

Q. Don't you think a standpipe thirty feet high by fifty would be just as expensive?

A. I haven't figured it out.

Q. You don't think rates applicable to a dense city like Newark under conditions here with gravity supply are properly comparable with Long Branch?

Mr. McCarter: They are not offered as such.

A. I would say in regard to that, we have to carry first cost, which is pretty high here, too.

Q. But you don't carry it?

A. Yes, sir; we do carry it; we take care of it.

By Mr. McCarter:

Q. Do you call that a populated or depopulated region, that proposed reservoir of yours?

A. You mean the drainage area?

By Mr. McCarter:

Q. Yes.

A. That is very sparsely settled.

Recess.

Mr. McCarter: We are nearly through. Mr. La Monte, perhaps we can agree. Can we agree upon the number of miles of street in Long Branch, irrespective of the number of miles of pipe?

Mr. La Monte: I don't know, excepting I have heard.

Mr. McCarter: What have you heard about it?

Mr. La Monte: I think about seventy-five.

The Court: About seventy-five miles of streets already laid out?

Mr. McCarter: Yes, sir, as against twenty-seven miles of pipe.

The Court: The next question is whether there is any territory that has not been laid out in streets, either on paper or some where else.

Mr. La Monte: It is practically all laid out as far as the limits.

It is agreed on the record that there are about seventy-five miles of streets in Long Branch City.

The Court: How much built on?

Mr. McCarter: Twenty-seven miles of pipe.

WELLINGTON LA MONTE, recalled:

Examined by Mr. McCarter:

Q. Can you tell us how many hydrants were in vogue from the records, were in vogue and in use in Long Branch during the life of the first contract?

Q. That is down to September, 1891.

The Court: Contract between the old company and the city?

Q. Yes.

A. Let me understand you; you mean at the time the ten-year contract was made on September 21, 1891?

The Court: No; before that.

Q. No; as I understand it, there were two contracts, one had expired then.

A. On September 21, 1901, it expired.

Mr. McCarter: There was a contract expired in 1895 and new ten-year contract made about that time expiring in 1901. Now, I want to know if you know from the records how many hydrants were in vogue during the life of that contract?

The Court: From 1891 to 1901?

Mr. McCarter: Yes, sir.

New Jersey State Library

A. No; prior to 1891.

Q. Prior to 1891?

A. I think there was no contract in existence prior to 1891 between the Long Branch Water Supply Company, but there were ninety-two hydrants on September 21, 1891.

Mr. McCarter: I have got it wrong. The situation was, this first contract from 1891 to 1901, and then the new contract was abrogated. How many was that?

A. There were ninety-two hydrants on September 21, 1891.

Q. Do you know the extent of the distribution system in Deal, in the Deal Company?

A. Yes; I am quite familiar with it.

Q. Have we got in your exhibits? Does that show the number of miles?

A. No.

Q. Can you tell us roughly, approximately, the mileage and style of pipe of the Deal plant that was, about?

A. Well, now, let me understand again.

The Court: He means mileage of pipe.

A. Yes; I know in the borough of Deal there are practically two systems of pipe, that is, there was the Deal Water Company piping the southern portion of the borough entire; and then we have been laying pipe and had some laid in the northern portion of the borough. Now, my recollection is that in the southern portion of the borough under the old Deal Water Company there was about six miles of pipe.

Q. Six miles of pipe?

A. Yes, sir, that we have laid, have laid; and counting what was laid in the northern part of the borough, about four miles more, about ten miles in the borough of Deal, I should say we have today

Q. One of the items in Schedule A1 is the Deal Water Company plant, cash paid $71,805.50. Now, I am asking you about the distribution system, the extent of the distribution system in Deal that existed at the time of that purchase?

A. Yes, sir; there was about six miles of pipe running from four to twelve inches in diameter, that is, in the southern portion of the borough; it shows on our map here.

Q. The rest of the plant consisted of a pumping station and standpipe?

A. Well, yes; yes, a tub.

Q. A tub?

A. Yes, on top of a trestle.

Q. Elevated tub?

A. About sixty or seventy thousand gallons capacity, and artesian wells, and couple of lots there in Deal.

Q. Do you know roughly, approximately, the size of the pipes in the distributing system of Deal, this old Deal?

A. Yes, sir; running from four to twelve inches in diameter.

Mr. McCarter: Mr. Van Note is not here, but my impression is that that is our case; he may be in in a moment or two.

Mr. Corbin: Do you want to read this affidavit you offered this morning? This is Pratt's affidavit; the original is in Trenton.

Mr. McCarter: The only part of the affidavit I care anything about reading are the figures: "On account of the growing necessities which require the laying of larger pipe in many instances, with the concurrence of the directors and promoters of the company a pipe has been laid under the contract as follows: These figures, I think, correspond with the memorandum I have: Of 36 inch

main, 42,609 feet, whereas our contention will be that the contract called for 47,500. Of 24-inch main, 1180; contract called for none. Of 18-inch main, 36,437; contract called for 33,465; 12-inch main, 4,385; contract calls for 10,315; 10-inch main, 5,581 feet; contract called for 11,440; 8-inch main, 2,910; contract called, according to this memorandum of mine, 3,070 square feet. I don't care to read any of the rest of the affidavit.

Mr. Corbin: I think it is only fair to call attention to the fact that that affidavit is dated November 22, 1902. There was some pipe laid after that; I don't claim there was much, but there was some.

Mr. McCarter: That will save us the trouble of sending for the original.

The Court: That is all right; that is quite satisfactory.

Mr. Corbin: I have marked it this way: "Pratt's affidavit in the Hippel case, offered June 3, 1904, offered by complainant in place of the original."

I would like to know if counsel are prepared to state what their claim is; they are complainants.

Mr. McCarter: I hardly feel capable of—of course I am willing to make a statement of our claim.

The Court: I would like to understand just where we are at on that.

Mr. McCarter: I will say to your Honor I do not feel prepared to-day to make the final summing up on this case, but will be very glad to open all I can. I can make a little argument here that may be a little more than counsel expected. I will do the best I can.

The Court: What I want taken down is, what remedy you expect, what points you want submitted to the Court.

Mr. McCarter: Yes, sir. I want to offer these Sherrerd maps.

The Court: They are all in.

Examined by Mr. McCarter:

Q. Have you ever made any estimate of the number of houses in Long Branch that are not using taps?

A. No, sir.

Q. There are considerable, are there not?

A. Yes, sir.

Q. You don't know what proportion of your citizens use water?

A. No; I couldn't tell you.

By the Court:

Q. But nearly all?

A. Well, no, I won't say.

By the Court:

Q. You haven't carried your pipes in front of some of them?

A. No, a good many, of course, a good many cases they come several hundred feet to the mains on the street contiguous, but I can't tell you how many pipes.

Mr. McCarter: Your Honor will remember the way this case came up; that the contract, the second contract had been abrogated by the Court, and the City of Long Branch received a threatening communication from the President of the Water Company to the effect that unless they imme-

diately signed that contract again that they would cut off the water supply.

The Court: Wasn't it unless they paid up?

Mr. McCarter: Whatever it was, there was a threatening letter, which was proper enough in its phraseology and contents, I think, from their standpoint. I suppose it was intended to provoke exactly what happened, namely, an application to this Court for an injunction to prevent the threatened cutting off of the water on the ground of the danger to the people, and of course—I framed the bill—I saw the necessity right away of our doing equity and offering to pay something, and I did offer.

The Court: It struck you in that way?

Mr. McCarter: It struck me in that way.

The Court: It didn't strike the Jersey City people the other day that way.

Mr. Corbin: Something else struck them, though.

Mr. McCarter: I wasn't in that case. So we tendered in that bill a willingness on our part to pay—

The Court: What was right.

Mr. McCarter: What was right. And we came before your Honor—and it developed in the course of the argument—Judge Collins being on the other side and I think Mr. Fay on the city side—that the real dispute between the parties was concerning the private rates, and Senator Blodgett, it was stated, took the position that that did not concern the municipality at all, and that as long as the public rates were fixed, that was all they were interested in. And your Honor, off hand, without committing yourself

finally, as I understood it, took the contrary position, and in the debate that followed it was suggested by the Court, to which both sides acceded, that the bill should be amended in a way that should submit to the Court—

The Court: By the complainant.

Mr. McCarter: By the complainant, the settlement of both the public and private rates; and your Honor said that if we did submit that and paid in a certain sum down and so much thereafter per month you would grant the injunction; and we did amend the bill—we did pay the sum down within the proper time, and we have been paying, as the evidence shows, the monthly stipend since. Now, it is perhaps in order to answer your Honor's question, therefore, that I read the amendment:

"IX. Your orator shows and hereby tenders itself ready and willing to pay any sum that may be found by this honorable Court, for the privilege it has enjoyed for the use of water for municipal purposes through the mains of the said defendant since the expiration of said contract on the 21st day of September, 1901, and it charges that it would be inequitable and productive of irreparable damage to your orator and its citizens at large if the said water company under this condition of affairs should be permitted to cut off the public supply while it continues to enjoy the privilege of serving private consumers through mains which occupy the public streets, alleys and roads of Long Branch, some of which were laid under the contract which has expired, and others since that time, and during the negotiations aforesaid; and also by amending the prayer of said bill

by inserting therein, before the prayer for general relief the words And that the proper and fair rates for water heretofore furnished and hereafter to be furnished to the complainant by the defendant, and to be hereafter furnished to private consumers in Long Branch may be ascertained and determined by this Court.' "

The Court: Let me interrupt you there and give you a thought that just come in my mind. The matter of furnishing to private consumers is one that I have thought to-day—I don't know as I told you—that is a very difficult thing for the Court to do, and involves—it is an impossible problem, so to speak. Isn't it enough for the Court to say that certain proposed rates which the defendants have now made, you know, by schedule, are not unreasonable? You see, as I recollect the granting of the order when that argument took place, it was stated there either by affidavits or orally, in such a way that the Court took it true, that the rates—there were no rates established, that this thing for one man and another thing for another man—there never had been any rates, and that nobody knew where they stod; that is to say, water had been introduced to a house years ago with an agreement there would be such a charge; then somebody else about under the same circumstances would have water introduced and be a different rate. There was no uniformity, in other words, and that was the thing that was in my mind. Now, the uniformity, decent uniformity or practically approximate uniformity of course is right and necessary, but when you come down to attempt to do what you ask me to do there, if the defendant pro-

duces rates which they have established, as they have done as I understand it now, and say they establish them some time recently—

Mr. Corbin: June, 1903; it was before this.

The Court: June, 1903, yes, before this; if the Court can say those are reasonable or unreasonable, isn't that about all that the Court can do, that is practical for the Court to do—at their peril? You see the details are so very difficult to arrange. I only throw that out. I don't say what these are. Suppose if I should say, take it altogether I think they are charging say so much too much, or about right, and I can't say that is too much, or something like that?

Mr. McCarter: Your honor's recollection is not altogether correct about it.

The Court: Probably not.

Mr. McCarter: The situation was this. In June, 1902, a year before June, 1903, and bebefore the new contract was ever adopted whatever month it was, I don't know when, before that was adopted a schedule of rates which differs very little from the present schedule had been adopted, promulgated and it had been issued in lieu of the old humdrum affair. Now, the Hicks contract that was set aside simply provided what the public rates should be and then said the private rates should be as per schedule, and the difficulty was that that schedule was a great increase, and we thought a great hardship, and the bill was framed expressly on the idea that while that little, quite harmless little sentence "as per schedule" didn't seem to signify much at the time, that it meant this inordinate increase that had occurred by this schedule of 1901, whatever it was. Now, since this litigation, as I understand it—

The Court: You mean the original litigation?

Mr. McCarter: No; since this litigation the present schedule as of June, 1903, has been adopted, which modifies to a certain extent the rigors of the schedule I have referred to.

The Court: It is an easier schedule?

Mr. McCarter: Little bit easier; it has come down in minor respects; but it is not identical, so your Honor is mistaken in the supposition.

The Court: I recollect that was a very prominent point that was made before me; I am quite sure of that.

Mr. McCarter: Prominence was given to the fact that whereas before it was hoger moger and hodge podge, now it was uniform and consistent and uniform, what we call the high rates of this schedule; and it would seem to me that practically all this litigation had been fruitless, and the whole scheme of our coming here, making this tender and doing what we have done, discontinuing our suit at law, or rather letting the other side discontinue the suit at law, if we are not to get from the Court one of the things that we came here for, namely, the ascertainment of the rate to private consumers, notwithstanding the schedule that has been in vogue for over a year, for the future, and the ascertainment of the public rate for the past since the expiration of the old contract and the future as well.

Now, of course if your honor thought, which we hope you won't think before we get through, that the schedule as adopted is a proper schedule, then you could simply, I take it, in your decree adopt that schedule.

But it would seem to me a misfortune to us all, having gone to the expense and trouble that we have in trying this question before the Court, a forum that we both entered under the conditions named, if the Court did not now take the responsibility of fixing these rates for the future, as the amendment of the bill asks the Court to do, and as we all understood we were here for the purpose of doing.

Now, I am frank to say, as I suggested this morning, that that may not be, after all, a very satisfactory thing. I don't mean in the amount of the rates—I don't suppose the conclusion will please both sides—but I mean assuming you did please both sides about the charges, how long will they prevail?

The Court: I will take it for granted that the decree should be subject to revision.

Mr. McCarter: I meant by that, what shall it be, a rate as of a ten year contract, as was the old contract, as these parties are glad and willing to contract for? I think we ought to discuss frankly, and I will say to the Court now I have not consulted with Mr. Van Note about this, but my own idea about this thing is that this Court, who has got a good big way of looking at things sensibly, would say, "Why, what was intended by that prayer was that I should fix the rates for a term that corresponded with the term of the old contract, namely, ten years, and that these people should have an end of this difference for a period for which they undertook to contract before."

The Court: It seems to be kind of a statutory period, don't it?

Mr. McCarter: They generally do.

Mr. Corbin: The Law of 1888 allows a town to agree for a period not exceeding twenty-five years.

The Court: I thought it was ten.

Mr. Corbin: This varies. I think Long Branch is under the general law; I am pretty sure it is.

Mr. McCarter: So that I think, perhaps, Mr. Van Note, I can say, don't you think so, that we would be glad to have whatever rates are fixed be understood to be fixed for a period of ten years; have the matter settled. This has been an expensive litigation. Your Honor knows I do not work for nothing, these engineers do not, and Mr. Corbin does not; and it is costing both sides something here, not to speak of the other interests in the case, and we would be foolish to have the Court fix a decree that would go in operation for a month and then have to go all over it again.

The Court: That won't do.

Mr. McCarter: I think the sensible way to look at it is that you are called upon to determine the compensation this Town should receive for the pipe supply from the time of the expiration of the old contract down to the present time, and on for balance of ten years, and the private supply from the time of the filing of this bill for the balance of ten years, and that that decree should in fact adopt perhaps the form of a contract, if you will, or the material features of a contract.

The Court: All I can do would be to say the complainant must furnish this water, and they are entitled to charge so much for it.

Mr. McCarter: Yes, sir. Now, whether you would in that decree undertake to make

any provision, which, I think it is evident from the evidence this morning, should have been inserted in a contract between reasonable people in regard to the pressure, is a matter that it seems to me you ought to consider; that the rates I am going to make, and settlement of this controversy I am going to determine this thing, I am going to determine it in a reasonable way; I am not going to require this City to pay so much for water that is not delivered in a way that should be delivered, and it seems to me—

The Court: I will make this suggestion now about that, it is this: To fix the pressure which should be maintained can only be done after a somewhat expensive experiment and observation. The other alternate that has struck me—and I don't adopt anything, I just throw it out now.

Mr. McCarter: I understand.

The Court: Is this: That there should be always water sufficient for a certain number, naming the number of steam fire engines.

Mr. McCarter: Well, now, whatever is necessary about that, I think, should be considered; that is my view about that.

The Court: It don't make any difference, particularly with a steam fire engine, except, of course, as I remarked during the taking of the testimony, a steam fire engine will do more work with less coal if there is what is called a back pressure, if the water is pressing in; but if, independent of that, which may be thrown out, I think, of consideration with propriety, subject to what both counsel may say on that subject,—if there is always water so that the engine don't suck air, so they don't suck air back through open faucets, all that sort of thing, that is

all they have any right to expect, and will be a very simple test; provided also that there shall be a clause in case of fire the street sprinkling shall cease immediately.

Mr. McCarter: Yes, sir, some provision of that kind. Your Honor is very much at home in those things, much more so, I am perfectly frank to say, than I. And all I can say about those things is, we are advised and we think that was a subject of criticism in the contract.

The Court: You had the contract. In case they undertook to do it and there was deficiency it might be a very serious question whether they were not liable too for heavy damages.

Mr. McCarter: Now, we are not here to get snap judgment or get the better of anybody. Naturally from the circumstances that have already appeared in the case, it has already appeared to your Honor this city and this Water Company are naturally quite close. This is in one sense a friendly fight.

Now, I want to say to the Court that both Mr. Van Note and I have approached and endeavored during the trial of the case to conduct our side of the case somewhat as a friendly arbitration, not anything technical. I think it has been so on the other side.

The Court: Oh, yes, both of you.

Mr. McCarter: We do feel that there is a serious difference here. We do not want to let your Honor think we are surrendering and falling into the hands of our friends.

The Court: You have no objection to their falling in your hands.

Mr. McCarter: We don't want your Honor to feel that that is true, because so far we are willing to abide by anything in this case. We want your Honor to feel that this is a serious difference between these two parties, and that, therefore, while they are friendly and trying it in an open, frank, candid spirit, they feel there is a great difference. The fact that Mr. Blodgett is occupying a dual position does not in any way do away with that feeling. That was perfectly understood at the time this suit was continued, and I personally have been charged by the people down there with the duty of presenting this thing from the standpoint of the Municipality,—and Senator Blodgett, I think, has behaved very handsomely in the matter, and not undertaken to use his dual position in any way, as far as I can see, and perhaps I can see it all, that was at all improper. We have had a fair show. Your Honor suggested once we had not—

The Court: You thought you had not.

Mr. McCarter: I mean from the other side, and from the city and from the Company; that it is a controversy friendly in character, but still a controversy, and one that has got to be adjusted.

Now, so far as public rates are concerned, it shall be our contention that for past and future the facts that were fixed by the Hicks contract were fair.

The Court: Let me see, what were those?

Mr. McCarter: Twenty-five dollars a hydrant, and Sixteen hundred dollars for sprinkling the streets per year; that was the rate fixed in the Hicks contract; that

was a Hundred dollars a wagon for sixteen wagons per year, or if they used more they could use them without paying any excess. That was the Hicks contract; that was the contract which Mr. Blodgett in his letter wanted us to renew, and so far as our attitude is concerned, after all this investigation, we feel that we cannot conscientiously ask your Honor to give us a better rate for the public supply than that. That is my opening on that. I will give you more advanced reasons, of course, when we come to it.

For the private supply we have a difference, and, while I do not expect now to elaborate my argument on that point, because I haven't got it very well crystalized in my mind, I want your Honor to approach this question—to bear in mind that we are peculiarly situated down there at Long Branch, and indeed in all these sea side places, namely, we are at tide water practically, and that any streams or supply of water that we tap we are not beholden to people below us who can charge us for that water. In other words, we do not destroy any water power; we get our water like we get grace, free. The only thing is we have to put in a distribution system and whatever reservoir was necessary in order to utilize the water that God has given us there. We have to pump it, but we don't have to do as your Honor has to do up at Moristown and companies have to do at other places who are away from the sea level and get streams below them whose supply is going to be cut off, pay for the water. That it sems to me is an important thing, and I shall rely on that fact as a reason why the local rates in that neighborhood are import-

ant, and as a reason why the rates that obtain in the Philippine Islands, or up in Massachusetts, or even up in Ridgewood, or even —if I may say in respect—up in Morristown, ought not to pertain to this locality which has a difference that is important. We are relieved altogether from consideration of paying for water as such. Newark spent I don't know how many Hundred of thousands of dollars in condemning the mill sites on the Pequannock water sheds—I am counsel in the case by the way—had to pay for the water—and I guess other companies that I know something about have had to pay Thousands and thousands of dollars for water. The Long Branch Water Supply Company or the Tintern Manor Water Company, when they built this big plant over here at Newman Springs did not have to pay a Dollar for the water; all they had to do was to buy the land in which to impound it and impound it there; and that cost which pertains to any other supply generally is their only investment, together with the pumping.

Now, that being the situation, we shall further contend that Long Branch—this is a dispute not between Seabright, Monmouth Beach, Lohmor, Deal and all the outlying sections and this Water Company, but it is a dispute between Long Branch and this Company—and that a fair consideration of the evidence, although perhaps I may not receive a nod of approval to this remark from the Court—our contention will be, and I think the evidence will bear it out, that for Long Branch alone, leaving out Seabright and Monmouth Beach and all those four or five miles of sea coast below Long Branch, that they have six and eight inch pipe supply-

ing all that vast amount of cottages all the way down there, that for Long Branch alone the supply has never been adequate—I think it was about up to its limit. I concede that with the outlying territory thrown in—I am not speaking now of the coasts brought in by the Tintern Manor, but I am speaking of Seabright and Lohmar and all those places that the Long Branch Water Supply Company has for twenty years furnished—the supply was perhaps at certain seasons of the year exhausted.

Your Honor will remember that Mr. Lake, who was the engineer in charge of the pumping station at Takanassee for years, testified, and so did another man whose name I have forgotten—Lake is the man—testified that with the exception of about ten days every Summer water flowed over the dam at Takanassee and out into the outer lake, thence into the ocean, plainly evidencing that there always was an excess during his time, and he stayed down until the amalgamation,—that the water there, that about perhaps ten days in the very driest season the water did not flow over the dam; but they never had a shortage; they never were short, but they were very near it; no doubt about that; I am not trying to exaggerate that.

The Court: That is the impression made on my mind.

Mr. McCarter: Yes, sir. Now, that being so, a supplemental supply, taking in the fact that Monmouth Beach and Seabright and those other outlying territories are furnished by this Company, was undoubtedly necessary. That I concede,—don't want to make

any other contention,—and if the Court contends, we feel that some part of that supplemental supply, in view of the probable growth of Long Branch, is properly attributable to Long Branch, which perhaps we will deny, then we will contend that only such proportion of the additional necessary supply as is proper can be charged to Long Branch in order to enable this Company to justify an increase in rates. We shall advert to the fact that notwithstanding what our friends call the absurdly low rates that obtained in Long Branch under the old regime, we shall not fail to direct your Honor's attention to the fact that for the year after that that Company paid a handsome dividend of five per cent. to its stockholders.

The Court: Five per cent. a year or five per cent. twice a year?

Mr. McCarter: No; five per cent. a year, I think it is.

The Court: Do you think that very handsome?

Mr. McCarter: Well, they were enabled to make money on those absurdly low rates; mind you, a man that used to pay Ten dollars is now charged Thirty-two dollars for the same service. On the Ten dollar theory they paid five per cent. dividends.

The Court: Isn't this the fact, that that was exceptional? You don't mean to say that everybody in Long Branch was increased three times, do you? Wasn't that one of the old taps?

Mr. McCarter: No. We are going to point out the evidence of Mr. La Monte, who has been quite frank and candid with us all generally, I think, that the rates have been

changed, I think he said anywhere from two to three increase on the average, two to three times.

Mr. Corbin: Oh, no.

Mr. McCarter: I think that is so in his evidence.

The Court: That is new to me, because the income under the new rates would show that.

Mr. McCarter: Well, there has been a decided increase. I don't think they went back any. That is about the situation. I haven't the testimony at hand now.

The Court: It didn't make any such impression as that on my mind. My recollection is, roughly now, that Mr. La Monte did say that in some cases they had increased from two to three; but it didn't make that impression that he meant to say that the whole income had been increased.

Mr. McCarter: Of course their expenses have been vastly increased; but what I mean to say is, I think I can fairly show the evidence that will demonstrate the fact that there has been a very great increase in the private rates here to such an extent that while the common rate before was Ten dollars, now the single rate is Eighteen dollars; no doubt about that. Mr. La Monte, I take your own schedule, Kellogg house standard is Eighteen dollars; now, the old standard, according to Mr. Conant, who was here, was Ten dollars.

Mr. Corbin: Minimum.

The Court: The minimum is Eight dollars now.

Mr. McCarter: The minimum on meter rate?

The Court: No; the minimum on their schedules now, one tap.

Mr. McCarter: One tap. No house has simply that.

The Court: Plenty of them.

Mr. McCarter: It don't appear so. I don't know.

The Court: Don't have to prove that; everybody knows that; I think that is common knowledge. You can go through a town like Long Branch or Morristown you will find a large number of houses with just one single faucet in.

Mr. McCarter: I simply say this, that there has been, as appears by Mr. La Monte's evidence, a decided increase in the rates. Now, there is no question about that, a decided increase in the rates, and we have shown several samples, not selected on account of their hardship, but samples of men whose rates had been changed anywhere from from fifty to a hundred and fifty per cent. increase in the rates. We will satisfy the Court about that. Now, that being so, the question arises, why is it necessary for this Company to do this?

The Court: They won't probably justify that; they probably won't in arguing justify that; I don't know.

Mr. McCarter: Well, the question is, why is it necessary? If there had not been an increase all this controversy would not be here. We are not making this fight at Long Branch for Rothenberg and for Kahn and the two or three little witneses that appeared here and gave evidence of increase. We are making this fight because the contention is there has been a decided increase here, and that is the fact, because the evidence

shows it. That being the point, why is it necessary? Some motive must exist for it, because they are not doing it to be hoggish; they feel their life depends on their good will down there. It is foolish for them to simply charge a higher rate because they wanted to. They have it. Now, why do they have it? They have it because they have gone into this big scheme. That is our contention; and they are endeavoring to charge to Long Branch an undue proportion of the cost of the big scheme. That is the reason why, I think, that we must conclude that these, what we call inordinately high private rates, have been fixed. Now, we shall argue what is perfectly obvious to the Court, that that vast territory, that plant is built, Senator Blodgett said, for fifty years, for discounting a long time, half a century; and we shall argue also that too much was paid for it. But assuming that it was properly paid for, that they cannot charge it all to us. It is improper for them to charge, as Mr. Corbin suggested in his opening, two thirds of the value to Long Branch, which is unfair and improper, and that no equitable consideration exists that would justify it. On the contrary, while we concede, if you will, if they have a right in view of their having supplied to you and the other outlying territories, that it was necessary to supplement the supply, it wasn't necessary to make the tail wag the dog and to put in this great big supply and charge the whole of it to Long Branch, or even two-thirds. Your Honor will remember that Senator Blodgett testified that the old supply at Takanassee was probably as free from contamination as any supply could be, and that with proper poli-

cing and care it could be well taken care of. That, therefore, has served the purpose for twenty years and I know of no reason that justifies its abandonment, except the fact that this Company has built an enormous plant over here at Newman Springs, and they do not want when the time comes to run two engines and keep up two plants; but, I think, that is an unfair reason to charge Long Branch, and make it necessary to charge Long Branch with an undue proportion of the cost of getting a supplemental supply. Now, what would you add, therefore, is a fair question to me, under those conditions. I am not criticising their getting the Newman Springs supply. Perhaps in their judgment that was the best thing to do. The fact that Mr. Sherrerd presents them with another one, it does not necessarily follow that Sherrerd is right and they are wrong. I don't mean that.

The Court: If they exercised sound judgment and come to that conclusion as public servants you are rather inclined to admit—

Mr. McCarter: I mean to say they had a right to do that. We are not here to run their business. I am trying to be fair about this thing; but if your Honor is satisfied, and I think we can demonstrate from the evidence of Mr. Sherrerd and other evidences in the cause, that that Takanassee supply could have been supplemented in a way that would have amply taken care of this high demand which exists during the summer months only,—because there is no question this is ample for the winter and will be ample for fifty years down there, no question about that,—the curious and peculiar condition being that it is this summer supply only

that we have got to look out for, if your Honor please,—and we can show your Honor that by some other scheme that is feasible and practicable, whether it be the scheme such as Mr. Sherrerd suggested, or a scheme of pipes, driven wells, such as at Belmar, at Asbury Park, at Deal, at Allenhurst, at Freehold, at Red Bank and at Atlantic Highlands, on every side of Long Branch, except the ocean side, and that that kind of a supplemental supply to take care of this dry weather flow in the summer months would have supplemented sufficiently this supply,—then I think we have from those figures of the cost, from the figures of the cost of such supplemental supply, a fair criterion to say "Gentlemen, if you saw fit in your wise discretion to go to Newman Springs and make this enormous outlay and provide for fifty years hence, the fair equivalent to charge of that cost to Long Branch would be what these other supplemental supplies would have cost Long Branch to have supplemented the supply." That will be our argument in regard to that.

We are not here as socialists. We do not think because the Tintern Manor Water Company happens to be a corporation, and our Mayor happens to be its President, that therefore they have no right, or that they are not entitled to a fair return for their money, and that they are not authorized to exercise a fair discretion as directors and managers,—not at all.

The Court: Your point is that Long Branch ought not to be compelled to pay them the present income on a speculative investment?

Mr. McCarter: That is it exactly.

The Court: For instance, the investment, you say, big enough for fifty years. That means such increase of population as shall arise in that time anywhere within reach of its capacity to supply.

Mr. McCarter: That is it exactly. Now, we want to rid the Court and rid our friends on the other side of the idea that we are socialistic about this thing. Quite the contrary. We want them to make a fair return for their money; but we do not feel, having spent Fourteen thousand dollars to get this supply that extends all practically through that neighborhood—

The Court: Does that include the old plant and all?

Mr. McCarter: Yes, sir. Ninety-two and odd thousand dollars for Tintern Manor—nearly a Million nine hundred and odd thousand for Tintern Manor—the whole business—that they have any right to say we shall have two-thirds, or that it is fair for us to have to adopt the thing. The thing this Court is charged with giving these people is a right to have a fair investment. Long Branch also has rights, and Long Branch only should be charged with such part of that investment as would have been fairly necessary in order to give them a proper supplemental supply.

The Court: I will ask you a question. Suppose a man like Mr. Sherrerd, or a committee of three, would have come to the conclusion that this little pond that could be made up there, three hundred acre pond—I will call it reservoir, would be sufficient for the probable growth of Long Branch, and that other towns within the scope of the original charter of the old Company—

Mr. Corbin: Ocean Township.

The Court: Ocean Township—would have done probably for five or ten years—said now, it won't go beyond that, and we can't tell how much Long Branch is going to grow; we have got seventy-three miles of street on paper and only twenty-seven of them piped; we don't know anything about what that is going to be, nor do we know what is going to be done in the other towns there. Now it will do, jack pinch, short time, few years, but that is the end of it; we can't get any more out of this, and we are not willing to say to you that will be a good investment to make. Now, if you have got a chance at this time to procure a supply which will cover Long Branch for the ordinary period of twenty or thirty years we think you had better do it. Now, what do you say to that?

Now, I will tell you this. I have been all through this matter of water supply in the Courts myself, and we had a fight with Mr. Olmsted about taking in a little spring that he had that affected his mill, somewhere in the latter part of the Ages I think—and we proved there we thought we needed it—great fight about that, reservoirs, and all that sort of thing—I thought we had water for twenty years, but in less than ten years we had to take more, in less than ten years—and we had no difficulty in proving to the satisfaction of the Supreme Court, Justice Magie presiding, that we needed that additional supply; and since that, this year we are now putting in a very large supply, because I am scared to death every minute for fear if there comes a drouth—not only taking that Olmsted supply, taking in one

twice as big as that since, we are now short, in danger of being short if there is a drouth.

Suppose the engineers talked that way with them, do you think it would have been worth while to spend any money on that?

Mr. McCarter: I couldn't say.

The Court: You will find if you look at what the Judges said in that case—they said it was the duty of a company to be prepared for the worst way along ahead of time. I don't know as they used the expression, but I did in argument, there is no known end to a drouth. Now, suppose they had said that will do for five or ten years, but you can't count on it beyond that?

Mr. McCarter: Well, ten years.

The Court: That is the utmost, Mr. Sherrerd says; what would you say now about the propriety of spending—

Mr. McCarter: I should say in addition to that, All right, now that is good, "sufficient unto the day is the evil thereof"; that isn't the point; but the trend of modern learning upon water supplies is to require the introduction of meters, and if that supplemental supply be obtained, and meters —not all at once pell mell come down like an avalanche, but reasonably be introduced, that supply is reasonably sufficient, so far as we can calculate here, for into thirty years, forty years.

The Court: I don't know about sewer system in Long Branch. Is there any proof of any?

Mr. McCarter: No, sir; there is no proof about it.

Mr. Corbin: They have sewers.

The Court: Complete sewer system. The

more sewers they have the more water they will lose, the more will run to waste, meters or no meters.

Mr. McCarter: I do not understand there is anything unfair or problematic about that.

The Court: I am glad to hear you say what you have now, that the modern trend was in favor of meters. I haven't observed it. If there is any one thing opposed it is the introduction of meters. I know they introduced them here in Newark with fear and trembling, because I talked with the Board of Works about it, and talked with Harrison Van Duyne, men I know very well; they said they wanted to do it but were afraid of the votes. They don't dare to do it in New York to-day, and they don't dare to do it in Jersey City. Of course, they have got to do it, and they have got to come.

Mr. McCarter: Your Honor asked me what answer I would give. That would be the answer I would give, and I think that would be a good answer, if I may compliment myself for a moment; I think it would be a complete answer, and I think it would solve the problem at Long Branch. In addition to that, we are not here with the Sherrerd plan as the only alternative; we are here with the alternative of availing ourselves of Professor Cook's underlying stratum of water there, of which there seems to be a plenty, which could have been brought in to supplement this supply at a very moderate expense.

The Court: There wasn't any proof given about that, but I happen to know this; I was interested on behalf of a banking insti-

tution in Morristown in loaning money on the bonds of Asbury Park or Ocean Grove, or somewhere down that way, that very plan, and I think I inquired of the men that come from there whether they didn't find the supply shrunk and fell, and I think he said it did.

Mr. McCarter: No, sir; the supply was ample.

The Court: He said they had to sink a different well.

Mr. McCarter: They had two stratas of water.

The Court: You take the whole coast—the question wasn't asked Mr. Sherrerd—and you supply all of that coast, the question is whether it won't run dry like a well. I don't know where you are going to. It is admitted it don't come from the ocean; it is admitted it comes from the interior, it is outcrop, and the amount that comes in there is limited. I don't know anything about it.

Mr. McCarter: We have the facts in the case that all around they are doing it with success. Mr. Coffin says they are using it down at Asbury Park where the population in Sumer and Winter is double if not triple that of Long Branch, with perfect success. They have five hundred foot level, got a little scarce, sunk down deeper and get all they want good water, after they filtered it is all right.

While it isn't in the case, I may say to the Court and counsel here that I met the Secretary of the State Board of Health the other day on the train, and I said, referring to this case, that Coffin had been on the stand, and that somebody had suggested

that the water as Asbury Park wasn't right. He said, that isn't so; it is very successful, and good; the filtering takes away the discolor; ther is nothing bad about the color, only unpleasant to look at; it is satisfactory in every way. Asbury Park has just three times the population of Long Branch, and they have nothing else but that, and they have plenty; they have all around; and I say there is a great deal of attention to be paid to the suggestions of Mr. DeNyse. Your Honor don't seem to take much stock in it, but I think I can show your Honor when I come to argue this case that they were all right, and by the expenditure of about Two hundred thousand or so on it originally a complete supply, supplemental supply in Long Branch can be readily had at that point. Now, if you can get a supply by driven wells for Two hundred thousand, or get a supplemental supply from the Sherrerd scheme for Two hundred and twenty-one thousand, somewhere in that neighborhood, make it Two hundred and fifty thousand dollars, if you will, then you have got some basis of figures to take from the gross cost of this grand scheme here of One million, four hundred thousand, and say how much should be applied to that cost of this thing. Now, that will, therefore, be fair, and if this Company cannot pay its interest on its bonds, and all that kind of thing, from Long Branch, then it will have to raise the money, as we think, but it isn't fair that they should try to get it out of us in execessive rates.

Now, we shall compare the rates of the territory contiguous and adjoining, rather

than that of the up hills and down dales and other parts of the State and country.

The Court: I don't think it is at all fair to compare the rates of Morristown, for instance. I only brought those down to show how we graded it.

Mr. McCarter: Exactly.

The Court: I don't think anyone can be compared with another, except after making allowance for the difference in condition. Take Perth Amboy, for instance, where they have a steady supply and large quantities—don't have to keep small accounts—get their money in big checks, large factories, where the simplest kind of distribution occurs, but where an expensive mode of supplying it, carrying water across the bed of the Raritan River, all that sort of thing, from way off. How can you compare that with this? Their consumption is as much in Winter as Summer.

Mr. McCarter: I don't care anything about Perth Amboy, hadn't it in mind, hadn't referred to it to-day, Belmar and Asbury Park principally is most like it, and the other surrounding town—and looking now at the old schedules before meters were adopted in any of these towns you will find that without exception. I am within the evidence, that without exception the rate in Long Branch, not metered rate, is greatly in excess of the rates that used to obtain in these surrounding towns.

The Court: I believe it was proven here in each case whether they paid expenses or not.

Mr. McCarter: Yes, sir.

The Court: Then I will ask you this, because it is a vital question in this case: Ought a private company who undertakes

to supply a town, and is permitted by the town to undertake to supply it, to be expected to take the same rates on its investment that a town gets? A town borrows its money for four per cent. or four and a half or five per cent. and supplies the town, and they make enough to pay the interest on those bonds. Ought a private company to be expected to take the same rates?

Mr. McCarter: No; I don't think so; but in each one of these cases these public municipalities to whom your Honor has referred charge themselves nothing for their sewerage, for their hydrants, and all that kind of thing, which we are tending this Company legal and liberal compensation for, and that more than counterbalances the other thing, I think. I am not a socialist. I think the Long Branch Water Company is entitled to a fair dividend. They got five per cent. right along under the old regime.

The Court: I think that is very small.

Mr. McCarter: Well, it is better than a kick in the stomach.

Mr. Corbin: They didn't get that always. One year they paid two and a half; one year four. It is all in evidence.

The Court: I recollect this. This question was asked from a socialistic view before Vice-Chancellor Van Fleet, when they had me down there. The Vice-Chancellor said the water companies were entitled to a fair dividend. I said what divided. He said ten per cent. That was entirely satisfactory to me. I always recollect that ten per cent.; it struck the other side, struck them very cold.

Mr. McCarter: Shall it be five or ten per

cent. on Two hundred and fifty thousand, or shall it be—

The Court: I don't say that they are entitled to make ten per cent.; I don't fix any sum I mentioned that.

Mr. McCarter: We are not socialistic here. Shall it be a fair dividend on a fair capitalization such as the old Long Branch Water Supply Company of Two hundred and fifty thousand, or shall it be five per cent. on—what is it—One million, four hundred thousand which this concern has got outstanding—

The Court: I say from Nine hundred thousand to a Million dollars, is a fair amount of capitalization chargeable to Long Branch. The testimony is that over Four hundred thousand of that has been spent before this enterprise was even organized.

Mr. McCarter: We shall show your Honor that they propose, as the evidence shows, we shall point out to your Honor, we shall show that they propose to abandon that good little supply that has been so good, and with proper care ever will remain, just throw that overboard.

The Court: I don't think so; I don't understand they are going to tear it down or release it, abandon it.

Mr. McCarter: Abandon it.

The Court: Hold it in reserve.

Mr. McCarter: No, sir; abandon it, is the language of the witness; they are going to give that up, they are going to move the pumps away, a concern that they paid Four hundred thousand dollars for, as to which the fair market value of their distributing system, according to the evidence this morning, was a Hundred and twenty-five thou-

sand dollars; call it Two hundred thousand, if you will; call it Two hundred thousand, if you will. The pumps are appraised at Ten thousand dollars apiece; one of them is already gone and they are going to take the other one away, and they are then going to abandon the whole thing. That is the scheme; they are going to abandon it all, a concern for which they paid Seventy thousand, the cost of which they are seeking to charge us with—and throw that to the winds, and bring everything from Newman Springs; and I contend, and I am in earnest about what I say, that it is not fair to expect Long Branch, which needed simply a supplemental supply, to pay any such proportion of this brand new supply, when it is quite evident that for a number of years, at least ten or fifteen or twenty years, especially if they introduce meters, it would have been amply sufficient to have supplemented the present supply with this Sherrerd scheme, or else apparently as far as the evidence goes have given us all we need by the pipes with driven wells.

Now, just a word and I will stop, for I have made this fuller than I expected.

I shall call attention to the fact that the increase, the duplications are grossly in excess of what is fair; more so than any of the others in the neighborhood, or anywhere else much that I know of, and that the rate itself, the original standard house, is higher than exists in the neighborhood of any of the places, with the possible exception of Red Bank, where, as I have before remarked, there is no compensation given whatever for the hundred and odd—Mr. Corbin has made a great point about this, about these Kel-

logg standard houses; now, let me refer your Honor to one set of figures to which we will advert. Freehold is Fifteen dollars; Atlantic Highlands is Sixteen dollars and fifty cents; Red Bank is Eighteen dollars; Asbury Park is Fourteen dollars and fifty cents, and Long Branch is Eighteen. The only one that is up to Long Branch of all these outside places is Red Bank, where they get no charge for flushing of their hydrants—they have over a hundred—where they are promptly paying off their bonds, as your Honor will remember by the evidence of that witness. That is the only town where the Kellogg standard house is within a Dollar and a half as much per annum or per house, as it is here. I shall also contend, as I said before, charging double for two families, charging double for two bath tubs and two sets of faucets, and not scaling it down, is insufficient—

The Court: It is a very difficult thing to arrange. I was in hopes that the declared policy of the Company was to put in meters and give everybody the privilege of putting in meters.

Mr. McCarter: And we shall finally contend on that point, and this is all I have got to say, that in view of the peculiarity here of the Summer population of Long Branch, which perhaps is half of the consumption, as Mr. La Monte said about half of the houses he said he thought it was fair to say were closed half the year—it is unfair to charge them as much as those that are consuming all the year; and that after all, in view of that peculiarity, the only fair way here is perhaps to make some basis, some minimum that will be applicable to all kinds in some

way, that I don't know any head in this State better than your Honor's to fix upon, and then put in meters and direct these people to pay in acordance with the water they do use.

The Court: It would cost a great deal of money to meter them.

Mr. McCarter: Perhaps it would, sir.

The Court: And I should hesitate to make a decree that they should immediately put in meters, or fix any time. It is a very slow process, a very difficult one. If some arrangement of this kind could be made, that they could have meters at once at their request, by renting, the Company to put them in without interest for a year or two, two or three years, and not to pay any rent for the meter in the meantime, the Company to own the meters; I would never think of directing or advising any Company to allow property owner to put in its own meter; the Company should own its own meter and have the right to change and control it. As Mr. Corbin says, it would cost Twenty-five thousand dollars to meter the town; it would be a hardship to put that on the Company, but if some intermediate plan could be devised by which the Company could say to anybody, if you want to put in a meter you can put it in if you will lend us the money to do it with, and we will agree to pay you back that money in two years or three years, or let half of it go against your water bill, something like that, as a compromise, it would simplify matters very much indeed in the mater of fixing rates, because, as counsel has well suggested, a minimum price could be paid, water or no water, and then that would cover all those people that don't

use their water in the Winter time, then a price could be fixed for water commencing the first of June and charging the highest prices for the Summer, and then scaling down from that time on to the end of the year, of the year to commence June, charging less for the months of December and January and February and March, scaling it by the month, and not so much by the quantity.

Mr. McCarter: Right in that connection I want to say one word more, because I want your Honor in thinking about this thing to bear this in mind, because we are evidently going to adjourn in a minute. Mr. Corbin grows poor and says yes, it will cost Twenty-five thousand dollars, and that seems to affect your Honor's mind.

The Court: I think it would be a hardship.

Mr. McCarter: In some way it would, but bear this in mind, sir—

The Court: It wasn't contemplated.

Mr. McCarter: We are entitled to get from the Court a fair rate, and if this Company has impoverished itself by an expenditure there of a large sum of money—

The Court: I can't count that; their security is good; they can borrow.

Mr. McCarter: You have a right to say this Company has made money before and I assume we are going to give it a rate that it can make money. Still, this is a solvent concern, not solvent, and Twenty-five thousand dollars, if that is going to be the cost of that thing, is not necessarily going to be prohibitive.

Mr. Corbin: Won't be solvent very long at the rate we are going now.

Mr. McCarter: I think it is perfectly absurd to charge us with Four hundred thou-

sand dollars, Two hundred thousand dollars of which they are going to throw right to the wind, this old Long Branch plant.

The Court: Every Water Company in the State, and including the City of Newark has thrown away a large portion of their present plant; the City of Newark has thrown away millions of dollars.

Mr. McCarter: Because they were on a polluted stream.

The Court: They put in driven wells up the river.

Mr. McCarter: None of them were successes like this; this is all right. They have no right to abandon that and charge us Four hundred thousand dollars with the cost of it. That is my point.

The Court: They haven't thrown it away. They propose not to use it at present.

Mr. McCarter: Abandon it, is the language they use. I say the only fair way out of this scheme is to make meter arrangements, as your Honor has suggested constantly throughout the evidence.

Mr. Corbin: There is one thing I want to say at the outset. Our water rates are payable annually on the first day of June, year in advance. Because of this litigation and uncertainty here we have not sent out our water bills on the first day of June.

The Court: I did not understand this was to take any effect until after the decision of the Court as to private water rates. I see no reason why you should not collect your private water bills.

September 6, 1905.

Between

LONG BRANCH COMMISSION,
Complainant,

and

TINTERN MANOR WATER COMPANY,
Defendant.

Continuation of examination in the presence of the counsel and Court as before.

WELLINGTON LA MONTE, recalled for
Further direct-examination by Mr. Corbin:

Q. In your former testimony you introduced Schedule A2 in evidence—

The Court: Just state what the schedule is when you mention it by letter.

Q (Continuing). Showing actual cost of plant in cash and stock to the Independent Telephone and Telegraph Construction Company, and among the items is item D for Newman Springs Reservoir, etc., $936,740.77, and you gave that as one of the items of the settlement reached in settling of the contractor. Now, have you made up a schedule of items making up that total?

A. I have.

Q. And have you that schedule before you?

A. Yes, sir.

Q. Now, what materials did you have in making up the schedule? Did you have the precise materials before you which you had at the time of the calculation of the settlement?

The Court: That is, now in making up this schedule for use in this case did you have before you the same materials that were used before when the settlement was had with the contractor?

A. No, I did not; some I had but some I could not find; some were passed into Court here and are in this case.

Q. You could not produce these precise items that you had before to make up that item?

A. Not all of them.

By the Court:

Q. What were here in Court?

A. For instance, pipe laid by the engineer; I hadn't that or any copy of it.

By the Court:

Q. You say it is in my possession, possession of the Court?

A. It is one of the schedules yes, sir; and there were several of those that I could not find.

Q. You had some information on it, did you?

A. Yes, sir.

Q. Now, how near did the total of your items on this examination of details come to the other estimate made with the contractor?

A. Why, difference between $1,000 and $1,500.

Q. That is, that total was $936,740.77; what is the total made up by the items you now make your estimate on?

A. $938,090.84.

Q. So the difference is about $1,500?

A. Yes, sir.

Q. Now, then, will you take up the different items in your present account?

The Court: Your present statement.

Q. Your present statement, or perhaps the better

way will be to introduce it and let Mr. McCarter cross-examine; that will be shorter. Just produce the account and tell what it shows. Start with the general statement you have first?

A. First item, E.

Q. Never mind details; what is it generally? It is classified among other letters, is it?

A. Yes.

The Court: Tell what each letter is, not the result, but what it stands for.

A. A, land for pumping station and stand-pipe.

Q. Give the amount.

A. $10,400. B, reservoir, cost of land in clearing. It reads "Land in clearing, $76,021.98."

Q. Now, there is annexed the details of that in a subsequent exhibit?

A. Yes, sir.

Q. You have got a more detailed exhibit?

A. Yes, sir.

Q. Go on.

A. C, the dam, meaning the cost of the dam, $89,764.11. D, pipe line from the dam to the pumping station, being the cost of construction $23,942.16. E, pipe line, other cost of construction, $46,808.86. F, pumping-station, the cost, $31,339.88. G, the pipe, being the cost of the pipe, $3,766.18. H, valves and special castings, $19,708.70. I, the lead and yarn, $20,884. J, filters, cost, the contract, New York Filtration Company, $45,000. K, pumps, contract, H. R. Wellington, $44.850. L, engineering, $13,854.57. M, interest, $110,799.74. N, legal expenses, $5,103.05. O, general expense, $14,824.42. P, Bond coupons, $6,976.50. Q, taxes, $1,190.87.

Q. That makes the total?

A. Total, $938,090.84. This was the total cost up to the time of the settlement with the Con-

struction Company on March 6, 1903, as near as I could get at it.

Q. There has been some cost since?

A. Yes, sir.

Q. What is that generally, what does that amount to?

A. Well, the contract calls for the completion, complete completion of the plant by the Construction Company after that time.

Q. And what was done further?

A. Well, there was finishing, the building, the pumps were all not in, the filter contract was not quite completed, the boilers were not set, the stacks, nor the grades were not put in, and it was more or less in and uncompleted state.

Q. That work has since been done?

A. Yes, sir.

Q. Now, you have got some additional items here to answer to the request of the Vice Chancellor, I think, cost per foot of the water beams?

A. Yes, sir.

Q. That is R?

A. Yes, sir.

Q. S, what is that?

A. Estimated cost of the Newman Springs Pumping Plant, estimated cost, $133,439.88.

Q. That is part of what is already included in the eight—thirty-eight?

A. Yes, sir.

Q. Now, F is what, estimate cost, running the Tintern Manor Plant from Newman Springs Pumping Station?

A. Estimated cost, $30,530.

By the Court:

Q. A year?

A. A year.

Q. Now, then, you have got annexed details of a number of these large items?

A. Yes, sir.

By the Court:

Q. Have you got the details there of the costs per foot of the grade mains including the cost of the pipe; the cost of the lead, of placing and putting together, cost of trenching?

A. Yes, sir.

By the Court:

Q. You have got those items all in so that the cost of laying a foot of it can be ascertained?

A. Yes, sir; I have.

Mr. Corbin: We will offer the statement, carbon copy, which the witness has there, if your Honor has not the original.

The Court: It seems to me I haven't got that statement. I think I saw that or heard of an affidavit made by Mr. Van Note, which, of course, Mr. McCarter had a right to cross-examine on.

Mr. McCarter: Those statements are attached to that affidavit.

Mr. Corbin: Yes. We will offer the schedule and have it marked Exhibit A of this date, September 6, 1905.

The Court: This is a copy of your affidavit, eh?

A. Yes, sir.

The Court: What you swear to here is nothing, don't go for anything, I suppose it is these schedules.

Mr. Corbin: Yes; the schedules is what I wanted to have.

By the Court:

Q. What you testify to to is, to the best of your

knowledge and belief, is to these schedules annexed here as being accurate?

A. Yes, sir.

The Court: Then the schedules may be, if Mr. McCarter adopts that plan, just cross-examined on. I don't want to confine you to anything.

Mr. McCarter: Of course in cross-examining on these schedules, which I am quite willing to do, very glad to, I do not want to forego the objection that I made as the record will disclose when the somewhat similar schedules were introduced in evidence, namely, that it is not the best evidence. I have argued all the way along, but your Honor has been against us on it, that we ought to have the original people here, that this is secondary evidence. With that reservation we will cross-examine a little.

The Court: Yes, certainly.

Cross-examination by Mr. McCarter:

Q. Turning to the general resume, Mr. La Monte, preceding the special or sub-schedules, item N, interest, what does that include, $110,799?

The Court: Interest pending the construction.

Q. I am trying to find out?

Mr. Corbin: That was pretty thoroughly gone over on the previous case; that very item was in the original balance sheet that was produced.

The Court: I suppose, as a matter of right, that you want to ascertain what the cost of the thing was, you have to include interest up to the time it was finished, interest on current balances?

Mr. McCarter: Well, I haven't read over all the evidence, and it is so long ago I don't remember. It is a large item, $110,000; it is a ninth of the whole thing, and I would like perhaps to get a little information.

Q. What does that refer to?

A. Well, it refers, Mr. McCarter, in the first place, the plant—the construction was started in 1900 along about from somewhere, from March to July, 1900; they commenced buying land, bought a great deal of the pipe then, material for the dam, and started making, putting the pipe in the ground at that time, and borrowed money to make payments for land, for pipe, for materials for the contractors, and carried these lines along from time to time up to this time, and they claim on March 6, 1903, that they had paid out for interest on deferred payments for materials, for instance the pipe company, and these different loans that they had made at the different banks, $110,799.74.

Q. Did you ascertain whether or not this Company with whom you contracted for the construction of this plant had any capital stock, any cash capital?

A. Well, I didn't take pains to ascertain it.

The Court: I guess they hadn't any.

A (Continuing). But my understanding was that it was very small.

The Court: If they had, then if you are ascertaining the cost of the thing you are entitled to have the interest on the capital while the thing was going on. It is just as broad as it is long; but the interest item amounts to nothing here.

Mr. McCarter: I don't want it overlooked; it includes $110,000 out of this $90,000.

Q. General expense $14,828. What does that mean?

A. Well, that consisted of a great many different items. From memory—it was a good while ago—I can tell you some of them, for instance, the Construction Company had the bonds printed; they had two thousand bonds printed in New York. Now, the bill for that, as I recollect, was something over $2,000. The Guarantee Trust Company authenticated the bonds; I think their bill was $1,000.

By the Court:

Q. Had to pay so much for signing every bond, you know?

A. Yes, sir.

By the Court:

Q. The cost of heating the bakery must always be considered?

A. And then the printing of the stock certificates, and there were a great many items.

Q. That is what you mean, that general character of expenses?

A. Yes, sir.

By the Court:

Q. Travelling expenses, horse hire and lunches?

A. I think they had some experts examine the plans.

Q. The last item Q, taxes, $1,100, $1,190.87 means what?

A. Well, in 1900, they bought considerable land up in Atlantic Township, Middletown Township, these different townships, and the Construction Company paid—

The Court: Suddenly became valuable and the Assessor found it out.

A. Yes, sir, and the Construction Company paid

the taxes on these lands until the property was turned over.

Q. Well, bond coupons means what, interest account?

A. Yes, sir; interest account; some bonds, I believe, were sold outright, not very many of them, some of them were sold outright, and of course, they paid the coupons as they came due on the bonds that had been actually sold.

Q. Then see if I understand you. Your schedule here includes not only against us so to speak, the interest which you paid for borrowed money, but the interest—

The Court: The shaves.

Q. (Continuing): But the interest which you also paid to the holders of your bonds?

A. Yes, sir.

Q. Charging interest on both sides?

Mr. Corbin: No, the contractor.

The Court: The contractor had to take the bonds.

Q. These bonds, these bond coupons, $697,650 covered what period?

A. Well, from the time they commenced selling the bonds, as I understand it, they did it this way: If they borrowed $100,000 from a bank, and carried it as a note they paid $5,000 interest, they charged them up interest, and if they had sold $10,000 worth of bonds to a party two years before as those coupons came due they paid and took up the coupons and charged coupons as interest.

By the Court:

Q. Part of the general interest account?

A. Yes.

Q. Now, turning to the sub-schedules that the Vice-Chancellor characterized properly do you

know how much land was cleared I see you have an item clearing $35,526.37?

A. Well, I can tell you roughly, there was about 600 acres of land cleared.

Q. Well, that information is gained in what way?

A. Well, the cost of that is gained from—

Q. No, the information as to the extent of the land cleared.

A. Well, from the deeds showing the amount of land we bought; I know the location of the land, know where it is cleared, it shows to be, and I know that the land was cleared and the character of the land they had to clear.

Q. Now, where did you get the item or how did you ascertain the sum for clearing, you charged $35,526?

A. Well, that was furnished by the engineer who had charge of the construction.

By the Court:

Q. Did you make any independent estimate yourself as to what it was worth?

A. Well, I went up and checked over the payments, the pay-roll and payments for these different things, went to Scranton, was there a week, and I might say also these amounts that he gave us we required him to make an affidavit to them because we didn't measure up the land and those things with a tape.

Q. Now, taking Exhibit C, cost of the dam. I understand that the foundation of that dam is built, was constructed for a dam of much greater height than was finally built?

A. It is.

Q. Have you ever made an estimate of how much was lost or rather—

The Court: How much it cost.

Q. (Continuing): How much more it cost by reason of that change in the plan?

A. No, I have not.
Q. Utterly unable to?
A. Yes, sir.

By the Court:

Q. Twenty-five per cent. more or thirty-three and a third per cent. more?
A. Now, I tell you the character of that country is such that it would be pretty hard to tell. You see we consider now that we have that dam so we can extend it on up at any time.

By the Court:

Q. That is it, but the question is not whether it was a prudential thing to do, but the question he asked and I ask is how much less would it have cost if you had not built it with the contemplation of its being built any higher than it is built?
A. It could have been built cheaper; I am confident of that fact.

By the Court:

Q. Twenty-five per cent., of fifteen per cent. or what not?
A. I should say perhaps a third less; I should say that.
Q. Isn't it also true that by reason of your failure to erect the dam at the height first contemplated you have now to pump to your filters whereas the primary scheme involved a gravity delivery?

The Court: Don't raise the water high enough.

A. Yes; the condition is this. If that dam had been raised to the height that we contemplated it it would deliver water into the filters without pumping, but if the water was drawn down in that dam in a dry spell we would have to have our pumps there ready to start.

The Court: The question in the case is whether in making up the amount they had to get out of Long Branch the whole cost of that dam ought to be taken or only two-thirds of it or half.

Q. Is the estimate that you made, one-third of the cost being attributable to the first contemplated height, based upon anything at all, upon a guess?

The Court: Anything but a guess; it is my guess and his.

A. Simply a guess.

Q. Simply a guess?

A. Yes, sir.

By the Court:

Q. Do you know how much wider the dam is than it would have been, do you recollect that?

A. Well, of course, it is a matter of—well, I will tell you as a matter of fact that dam is not very much stronger than it should be at the present.

Q. The question is how much wider and higher. I understand; how much wider the base is if it wouldn't have been—Now if we get a flood behind that dam—

Q. Won't you answer the question?

The Court: He says it isn't much wider than it ought to be for strength, but he is only guessing.

A. Yes, sir; we have had floods come ten feet deep against that dam and carried bridges and everything before it.

Q. I suppose you refer to the flood two years ago?

A. Yes, sir.

Q. Wasn't a lot of land purchased that would have been flooded by the increased height of the dam that is not now flooded or used?

The Court: Did you buy all the land that

the dam would flood at its first contemplated height?

A. No; we did not buy it all, but we bought some that is at present back from the present flooded area.

Q. Do you know how much of it was bought that is not within the present flooded area?

A. Well, I should say from a third to half.

Q. Do you know whether that was cleared?

A. It was cleared, yes, a good deal of it.

Q. And the expense of clearing that is included in your item of clearing?

A. Yes, sir; for instance, some of it we bought that we did not expect to flood because it was contaminated; for instance, there was a stable standing near that.

Q. I should like for you to answer my question.

Mr. Corbin: He is getting his answers accurate.

Q. Turning to Exhibit D, the so-called cost of the pipe line from the dam to the pumping station; I notice that you give the total cost as $23, 942.16.

The Court: That is of the pipe line, isn't it?

A. Cost of laying the pipe.

By the Court

Q. Cost of laying it?

A. Yes.

Q. And you undertake to itemize that and you say for construction at $1.24 for unloading, carting and laying, $12,401.24 leaving a balance of $11,540.92. I understand from that—I wish you would correct me if I am wrong—you have made a balance of $11,-540.92 for so-called extras. Am I right?

A. Well, not exactly extras. The contract that

was made with the sub-contractor to lay this pipe required that he should put in a certain number of pile bridges, that he should lay a certain amount of the pipe under the river which was to be extra; that he should do a certain amount of filling, certain amount of bulkheading along the pipe to protect it, which was all in the original contract.

Q. Is that sub-contract in evidence in this case?

A. I think not.

Q. The original contract with the contractors, the Telephone Company, of course required them to do all of this, did it not?

A. Well, this was not a contract with the Telephone Company. This was another contractor. Oh, I beg your pardon, it was a contract with the Telephone Company.

Q. And that required them to do all of this?

A. Yes, sir.

By the Court:

Q. Stating how much the details cost; then they took the sub-contract which the Telephone Company made with another Company to do this part of the work: Is that right?

A. Yes, sir.

Q. Where did you get the sum of $11,540.92? Wasn't that by subtracting $12,401.24 from the other, and calling that a balance?

A. Yes, sir.

Q. That is just what you did, wasn't it?

A. Can I explain how I did this?

Q. Certainly.

A. When I got the Vice-Chancellor's letter, asking for the details of this cost, I took the memoranda that I had of the cost of laying that pipe line from the dam to the pumping station, which was $23,942.16; then I took the contract with Contractor Peter Mullin and saw that his contract

called for $1.24 for unloading, carting and laying that pipe; then I took the number of thousand of feet of pipe that were laid, and multiplied that, showing that if he had straight work, nothing else, that it would have cost $12,401.24; then I took the difference between that and the amount charged leaving $11,540.92, and put on this foot note explaining, and, of course, it can readily be seen from the geological survey map that it was through a bad swamp and that all these extras had to be done.

By the Court:

Q. You added extras which were visible to your eye which was to be done, amount to be included in the difference between the contract price and what the total would have been if it had been good laying?

A. Yes, sir.

Q. Who was this contract with, that you speak of?

A. Peter Mullin.

Q. That was a sub-contract between the Telephone Company and him?

A. Yes.

Q. Where is that contract?

A. Well, I have a copy of it here.

Mr. McCarter: I think it ought to be in evidence. I don't think you ought to refer to a paper that is not in evidence. I object to so much of the evidence as refers to the contract that is not in evidence.

The Court: He has got a copy of it.

Q. Now, is it not true that the item $11,540.92 as an item in that schedule is what is known in engineering parlance as fudging; in other words, finding a figure that will fit the balance?

The Court: I can answer it; it is.

Q. In a sense?

A. No, sir.

The Court: But the witness swears, as I understand, that from his own observation and knowledge and geological survey that is used by Courts in New Jersey, the place, the strip of land was peculiarly situated, it was in a swamp and crossed a river and required special treatment over and above what would be the ordinary cost of digging, and the ordinary cost of digging he has put in there in his estimate what would be the cost of digging and laying it in favorable ground, then he has added for the difference these other things which he knew existed.

Q. What did the $1.24 a foot—where did you get the $1.24 a foot?

A. From the Peter Mullin contract.

Q. Do you know of a single contract or can you lay your memory upon a single contract where the extras or the fudging so-called came within almost identically the full amount of the contract?

A. Now, I am getting in here where I don't understand just what you mean by this "fudging." Now, if you will pardon me, I would like to explain if I have not made it clear what this item is.

Q. You answer my question.

The Court: He says he don't know what you mean by "fudging" exactly?

A. No, I don't know it.

Q. Do you know how much the Telephone Company agreed to do this particular work for?

The Court: How much did Peter Mullin agree to do it with the Company?

Q. I was asking the other; how much the Tele-

phone Company agreed to do this whole thing for, the whole thing to tie up the dam to the pumping station?

A. No, sir.

Q. Their contract was a gross sum?

A. Yes, sir.

Q. Are you capable of making a contract of what it would cost to lay that pipe?

The Court: Making an estimate, you mean?

Q. Making an estimate what it would cost independent of the unloading, carting and the laying, what you have called the extra or balance through that territory, of your own knowledge?

A. Yes, sir.

Q. Do you know how much pile driving was necessary?

A. Yes, I know.

Q. How much?

A. Well, I can't tell you right, I can't sit here and tell you but I can take—I have details and I have plans of it.

Q. Well, how much earth filling?

A. Yes, sir; I could tell you if I had a chance to figure it up.

Q. How much bulkheading?

A. Yes, I could tell you if I had a chance to figure it up.

Q. Pile bridging?

A. Yes, I have done more or less of that work.

Q. I say, how much of that was done in this case?

A. I haven't it right here before me, but I have all these details.

Q. Have you made an estimate of each one of those, and do you say that those added together aggregate the sum of $11,540, or do you say that $11,540 is the difference betwen $12,401.24 and the

sum that you have said that you agree to pay them for the cost of that—

The Court: He has already said that; it isn't necessary to repeat it; he already said that. The explanation is thart he attributed that to these items which he knew must be down there. Now, you ask him whether he had material enough from which he could make an estimate; he says he has, but he has not done it.

A. What we claim is that to have ascertained the fact that the Construction Company paid Peter Mullin $23,942.16, that they paid him for laying 10,001 feet of pipe at $1.24, $12,401.24, and we also claimed to have ascertained the fact both from checking up the totals of the pile bridges of the bulkheading for excavating, for the filling, and from examination of the vouchers of Peter Mullin that they paid him for that balance, $11,540.92. Now, that is as I understand.

Q. Do you say that you did check up exactly $11,540.92?

A. Well, I couldn't say that I checked it up to a penny, but I checked those things up very closely so that I was satisfied that the item was practically right.

Q. Did you produce that figure $11,540.92 before in your Schedule A2?

A. No.

Q. Then this calculation was made recently?

A. Oh, yes, the calculation was made recently, yes, sir, since I got the—

Q. What did you check up recently, what did you have in your possession recently that enabled you to check up that sum or anything like it?

A. I had just what I told you.

Q. What? A. The claim from the Construction Company that they had paid Peter Mullin.

The Court: He wants to know whether you had approximately the amount of the different item, the bulkheading and the pile driving and so on that you mention there as making up that sum, whether you had a statement of what the details of each were?

A. Not separated.

Q. Have you a copy of the Mullin contract here?

A. Why, no, I haven't, that is, I haven't an original copy, but I have a copy of the specifications, and a copy of Peter Mullin's bid on which the contract was based.

Mr. McCarter: Will you produce that; maybe that is all we want.

Witness handed Mr. McCarter a paper.

Mr. McCarter: The witness produces a proposal and contract or copy of it between the Independent Telegraph & Telephone Construction Company, and one Peter Mullin, and is asked whether or not both the proposal and the contract do not include filling, piling and all of the items that are included in your last sub-head in the schedule now under consideration?

A. They do.

Q. Then Peter Mullin, by his contract with the Independent Telegraph & Telephone Construction Company undertook to do all of this work for $1.24 a foot, did he not?

A. Oh, no; Oh, no.

By the Court:

Q. There are details there?

A. That is all uncertain amount as to how much excavating and how much filling there would have to be, you know?

Q. In making estimate as you did, did you take

the figures he proposed on in taking what you call "extras"?

A. Why, yes, we took that contract; we checked this up on the basis—

Q. Does your estimate of Ten thousand and odd dollars for what you call a balance, is that made up upon the estimates that Peter Mullin agreed to do that particular work for?

A. Yes.

Q. You are sure of that?

A. Yes.

Q. Why do you hesitate?

A. Well, I don't know as I know just exactly what you mean.

Q. Well, did Peter Mullin in his proposal and in his contract undertake to do excavating, earth filling, pile driving, bulkheading, laying submerged pipe and pile bridging?

A. He did.

Q. Well, did his figures for that, are the figures that he stipulated for that kind of work, the figures that you have used in reaching the sum of $11,540?

A. Well, I will tell you.

Q. Can you answer that yes or no?

A. Yes, sir; it was made on the basis of that contract.

Q. Now, let me ask you again, so there cannot be any misunderstandingg, are the figures that you have given whose sum amount to $11,540.92 reached by charging the rates for excavating earth filling, pile driving, bulkheading, pile bridging and the laying of submerged pipe, they are contained in the proposal and contract of Peter Mullin?

A. Yes, sir; the settlement was made—

The Court: Between Peter Mullin and the Company?

A. Yes, sir; for the total amount, what we took

into consideration at the time of this settlement was this one item $23,946.

The Court: Which was paid to Peter Mullin?

A. Yes.

The Court: I understand the witness to say this: That in the investigation which he and Mr. Blodgett and another gentleman made of the value of this plant, they found that they paid Peter Mullin Twenty-three thousand odd dollars and they went to looking around to see what that was for, and they had Peter Mullin's proposal and contract?

A. Yes, sir.

The Court: And they looked it up and they made up the whole $23,000 in that way by taking his detailed contract and putting it on the ground as near as they could. That is the way I understand the evidence.

What we want to get at, what I want to get at, is what was the real value of that. One way of getting at it is to find out what the contractors actually paid. Now, that may be too much or too little. This witness and the other two gentlemen who were engaged in the job of ascertaining that very thing took the amount paid to Mr. Mullin, showed the vouchers as I understand it, they then took his contract, and they checked it off as best they could, looked over the ground and saw he had done a lot of this extra work and as near as they could find out, it came to about that amount.

A. Yes, sir. Can I make any explanation?

Mr. McCarter: I don't think any explanation is necessary when the Court has explained it for you.

The Court: That language is unjust in you, and I would be obliged to you if you would not indulge in it. I am stating this case the best I can, and I go clear back every time a question is put as to what this witness' knowledge is based on, and it is based on his investigation made years ago, now, you objected to all that; your objection is there. I thought and I still thing it is the best thing these gentlemen could do to get at the value of that property. You don't want to pay the interest on the value of that property. I am anxious to find out how much you ought to pay, how much Long Branch ought to pay, what the rates of water are, and one way is to get as near as we can at what the property cost and what it is worth, and if they spent, as I said over and over again, if they made too expensive a plant they have no business to charge Long Branch such rates as it will pay interest on the whole of that; but everything we do must be a mere approximation; we cannot get at it exactly; the thing is not capable of exact examination any more than you can measure a thing exactly. It is all proximating. Now, I think, I understand what the witness has said and I stated what I understood he had sworn to, and the interpretation I put on it. Now, sir, I have a very hight regard for you, but I will be obliged to you if you will not indulge in remarks that seem to reflect on the Court:

A. Can I just please make one explanation here? You understand from this letter of the Vice-

Chancellor's in April, that he asked for detailed cost per foot in laying the pipe. Now, that is the reason I took this one item out from the sum total we had settled on from the contract, and the amount of pipe laid was that. That shows here the cost per foot for laying or a total cost for laying that pipe. Now, if the Vice-Chancellor had asked me for the total cost of pile bridges I could have gone into my material and taken out for him just what it cost to put the pile bridges in, or just what it cost to put in the excavating, or what it cost to put in the earth filling from the details I have. But the Vice-Chancellor in that letter asked me for the total cost per foot for laying this pipe. Now, in order to do that, I had to take it out from the best information I had and that is the reason this is given separately and I don't give the pile filling which I think I could do quite accurately; I did it the best I could.

Q. As I understand you, the difference between what you say is the cost of laying which includes unloading, carting and laying, and the total sum paid is what you attribute to the balance of the work, and that you never have checked up the figures foot by foot of the items for excavating, earth filling, pile driving, bulkheading and pile building to see whether or not they did reach the sum of $11,540?

A. No, I should say that we did not; we did not; we took the sum total and I took this one item out.

Q. And you assumed that balance was for the rest?

A. Yes, sir, that is it exactly.

Q. Now, we will turn to Exhibit E, pipe line, east of pumping station. Is the same thing true of the last item on that schedule, namely $10,375.96?

The Court: For what?

Q. Designated balance, namely, you paid a total

for that work of laying the pipe line east of the station $46,808.86?

A. Yes, sir.

Q. You are able to give us the estimate of laying the pipe as per the exhibits?

The Court: The thing shows for itself.

Q. For $36,432.90, and the balance of the cost you simply subtract one from the other and say that is the balance?

A. Yes, sir.

Q. That is the way you reach it?

A. Yes, sir.

The Court: It amounts to swearing that there were other things done that might have come to that amount?

A. That is it.

By the Court:

Q. They satisfied themselves the whole thing would take so much. They can take and figure out where certain of it went, but they know there were other legitimate objects to which the balance might go?

A. Yes, sir.

Mr. McCarter: I hope your Honor in recalling that does not overlook the fact that it is not true. I am glad to say that these two companies had common directors.

The Court: Oh, yes, I understand that. These gentlemen are witnesses that are entitled to some credit; this gentleman had no interest in it.

A. Mr. Blodgett had no interest in it, Mr. Conant had no interest in it, Mr. Waldon had no interest in it.

The Court: They got three men that had

no interest in it to appraise this. Now, certainly their appraisement has some value; it may not have as much as we would like to have, but it is the best we have got. The thing is there on the ground, and it did cost money, and I suggest, Mr. McCarter, that the financial progenitors haven't made much out of it.

Q. Now, turning to Exhibit F, the pumping station, cost of that. I presume that that was built for a capacity longer than the ten-year contract, was it not, with Long Branch, greater than would be required by the ten-year contract?

The Court: Oh, it will pump twice as much water as Long Branch wants, I suppose, but they have several pumps, but they don't run them all at once. I believe that is it, isn't it?

A. Well, at the present time it would not pump more than—well, no, it isn't twice the capacity of the consumption of the coast to-day.

Q. I am not talking about the coast, and am not talking about to-day. I am talking about the ten-year contract for Long Branch.

The Court: Mr. McCarter, as a matter of fact, I will relieve you of that. It is an admitted fact in the case that this concern does supply other cities besides Long Branch, and was estimated to be sufficient to supply a large population besides what would ever be in the limits of Long Branch. You need not go into that. It is part of the facts in the case already found by the Court. But I will be glad if you ask him—I shall, if you don't—whether the number of engines, the number of pumps and boilers are more than enough at present, are more than enough to

supply what they do supply, that is, Deal, Seabright and all that country there, and then the place below, South Elberon, and all that. I would like to have you inquire into that.

Q. Well, what is the fact about that?

A. Well, it is not any more at the present time than we should have to supply our present consumption with the Long Branch plant shut down, if it were shut down.

By the Court:

Q. Haven't you shut down the Long Branch plant yet?

A. No.

Q. Tackhansie plant, you mean?

A. Tackhansie Lake plant.

By the Court:

Q. I suppose you had?

A. No, we have not.

By the Court:

Q. What you mean to say is this: It would work your plant up to concert pitch?

A. Its capacity, yes, sir.

By the Court:

Q. To supply everything you do supply if you devoted it all to that?

A. Yes, sir.

By the Court:

Q. But you haven't yet abandoned Tackahensie, eh?

A. No.

Q. Does your Thirty thousand dollars cost of running include the present cost of Tackhensie?

A. You mean this estimate that I produce here?

Q. Yes.

A. No, it does not.

Q. You are in fact, though, running the plant including Tackhansie at double expense, so to speak, now? That is, you are running both sets of plants?

A. We are running both sets of plants.

Q. Whereas the Newman Springs plant is quite adequate if Tackhansie were thrown out?

A. Well, it would be under certain conditions.

The Court: They haven't got the mains laid.

Mr. McCarter: I understand that.

A. I think we could have just nicely got along this Summer with Newman's Springs; this Summer we have gotten along nicely but wouldn't have had any margin.

By the Court:

Q. The reason you have not abandoned Tackhansie is that the extra mains through Long Branch in order to supply the whole field haven't been laid?

A. Have not been laid.

By the Court:

Q. And rather than force the water through Newman's Springs through small mains you have kept up Tackhansie?

A. We raised it to a high pitch this Summer, and put in all we could because our water at Tackhansie almost gave out; we just run—we had to cut off street sprinkling, had to cut off waste, sent out circulars to our customers because it ran out this Summer.

By the Court:

Q. Tackhansie proved to be not sufficient?

A. Yes, not as much as we expected it to be.

By the Court:

Q. Do you know what the total supply of Tackhansie was this Summer?

A. We supplied from three to three and a half millions in twenty-four hours from Tackhansie and about the same amount from the Newman's Springs plant.

By the Court:

Q. Tackhansie supplied half, eh?

A. Yes, sir.

By the Court:

Q. While you were running Tackhansie you ran it full split?

A. Yes, sir; until we had to ease off on the consumption, street sprinkling and lawn sprinkling.

By the Court:

Q. You mean to say down below Tackhansie, down that way?

A. Yes, sir; we couldn't get water up from Newman's Springs; we put the pressure up at Tackhansie to eighty-five pounds, and forced it all the system would take.

By the Court:

Q. How much did the pressure up at Newman's Springs have?

A. Eighty-five pounds.

By the Court:

Q. You said Tackhansie?

A. I beg pardon!

By the Court:

Q. You meant Newman's Springs?

A. Yes, sir.

By the Court:

Q. You put the pressure at Newman's Springs at eighty-five pounds, all the system would spare, then couldn't get enough to supply Elberon and Deal?

A. Yes, sir.

By the Court:

Q. Then you had to supplement that by Tackhansie?

A. Yes, sir.

By the Court:

Q. And you used all Tackhansie had this summer for that purpose?

A. Yes, sir; and had to cut down the consumption.

By the Court:

Q. Now, then, I will ask you this: What was the comparative supply at each at the greatest pinch, I believe you have stated it?

A. About half. We supplied about half from the Newman's Springs plant, and about half from the Long Branch and Deal.

By the Court:

Q. Then there were about 7,000,000 gallons a day?

A. Yes, sir; in twenty-four hours.

By the Court:

Q. And some amount of economy used?

A. Yes, sir; during a few days of the dry spell.

By the Court:

Q. That was about the first of August?

A. It was in the latter part of July.

Q. Let me ask you this question: Assuming that you had a binding contract from every consumer or possible consumer in the neighborhood of Long

Branch and assume that your mains in Long Branch were sufficient and adequate to accommodate the Newman's Springs supply with 36-inch pipe, do I understand that your Newman's Springs plant is inadequate to pump the necessary water that would be required in such an event if you abandoned Tackhansie?

A. Well, I say that it is no more than adequate for the reason—

By the Court:

Q. Do you mean to say that you could not have relied on Newman's Springs Pump, the pumps this Summer, to have supplied more than the seven million gallons a day?

A. No.

By the Court:

Q. You had plenty of water, though?

A. We had abundant water, though.

By the Court:

Q. Had an abundance of water, but not the pumps to drive it up?

A. In pumping seven million gallons in twenty-four hours there are certain hours in the day when we perhaps run at the rate of sixteen or eighteen million, fully double; the water carts would come on right after the noon hour, all at once; then in the evening the lawn sprinklers all start at one time. Then we notice a difference in the forenoon from half-past six to eight o'clock when people are taking baths and water is used in the kitchen, and we notice a big difference on Monday on account of washday.

Q. I want an answer from you if I can get one on this question, that is to say, whether you mean what you said twice, or whether you don't mean what you said, namely, that your pumps would have been

about enough. Now, would they have been enough or wouldn't they?

The Court: He said they would have been enough.

A. Yes, they would have been enough.

By the Court:

Q. But nothing to spare?

A. No, it would not have been safe to run with any less capacity.

Q. You found this cost of pipes, Exhibit G, that there had been a rebate paid. Do you know the amount of that rebate, did you know at the time?

A. Yes, sir; I saw the figures.

Q. Now, do you undertake in this Exhibit G in your addendum to it, to say that the added cost to furnish branches running in the side streets for future extensions would off-set that rebate? Did you ever make an estimate what those added expenses would be to see whether in fact they would off-set; do you know how many branches there were?

A. Yes, I knew where the branches were all put in; we did that approximately.

Q. When did you do that?

A. At the time of the settlement with the construction company.

Q. Did you ever testify before in this suit that the one would off-set the other?

A. No.

Q. As a matter of fact, are you able to calculate that one would?

A. Well, only in a general way; yes.

Q. And those branches, of course, that you off-set for or with, were entirely for future extension?

A. They had to be put in.

Q. Were they or were they not for future extension, as your exhibit says?

A. Some of them were future extension and some of them were made at that time; yes, future from the time the trunk line was laid, yes.

Q. Now, I will turn to Exhibit R, detailed cost per foot of water mains. How was that made up that statement?

A. Well, now, I have forgotten just how I arrived at this thing in detail, but I took the weight, for instance, of my 36-inch pipe, I took a great many carloads, as I explained in the affidavit, and took the average weight per foot in length and then multiplied it by the rate per ton and gave the cost of the iron per foot of $6.70, that is, it was an estimate on the known weights of pipe, and some of them where I couldn't get the exact weight from the bills I took a table in making up this estimate.

Q. This you have done recently?

A. I did this for the Vice-Chancellor.

Q. This had not been done before?

A. No.

By the Court:

Q. Before you took simply the bills?

A. The gross, yes, sir.

By the Court:

Q. Total bills?

A. Yes, sir.

By the Court:

Q. But I wanted in detail and he took it that way.

Q. I observe that you say, "Cost of trenching and laying." Where do you get that?

A. From the contract, the actual cost from the contract; the actual price paid for laying, that is what I mean.

By the Court:

Q. I think that was by the cubic feet?

A. No, by the lineal feet.

By the Court:

Q. Lineal feet?

A. Yes, sir.

Q. Now, where did you get the figure 1.3544 in the last column?

A. Well, I took this estimate from my schedule that I had already made up.

By the Court:

Q. Give the name of it, name of the schedule?

A. Well, it is the cost in detail of the new water system of the Tintern Manor Water Company—Independent Telegraph & Telephone Construction Company; it is first sheet.

Q. You took it from what?

A. I took it from this first sheet, the detailed cost.

By the Court:

Q. I suppose he did what I could have done myself, number of feet?

A. Yes, sir.

Q. I don't understand your answer. I ask you again where you got the figure 1.3544 at the foot of the column before you add up, reaching a total cost per foot of the water main?

A. Well, I took the actual cost of all of those items and divided it up. I haven't my figures here. I did it several months ago, and some I took from tables, that is, for instance, the amount of lead and amount of yarn.

Q. I am not talking about the lead; I am talking about—

The Court: The excavation.

Q. No, sir; I am talking about the last item here, 1.3544 which is really an item of extras?

A. Oh, no, Mr. McCarter; in laying a main you have to put in valves, you have to put in a certain number of special castings, for instance, for your bends, and all these things, and then of course the cost of putting these mains into the system of course we had to build pile bridges, we had to lay submerged pipe to get under the rivers, and that all entered into the cost per foot of these mains of this system of pipe.

Q. Now, I again ask you where you got the figure 1.3544 thousandths of a dollar per lineal foot?

A. Well, I took the cost of valves as I had ascertained them in my previous schedules, I took the yarn and amount of sub-merged pipe and divided it up pro rata, if I remember right.

By the Court:

Q. By the total number of feet?

A. Yes, sir.

Q. Did you measure up the quantity of each of those particular items, valves, stops, yarns, pile bridges and sub-merged pipe?

A. No, sir; I did not.

Q. Wasn't it as a matter of fact then a difference again?

A. It is an estimate.

Q. Isn't it adding the others up and subtracting this sum from the grand total, and calling that the last figure?

A. No, because I got at this item before I got my sum total, I had to.

Q. It is an estimate based on what?

A. Based on the cost of these different items.

Q. Do you know how much the cost of sub-merged pipe was?

The Court: If you will let me see if I understand the witness. I understand there

are certain items they ascertained had been paid, certain items for stops and valves, and so forth. They had to pay the sum total of those and in distributing them over the increased cost per foot they divided them by the number of feet?

A. Yes, sir; pro rata.

By the Court:

Q. As for instance, Mr. McCarter, if you lay 10,000 feet of pipe on the line of that pipe are so many valves, so many branches, so many special pieces, and there is so much spent for bridging over a soft place, and like that; you take that sum total and divide it by the whole 10,000, it is so much per foot spread over the whole thing; now, that is what I understand.

Q. Well, do I understand that you ever before knew of a work of so-called extras to exceed the cost of trenching and laying per foot?

Mr. Corbin: Why do you call them "extras"? It is part of the contract.

A. Mr. McCarter, you can see that this, as I have explained before, this special item is only in regard to laying that line from the dam to the pumping station.

The Court: That is all.

A. (Continuing): Which was an extraordinary cost for coming through that swamp. I don't believe a man could ever have gone through that swamp where this pipe went, don't believe he could have.

Q. You haven't included in that the cost of submerged pipes east of the pumping station?

A. No, that is in the next item.

Q. Which is that?

A. The next column there; that goes in the next column.

The Court: He wants to find out what this cost per foot of the water mains laid in the ground, and he divides that up and takes two columns, one from the dam to the pumping-station which cost a great deal more than the other, and he foots that up first, cost of the pipes, and then added cost of the lead, then cost of trenching and laying which was by contract 1.24, wasn't it?

A. Yes, sir.

The Court: Then this extra cost which he has spoken of before, the valves, bridges, laying submerged pipe, and so forth, 1.3544; those were the extras due to the swampy place, and he makes the cost of that 9.53 a foot for 10,000 feet, two miles, practically. Then he comes to the other 36-inch, and there, you see, it is much less. First the cost of the pipe is the same, 6.70, cost of lead 23.36, the cost of trenching and laying 75 cents; then they add for yarn 71.64 instead of 1.3544, much less outside of that particular—

A. Piece of pipe, particular two miles.

The Court: Yes.

Q. I wish you to turn to Exhibit T, the estimated cost of running the Tintern Manor Water Company plant from the Newman Springs Pumping Station under the item of general expenses, and referring to the item "General Expenses" ask you what you mean by that.

A. Well, that is the expense that the company is to outside of the expense at the pumping stations.

Q. That, of course, is an estimate?

A. Oh, yes, it is an estimate wholly on my part.

Q. For instance, you charge $1,000 of the office

expenses to the plant, Newman Springs, is that right?

A. Well, if you will read the Vice-Chancellor's letter, perhaps I am not—I try to give it just as he asked for it; now, if I had made a mistake.

Q. Is that what you do as a matter of fact?

A. I charge the item office expenses as part of the expense of the company in operating the plant.

Q. How much is the total of the office expense?

A. $1,000.

Q. No, no, the total office expense?

A. Oh, $1,000.

Q. You charge all the office expense?

The Court: You mean to say that all the office expenses of that company now from day to day are only $1,000?

A. That is what I figure for rent, for stationary, for books, for lighting, for heating the office; that is the way I classify.

Q. Well, do I understand that you attribute to the pumping plant all the expenses of running the office?

A. Oh, no, that is not in the pumping plant; the pumping plant cost, operating expenses of Newman's Springs Station is entirely separate, nothing to do with the pumping plant.

Q. Oh, I see. I was wrong; you are quite right. What do you mean by miscellaneous expenses, gift to Senator Blodgett?

A. Well, yes, and any damages the company may be at for any cause, a great many items.

Q. Well, that is an estimate, of course?

A. That is estimate; I have been taking those things from actual operation, our trust company expenses, Board of Directors.

Q. What do you mean by maintenance in your general expenses?

A. Well, I mean by that the expenses for repairs

at the dam to the bulkhead, to the mains in general, to changing hydrants from old to new.

Q. Is that an estimate again?

A. That is an estimate again, yes, sir; I estimate that it will cost us that from year to year, repairing mains and hydrants.

Q. What is salary and O. E., what does that mean?

A. Well, I make that as the salaries and the other expenses of the officers and clerks, such as railroad fare, meals when they are out on duty and car and railroad fare.

Q. The insurance, the foreman and horse and wagon are actual not estimated?

A. Yes, they are estimated that it will cost us that from year to year; while it may not cost us $500 for insurance every year, some years it will cost us $1,200; some we get on a three-year basis, and we have our boiler insured, while it may not all come in one year I estimate that that would be an average. Oh, this is all estimated, Mr. McCarter. Of course, I can't tell just what.

Q. The same is true of the operating expenses of Newman Springs, entirely an estimate?

A. It is entirely an estimate what it will cost us.

By the Court:

Q. Don't you know how much coal you have bought and used in a year? Don't you know how much you paid to your engineers?

A. Yes, sir, Vice-Chancellor, but you ask for an estimate of what it will cost us to run Newman Springs with the Long Branch plant shut down. That we never have done, and I took an estimate of how many men we will have to have, about what price we would have to pay them at Newman Springs alone; for instance, I figured on five or six men.

By the Court:

Q. This question was asked you with the idea that Tackhansie had been abandoned, I suppose it had.

A. No, it has not.

Q. Would you have to have more men at Newman Springs if Tackhansie were abandoned?

A. Yes, sir; I would have to have, probably, I figured that I would have to have what I call a chief engineer, I have to have one man that is a thorough machinist because those pumps are expensive, and has to keep them in repair and put in the brasses. I would have to have one chief engineer, I would have to have one man to run the pumps daytime, and another to run the pumps night. You understand any ordinary accident that might happen to the pump want a pretty good man. Then I would have to have one day foreman and one night foreman, and I would have to have at least one man in twenty-four hours to attend to the filters.

Q. How many of those do you have now?

A. Oh, well, I have—you mean this summer?

Q. Yes.

A. I have ten.

Q. You have the chief and all these other fellows you speak of now?

A. I have ten men, engineers and foreman.

Q. Then why haven't you given us actually what you have paid for these fellows?

The Court: He wasn't asked that. I didn't ask that in the letter; I thought what I asked would cover the ground, but I was mistaken. I supposed that Taskhansie was not running.

A. Of course, we can cut off a lot of these men if Newman Springs was running alone.

The Court: He hasn't put in the actual expenses, because I didn't ask him. I suppose if you ask the witness he will say to you it has cost them more to run the two than it would to run the one alone, I should be very much surprised if he did not. But the trouble is they have not been able to raise the money, or they haven't been able to lay the additional big main through Long Branch, which is necessary to build these works. That is about it, isn't it?

A. Yes, sir.

Q. What items in the operating expenses of Newman Springs station, repairs to pumps, boilers and filters—are they estimates?

A. They are, yes.

By the Court:

Q. What are they based on? Are they based on experience?

A. Yes, sir; actual experience from year to year and average cost I took of these things, and, of course, what I think it is safe to—

Q. To what, finish out, please.

The Court: Rely upon.

A. Yes, safe to appropriate; if I was to make an appropriation for running expenses for next year, if we are going to shut down that I would say it would cost that. For instance, one year we may have no repairs to pumps, a small charge. Then the next year we may have to take one of our big pumps down and go all over it putting in new brasses, that may cost $2,000.

By the Court:

Q. You say "estimate"; you mean not only that, but average?

A. An average estimate per year; yes, sir.

Q. Only one more question, I think. Does your general resume at the head of your exhibit, which is an item pumps, Exhibit K, Pump Contract, H. R. Worthington, does that include this new pump that is not there yet?

A. The pump is there.

Q. It includes new pumps?

A. Yes, sir.

Q. Have you anywhere or could you produce a statement showing exactly what Tintern Manor has cost you to operate separate from the—

The Court: The actual cost.

Q. (Continuing): Up to date?

A. Oh, yes, of course, I keep those records.

Q. Well, has it cost you up to date $500 a year to repair the pumps?

A. Last year it cost us very much more than that, and I think it will this, for the reason that we had to take down one of our pumps and have it gone over thoroughly, the bearings all filed up, some new brasses put in, and the valves have to be renewed. I think I paid over $400 for valves alone in one pump last year, had to be all renewed, and not only had to put in new valves, but had to put in new disks, and new pipes, and, of course, when those things have to be done it is quite expensive.

Q. Do you know what your coal cost you for a year there?

A. Well, it has cost us for last year, I think it cost us just about this figure.

The Court: That is $6,000?

A. Yes, sir; about $6,000.

By the Court:

Q. At the two pumps?

A. For both stations.

Q. I mean at Newman Springs?

A. No, I couldn't tell you just that amount, but

I keep a detailed cost; it is just about what it has cost; that is what I took it from, from the cost of the coal.

By the Court:

Q. You think it has cost $6,000 for the coal?

A. Yes, sir; I think it will cost that this year about, when it is running.

Q. Is it your idea you consumed as much coal at one plant economically administered to produce the same flow as at both?

A. I think we consume as much coal at Newman Springs to pump as much water as we are now using at both; for instance, it takes so many pounds of coal to pump a thousand gallons of water.

Q. Whether you do it separately or together?

A. Yes, sir; it takes so many pounds.

Q. Assuming they are both good plants, good size, there would be no economy, except for labor?

A. Yes, sir.

Examined by the Court:

Q. Do you know what the amount of your actual salaries are to the officers, the president, and treasurer and engineer, and so forth? Does Mr. Blodgett at present get any salary, or don't you know?

A. He does not; he does not get any salary, but he has been paid by a vote of the Board of Directors $1,000 at two different times.

Q. One moment. What are your officers?

A. President.

Q. Then you have an accountant, and man in general charge of the account of the clerk, how is that?

A. I keep the general books myself. We have the President, we have the Secretary and Superintendent.

Q. Secretary and Superintendent run together, eh?

A. Yes, sir.

Q. What do you get, your salary?

A. $2,000.

Q. Then don't you have a clerk besides?

A. Yes, sir; in the Summer I have three clerks.

Q. Now, what do those clerks cost?

Q. Take the three in a bunch?

A. $155 a month.

Q. The three?

A. Yes, sir.

Q. For six months of the year around?

A. Two of them are employed the year throughout.

Q. You cannot get them for less than $2,000, I suppose?

A. No; and, of course, I have got to increase those salaries a little from time to time.

Q. Then independent of the President, the Secretary and clerks and Superintendent costs $4,000 a year?

A. Yes, sir, the other expenses—you see, I have made it $4,440.

Q. You have made it $4,000?

A. No, $4,440.

Q. Then office expenses, that is the cost for the room itself and stationery and lighting and heating?

A. Yes, sir; I figure that $1,000.

Q. Now, miscellaneous expenses, $1,200?

A. Well, of course, I have figured on something for the President in that, and also for the Board of Directors; at their meeting, of course, they are paid, and then the Guarantee Trust Company of New York pay our expense and register our stocks.

Q. Do you require security for any of your officers, have them give security?

A. No.

Q. Now, insurance, $500, that covers what, your plant up at—

A. Newman Springs, at West End and all of the buildings and office furniture and fixtures.

Q. Now, then, a street foreman and laborers. What do you mean by "street foreman"?

A. I have to have a man constantly watching things in the street, watching hydrants, if there is a leak, go to see.

Q. Does he take your meters?

A. Yes, sir.

Q. Watch the persons who go in and out, move in the houses, all that sort of thing?

A. Yes, sir; more or less, and if we need work to be done he gets men and goes and does it, you know.

Q. That street foreman and laborer is $500?

The Court: I will say to Mr. McCarter if that man is a man that is worth anything, good for anything, I don't see how they can get him for $500; I can't get them in Morristown for that.

Q. You keep a horse and wagon?

A. Yes, sir.

Q. You think you can keep that for $300 a year?

A. I think so, yes, sir.

Q. Only keep one?

A. Yes, sir.

Q. How do you go out to Newman Springs and back again?

A. I go out on the train and take a wheel, have a bicycle.

Q. Now, maintenance, $2,200; that is maintenance of what?

A. That is starting right at the dam.

Q. Keeping the dam up?

A. Keeping the dam up, keeping the bulkheads

up, keeping the mains repaired, keeping the old hydrants taken out and new ones put in in their place, and repairing leaks, and deterioration that we have to remedy.

Q. That includes some labor paid out?

A. Oh, yes.

Q. So that that covers what I should think was a very serious deficiency in your estimate for the street foreman and laborers, $500; that $2,200 covers that?

A. I will explain how I make that item up.

Q. Have you got any estimate how that has been heretofore? Have you got any account what you have paid for those things?

A. Yes, sir; I have; I have told you the way I make up that item, street foreman and laborers; I take my man that I have to pay whether I am doing anything or not, and I have to keep certain number of men for doing little things; if I put that man at laying pipes at the end of the month I charge his salary to that.

Q. That is the way you reduce your charge to street foreman and laborers?

A. Yes, sir.

Q. A lot of that you charge to particular item of maintenance?

A. Yes, sir.

Q. You put the street foreman and laborers and horse and wagon and the $2,200 together, that makes $3,000 for that item?

A. Yes, sir; and, of course, on this maintenance we have some pipe under the streams; we have had a great deal of trouble with the pipe at Seabright, 18-inch main going under the river at Seabright, and if we have to do anything with that we have to get a diver to go down; that item would be larger under some other condition.

Q. Now, the operating expenses at Newman's Spring, that $4,440, does that include the main en-

gineer and his assistants that you have spoken of?

A. Yes, sir; foreman and filterman.

Q. Then the repairs to the pumps—how many pumps have you there or are you going to have when you use them?

A. Well, we will have three main pumps, and two centrifugal pumps for raising the water into the filters.

Q. And you just use the centrifugal pumps for that purpose?

A. Yes, sir.

Q. That is very simple, that isn't much?

A. No.

Q. Three principal pumps are liable to run under 85 pounds pressure?

A. Yes, sir; at Newman's Springs.

Q. They are the ones you rely on?

A. Yes, sir.

Q. And you allow $500 a year to keep those in repair?

A. Yes, sir.

Q. Well, I will ask you what I know myself. It costs more to keep in repair a pump that is run under pressure of 85 pounds than it does the one under pressure of 25 or 30?

A. Yes, sir.

Q. The higher the pressure the more severe the strain on the different parts of the pump, and faster little things give away and wears out, is that it?

A. Yes, sir; and sometimes we have had to keep the pump in motion continually, and that was bad, but we had to do it; we couldn't shut off the supply, of course, those things enter together.

Q. How many boilers have you got?

A. Five boilers.

Q. How many filters?

A. We have got twelve filters, one million capac ity in twenty-four hours.

By Mr. McCarter:

Q. Each?

A. Yes, sir; one million gallons each capacity in twenty-four hours.

Q. Oil, packing and waste. Is that taken from running over your accounts and seeing what you have paid previously?

A. Yes, sir; from what we have been paying, yes.

Q. Lighting engine-house. Do you make your own light or do you have that come there?

A. Well, we have been buying gas in Long Branch and we have been lighting with oil at Newman Springs; now, of course, if we got to the Newmans Springs plant entirely, we have either got to take gas from the City Company or we have got to put in our own plant; in either case I think $40 a month, it will cost us that much; it is a very large building; I don't think we can light it under $40 a month under any conditions.

Q. The coal, you say, is bought by the year?

A. Yes, sir.

Q. The coagulant, that is for your filter?

A. Yes, sir; that is less than we have been using at both stations, but I figure with running the one station we can cut it down to that.

Q. Miscellaneous, $300?

A. That is for telephone at the station, and that is different things.

Q. Now, you have got this tax business, $6,000. I would like you to give me some of the items of that, how you make that out. That is a pretty serious thing?

A. Well, of course, in the first place we pay—

Q. You have got to pay for the value of your property in the different districts?

A. Yes, sir.

Q. What is the local tax for that that you have

been paying? What are your tax bills for this year?

A. Well, we have not got them for this year.

Q. What were they last year?

A. Last year I think our total tax bill cost us—

Q. Independent of the franchise, local tax, Long Branch, Elberon and the other townships, I forget their names?

A. I think it cost us about $4,400 last year tax on property.

Q. And then the franchise tax is according to the number of feet?

A. According to our gross income.

Q. Your gross income, for instance, this year will be about what?

A. Well, it will be about, well, probably $85,000.

Q. Then that will be $1,700—two per cent., isn't it?

A. It is based pro rata—that is, we don't pay on the whole of our gross income.

By Mr. McCarter:

Q. You deduct for private right-of-way?

A. Yes, sir; as the pipe in the public streets is put.

By Mr. McCarter:

Q. Whole thing?

A. Yes, sir.

Q. What do you estimate it being this year? What did you pay last year?

A. We paid something like $5,400 or $5,500 last year.

Q. Then you didn't make it at $6,000 last year?

A. No, it didn't run $6,000 last year; our taxes are increasing down there every year, increase $400 or $500 from the year previous, and we are adding to our property; and then the tax rate is constantly increasing in all of those townships, and especially

in Long Branch; they have done away with the old charter where they are confined to a certain amount.

Q. They feel free?

A. Yes, sir.

The Court: My view at present is that I would deduct one-third of the cost of the dam.

Mr. Corbin: Let it go on the record that Mr. Asher would estimate that the dam for the supply of Long Branch at its present height ought not to cost more than half what this did cost.

A. That is what he would say if he were here.

The Court: Mr. Corbin is willing to admit that he will swear to that.

Examined by Mr. Corbin:

Q. Is there any competition developing in this territory?

A. There is.

The Court: For water?

Q. For water supply?

A. By another company.

Mr McCarter: Is that material?

The Court: I don't know.

Mr. Corbin: It would be if you are going to make an assumption that we have got a monopoly down there. I don't want that assumption made; I don't think the case ought to be made on that.

The Court: You mean competition in what part?

A. The territory now supplied by us.

Q. New company organized by authority of the Borough?

A. Yes, sir; there has been a franchise granted to

a water company in Deal to occupy the same streets that we are now occupying.

Mr. McCarter: Of course, I object to that as immaterial.

The Court: I will let it in.

Testimony Closed.

IN CHANCERY OF NEW JERSEY.

Between

LONG BRANCH COMMISSION,
Complainant,

and

TINTERN MANOR WATER COMPANY,
Defendants.

On Bill, &c.

Affidavit.

State of New Jersey, } ss.:
County of Hudson, }

Wellington La Monte, being duly sworn, according to law, on his oath, says:

I was a witness in this case on the hearing. In Schedule "A2," which I made up, which is before the Court, the cost of the first four items, A, B, C and D, sums up $1,334,031.83. Those are the same figures referred to in my testimony on page 291 and page 302.

On page 307 of my testimony I stated that the committee had before it a schedule of cost and that the cost was ascertained to be $1,334,000. The summary of our examination was inserted in "A2" of the exhibits, but we did not have any one schedule

showing all the items and details of what we ascertained. What we had to start with was a balance sheet furnished by the accountant of the Construction Company, dated January 15, 1903, which was submitted to the Court; but we went over all the items and criticised them and made up an entirely different classification of the expenses and arrived at our summary. The result was only a few thousand dollars' difference than the result shown by the Company's balance sheet, but the classification of items differed very much. They were included in a great number of sheets and memoranda—some in ink and some in pencil—and some memoranda furnished by the engineers, and we did not attempt to copy all these details in any schedule. Some of these I still have and some I have not; but I have among them data covering the entire cost of the new system, which I have carefully gone over and summarized in the annexed schedule, showing the total cost to be $938,090.84, which is about $1,250 more than it was stated in Schedule "A2." To this schedule I have appended detailed statements of the items showing quantities, sizes and weights and cost. The sizes of the pipes are known to me personally. The weight of the pipe per length was made up by examination of a large number of purchases; perhaps a hundred carloads; and taking the average of the weights per length and applying that to the known distances.

The cost is made up from the paid bills which were exhibited to us, and verified by price lists which we examined. The quantity of lead and oakum used was taken from paid bills exhibited to us.

By reason of the loss of some of our data and because some of the data which I had is now in the possession of the Court, I have had to estimate quantities; but the total result, $938,090.84, will not vary $5,000 either way from the amount ascer-

tained by the Committee when they made their examination in March, 1903.

I have no hesitation in saying that the schedules appended to this affidavit show, with practical exactness, the quantities and cost of all the several items of the Newman Springs plant.

The new plant is now entirely completed, with the exception of the setting of one of the large pumps, of a value of about $22,000. It has been built by Worthington and is ready to be shipped and will soon be in place. With that exception the work is complete and is in use.

I have added to my statements a schedule of the estimated cost of running the Newman Springs pumping station alone, the others being out of use. This is made up from the result of our experience at the present time.

Referring to the item of $70,000 in Schedule "A2," I stated that the $50,000 which the Construction Company was to pay in cash to the Water Company has been paid, and that the new work which they have done towards finishing the plant has been, as near as I can estimate, much more than $20,000, which it was estimated would be required to finish the same, and this sum should be added to the actual cost of the plant.

In my opinion $30,570 is the lowest price at which we can operate the Company, the Newman Springs plant alone being in use. The details are in the schedules hereto appended.

WELLINGTON La MONTE.

Subscribed and sworn to at Jersey City this 21st day of April, A. D. 1905, before me,

Samuel S. Moore,
Notary Public,
of New Jersey.

Cost in Detail of the New Water System of the Tintern Manor Water Co. To the Independent Telephone and Telegraph Construction Co.

On March 6, 1903.

A. Land for pumping station and standpipe	$ 10,400.00
B. Reservoir, land and clearing (see Exhibit B)	76,021.98
C. Dam— (see Exhibit C)	89,764.11
D. Pipe line, dam to pumping station—construction (Ex. D)	23,942.16
E. Pipe lines (other) (see Exhibit E) construction	46,808.86
F. Pumping station (see Exhibit F)	31,339.88
G. Pipe (see Exhibit G)	376,618.00
H. Valves and special castings (Exhibit H)	19,708.70
I. Lead and yarn (Exhibit I)	20,884.00
J. Filters (contract, N. Y. Continental Jewel Filtration Co.)	45,000.00
K. Pumps (contract H. R. Worthington)	44,850.00
L. Engineering	13,854.57
M. Interest	110,799.74
N. Legal expenses	5,103.05
O. General expense	14,828.42
P. Bond coupons	6,976.50
Q. Taxes	1,190.87
	$938,090.84
R. Detail cost per foot of water mains (Exh. R)	
S. Estimated cost Newman Springs Pumping Plant (Exh. S)	133,439.88
T. Estimated cost of running Tintern Manor Water Co. plant from Newman Springs Pumping Station (Exh. T)	30,570.00

Exhibit B.

COST OF RESERVOIR.

Land	$40,043.53
Powder	689.77
Clearing	35,526.37
Damages	162.00
Tools and Miscellaneous	900.31
	77,321.98
Cr. By Timber cut and sawed—130,000 ft. @ $10.00	1.300.00
	$76,021.98

Exhibit C.

COST OF DAM.

Concerte—Dragon cement—2906.6 cu. yds. $9.00	$26,159.40
Concerte—Improved shields cement 1075.0 cu. yds. 810	8,707.50
Brick masonry— 58.0 cu. yds. 14.50	841.00
Plastering— 389.6 sq. yds. .50	194.80
Coping and water-table— 16.05 cu. yds. 15.00	240.75
Rip Rap— 656.3 cu. yds. 4.10	2,690.83
Rip Rap broken stone— 315.5 cu. yds. 3.50	1,104.25
8″ Y. P. sheet piling in place— 71,8.03 ft. B. M. 50.00	3,590.15
2″ x 4″ sheet piling in place—	646.64
Earth embankment— 33460 cu. yds. .38	12,714.80
Earth excavation— 10416 cu. yds. 35	3,645.60
Earth " 3325 cu. yds. .25	831.25
Top soil dressing— 816.6 cu. yds. .40	326.64
Pile driving—	5,849.73
Timber apron & bulkheads—	4,203.57
Grubbing and clearing— 5.27 acres 200.00	1,054.00
Hauling iron, lumber, poles, &c.—	2,311.61
Extras	1,152.59
Total paid contractors.....	76,265.11

36000 Brick, @ 6.50.....	234.00
Gate valves, sluice gates, screens and appliances sufficient for whole dam as planned to original height.	7,290.00
Hardwood lumber on apron and bulkheads from co's sawmill 700000 ft. @ 15.	1,050.00
10,000 ft. spruce— @ 30—	300.00
600 ft. C. I. 36″ pipe—150 tons @ $27. $4050. Lead $225.00	4,275.00
Iron, bolts, washers expanded metal	160.00

DESCRIPTION.

Dam about 460 feet long and 20 feet high with foundations complete, and gate valves, sluice gates, screens, and appliances for dam 50 feet high, as per original plan.

Exhibit D.

PIPE LINE DAM TO PUMPING STATION.

Size, 36″; length, 10,001 ft.; construction, cost—		$23,942.16
10,001 ft. @ $1.24 per foot for unloading, carting and laying—	$12,401.24	
Balance—	11,540.92	

For excavating, earth filling, pile driving, bulkheading, and pile bridges, laying submerged pipe under river; most of line was laid in bad swamps.

Exhibit E.

PIPE LINES EAST OF PUMPING STATION.

Cost of construction $46,808.86

Rate for unloading, carting and laying pipe, company to furnish pipe, valves, lead and gaskets.

36″—75c per foot. 24″—50c per foot.
18″—27c per foot. 12″—17c per foot.
10″—14c per foot. 8″—13c per foot.

(Above are the prices paid to Flood and Sherrill, Contractors.)

ESTIMATE.

31,946′—36″	@	75c	per	foot	$23,969.50
1,456′—24″	"	50c	"	"	728.00
36,354′—18″	"	27c	"	"	9,815.58
4,397′—12″	"	17c	"	"	747.49
5,667′—10″	"	14c	"	"	793.38
2,915′— 8″	"	13c	"	"	378.95
					$36,432.90
Balance					10,375.96

For extras, such as laying pipe under railroads, repairing pavements, piling, several hundred feet of pile bridges, laying submerged pipe under rivers, putting in branches, setting fire hydrants, building vaults for gate valves, &c.

Exhibit F.

PUMPING STATION.

Cost to March 6, 1903, $31,339.88

Brick building on concrete foundations with filter room, engine room, and boiler room, separated from each other by brick partition walls.

Filter Room—size, 66′x125′, with concrete basins for filtered water, under the whole building.

Engine Room—size, 41′x82′, with concrete basin under the whole building, together with foundations for pumps.

Boiler Room—size, 43′x64′, cement floors and foundations for five 125 H. P. boilers.

Exhibit G.

PIPE.

Cost—as charged in statement..... $376,618.00

Feet.	Size.	Lbs. per ft.	Estimate—Total.	Tons.	Rate.	Amount.
41947	36″	@ 506	21,225,182	10,612.59	@ $26.50	$281,233.64
1456	24″	" 254	369,824	184.91	" "	4,900.12
36354	18″	" 165	5,988,410	2,999.20	" "	79,478.80
4397	12″	" 88	386,936	193.47	" "	5,126.96
5667	10″	" 68	385,356	192.68	" "	5,106.02
2915	8″	" 52	151,580	75.79	" "	2,008.43
				14,258.64		$377,853.47

Several hundred feet of 36″ pipe and several hundred feet of 18″ pipe were flexible joint pipe, bought at an extra cost. Added to this is pipe furnished for branches run into side streets for future extensions.

The difference in the above amount, plus the additional cost of flexible pipe and cost of pipe for branches, was offset by a rebate allowed the Construction Co. by the Pipe Company, the amount I have no memorandum of.

The above weights are estimated as near as possible from the records in my possession, and I think can be verified at the office of the United States Cast Iron Pipe and Foundry Co., 71 Broadway, New York.

Exhibit H.

Valves and Special Castings.

Cost - - - - - - - - - - - - - $19,708.70

A fair estimate of the cost of this item would be 5% of the cost of the pipe.

5% of $376,618.00, cost of the pipe - 18,830.90

Exhibit I.

Lead and Yarn.

Cost - - - - - - - $20,884.00

Feet.	Size.	No. Lengths.	Lbs. per Joint.	No. Lbs.	Rate per Hundred.	Amount.
41,947	36″	3,496	63	220,248	$4.45	$9,801.04
1,456	24″	122	42	5,124	"	228.02
36,354	18″	3,030	32	96,960	"	4,314.72
4,397	12″	367	22	8,074	"	359.29
5,667	10″	473	20	9,460	"	420.97
2,915	8″	243	15	3,645	"	162.20
				343,511		$15,286.24

Balance $5,597.76

The above estimated amount of lead per joint is taken from a table, the joints were well leaded and amount used probably more than given in table.

There is always much lead wasted and burned up.

In the above estimate no account is taken of yarn used, of the extra lead used in running the flexible joints, nor any allowed for valves, special castings, branches, &c.

Exhibit R.

Detail Cost Per Foot of Water Mains.

	36 in. Dam to Pump Sta.	36 in.	24 in.	18 in.	12 in.	10 in.	8 in.
Cost of pipe per ft. at $26.50 net ton	$6.7000	$6.7000	$3.370	$2.1900	$1.170	$.900	$.690
Cost of lead per ft. at $4.45 per 100	.2336	.2336	.156	.1184	.082	.074	.056
Cost of trenching and laying	1.2400	.75	.500	.2700	.170	.140	.130
Add for valves, specials, yarn, pile bridges, laying submerged pipe	1.3544	.7164	.377	.2416	.133	.104	.084
Total cost per foot	$9.5280	$8.4000	$4.403	$2.8200	$1.555	$1.218	$.960

Cost of Mains as Per Above Estimate.

No. Feet.				
10,001′	36″	Dam to pump sta. at 9.528		$95,289.53
31,946′	36″	Force main at	8.400	268,346.40
1,456′	24″	" "	4.403	6,410.77
36,354′	18″	" "	2.820	102,518.28
4,397′	12″	" "	1.555	6,837.34
5,667′	10″	" "	1.218	6,902.41
2,915′	8″	" "	0.960	2,798.40
		Total		$489,103.13

Exhibit S.

Estimated Cost of Newman Springs Pumping Plant, Complete.

Cost of building to March 6, 1903,..	$ 31,339.88
Filters, contract N. Y. Continental Jewel Filtra. Co.	45,000.00
Pumps, contract H. R. Worthington.	44,850.00
Five, 125 H. P. boilers with stacks, grates, & setting (est)	9,250.00
Completion, extras on contracts, heating system, lighting system, etc. (est.)—	3,000.00
	$133,439.88

Exhibit T.

Estimated Cost of Running Tintern Manor Water Co. Plant from Newman Springs Pumping Station.

General Expenses—		
Legal expenses—	$1,000.00	
Salaries & O. E.—	4,000.00	
Office expense—	1,000.00	
Miscellaneous expense—	1,200.00	
Insurance	500.00	
St. foreman and laborers	500.00	
Horse and wagon—	300.00	
Maintenance—	2,200.00	$10,700.00

Operating Expenses—Newman Springs Sta.

Engineers and firemen—	4,440.00
Repairs to pumps—	500.00
" " boilers—	100.00
" " filters—	250.00
Oil packing and waste—	600.00
Tools and sundries	200.00

Lighting engine house—	480.00	
Coal—	6,000.00	
Coagulant—	1,000.00	
Miscellaneous expense—	300.00	13,870.00
Taxes, including Franchise Tax—		6,000.00
		$30,570.00

IN CHANCERY OF NEW JERSEY.

THE LONG BRANCH COMMISSION

vs.

TINTERN MANOR WATER CO.

Submitted September, 1905.

Decided November, 1905.

Final hearing on bill, answer and proofs.

Mr. ROBERT H. MCCARTER and Mr. C. G. VAN NOTE for Complainant.

Mr. WILLIAM H. CORBIN for Defendant.

PITNEY, V. C.

The Municipal Government of the Borough of Long Branch (The Long Branch Commission) by its bill, filed July 31, 1903, as originally framed, sought an injunction against the Tintern Manor Water Co., which for many years (under the name of The Long Branch Water Supply Company) has been, and was still, supplying Long Branch and its inhabitants with water, to enjoin it from carrying out a threat recently made in writing, to discontinue its supply of water to the municipality for public purposes, unless the municipality should

pay certain arrears of dues for water furnished it for about two years then last past.

On the return day of an order to show cause why such restraint should not be granted, it appeared that the contest arose out of a dispute as to the rates to be charged by the Water Company, not only to the municipality for public purposes, but also to private consumers.

In fact, it was practically a continuation, in another form, of the contest, instituted by a citizen, but in fact supported by the municipality, in the Supreme Court, of which a report is found in Hicks vs. The Long Branch Commission, 40 Vroom., 300.

It further appeared that the dispute at the present moment, August, 1903, was not so much over the terms of the agreement which was defeated by the Hicks suit and which was, as we shall see further on, sufficiently favorable to the municipality, as ever the rates to private consumers which had been established by the Water Company on June 1, 1903, and which were an amendment and slight reduction of rates established on June 1, 1902.

At the argument on this order to show cause, August, 1903, the Water Company contended that the municipality had no right, or power, to interefere with the rates established by the Water Companies for private consumers, or to make any terms for such consumers, and that the rates fixed by the Water Company, which was organized under the Act of April 21, 1876, P. L., 1876, p. 318; Rev. of 1877, P., 1365, were final under the Thirteenth section of that act, which declares that the Company may sell its water at such price as the Company may think proper.

But I held that the true construction of the last clause of the Second section gave, by implication, authority to the municipality to impose terms

upon the Water Company *in limine*. That section requires the nascent corporation to annex to its certificate of organization "the consent in writing of the 'corporate authorities' of any town or city proposed to be supplied 'with water.'" And it has been held that the certificate of organization without such consent was null and void. See Tyler vs. Plainfield, 25 Vroom., 526; Mampton vs. Clinton, 36 Vr., 158; Franklin vs. Nutley, 8 Dick., 601.

This clause puts it in the power of the municipality to impose terms as to the rates to be charged to both the public and private consumers, and it has frequently been exercised. It was not, however, done in this case.

But further a statute permits the municipality to make contract such as that mentioned for no longer than ten years, thus leaving it open to the municipality to revise its contracts with the Water Companies every decade. The result it, as it seems to me, that the municipality has the power either by statute or by the implication therefrom, over the whole subject.

But, independent of such statutory provision, I think it is the province and the duty of the municipality, whenever opportunity offers, to exercise its power in the protection of its inhabitants against extortion, and to secure them a supply of water and of gas from corporations, assuming to furnish those commodities, at reasonable rates.

I so hold in Public Service Corporation vs. American Lighting Co., 57 Atl. Rep., 482, and see Davis vs. Harrison, 17 Vr., 79 at page 85; Lake vs. Ocean City, 33 Vr., 160, at 162; Mayor vs. City Trust Co., 54 Atl., 815.

The Water Company, in exercising a public franchise, which, from its nature, and mode of exercise, is necessarily, during its continance, a prac-

tical monoply, and it follows beyond all question that its charges for its supply must be reasonable. And it would be strange indeed if the Municipal Government, which, so to speak, imposes this monoply upon its citizens, were powerless to protect them against unreasonable charges.

However, the counsel for the defendant, at the hearing of the order to show cause, cheerfully acquiesced in my ruling, and it was at once agreed in open Court that the bill should be amended by inserting a clause, asking the determination by this Court of the question of the reasonableness of the scale of charges demanded by the Water Company, as well those to the private consumers as those to the municipality. This amendment was made and the bill, as amended, was answered and the jurisdiction of this Court in the premises submitted to by the defendant, and the cause brought to a final hearing and a mass of testimony taken on the issue so raised in the Spring and Summer of 1904, and again in September, 1905.

In the meantime, an injunction against shutting off the water from the municipality was granted on terms that it should forthwith pay to the defendant four-fifths of the arrears already accrued and of the dues thereafter to acrue pending the suit. The rate to private consumers to stand and be enforced according to the scale of June 1, 1903, until the final decree of this Court.

Coming now to the determination of the matters submitted, I find it necessary, for the full understanding of the affair, to give a short history of the Water Company which has been for years supplying Long Branch with water.

The defendant, The Tintern Manor Water Company, is the successor by process of merger and consolidation under Sections 104-107 of the Act Concerning Corporation of 1896, P. L. 1896, 277 of the Long Branch Water Supply Co. which was or-

ganized in 1882, under the Act of April 21, 1876, *supra*.

The declared object of the latter Company was to supply with water "The Township of Ocean" (Monmouth County)" and the seaside resorts of Long Branch, Monmouth Beach and Seabright, and the places adjoining thereto.

The only one of the places so mentioned then incorporated was Long Branch.

Attached to its articles of incorporation was the formal joint consent of the municipality of Long Branch and of Ocean Township to the incorporation by the gentlemen mentioned in the certificate for the purpose above mentioned and to the laying of water mains throughout the territory mentioned, and operating its works therein. The language of the consents is full and ample. No terms were imposed.

The territory of Ocean Township covered by this certificate is about nine miles in length on the seashore, and varies in width from less than one-half a mile to upwards of two miles. Being bounded on its northwest side for about five miles by the Shrewsbury River and Pleasure Bay.

At the southwesterly end, at Elberon and Beal, it extends several miles into the interior.

The Long Branch Commission covers about one-half of the southeasterly part of the ocean front of this tract.

This Company preceeded to supply the territory mentioned, and took its supply from the Whale Pond Brook, a stream, rising in the interior and running at right angles to the coast and emptying into the ocean in about the middle of the territory of the Long Branch Commission, and about a mile, and a half southwest of the center of the old village of Long Branch. The point of diversion is about a half a mile from its debouche into the sea and is called Takanassee.

It there established a pumping station and a water tower about eighty feet high and laid mains throughout Long Branch and thence northeasterly along the beach to North Long Branch, Monmouth Beach, the old fisherman's village of Galilee, Lowmoor and Seabright, a distance of at least six miles. It also laid its mains southwest to Elberon and South Elberon as rapidly as population demanded.

In response to such demand, it, from time to time, added more mains of greater size, and, apparently, always kept well up to, if not in advance, of the demands of its patrons, and always served them, so far as appears, with entire satisfaction.

On September 21, 1891, it entered into a written contract with the municipality of Long Branch to continue for ten years. By that contract the municipality gave the Water Company the exclusive right to furnish water for municipal purposes, also the right to extend its mains through any of the streets of the municipality, and agreed to pay it $4,000 a year for the municipal supply, including street sprinkling and hydrant service, for hydrants then in use, with a further charge of Forty dollars a year for each hydrant thereafter to be added.

The Water Company agreed to pay an annual tax, or whatever it may be called, of $250 a year and to furnish at all times a complete and adequate supply of water.

The municipality further granted to the Water Company the exclusive privilege of furnishing water for private use to the residents of the community, upon condition that the rates charged for the use of water should not exceed the rates charged at the date of the contract, reserving the right to the Water Company to supply water to any premises through a meter at twenty cents per 1,000 gallons (equal 133 cubic feet).

In point of fact, there never was any scale of charges for unmeasured water established or en-

forced by the Long Branch Water Company until June 1, 1902, and a great inequality and lack of uniformity arose out of the absence of such an established scale.

Very few, if any, meters were introduced, and none, I believe, for water used for ordinary domestic purposes.

So great was this inequality of charges that at and before the attempt to establish rates on June 1, 1902, in many instances private consumers were receiving for Ten dollars a year, a supply of water for which others were paying Forty dollars per year. It was the attempt to adjust this inequality by raising the charges of those who had been served at a low rate which formed one of the causes of the previous and present contest.

In the meantime in the latter part of the last century the growth of the population in the territory covered by the articles of association had grown from about $6,000 in 1880, including about 4000 for Long Branch, to over 14,000 including about 9,000 for Long Branch, and the use of water had increased in a greater proportion.

Such greater proportion was due, as we all know, to the somewhat modern lavish use of water for personal bathing, for lawn sprinkling and for street sprinkling.

The result was that the officers of the Long Branch Water Supply Company found that in a very dry season their demand for several days was equal to the supply, and they took into consideration plans for increasing such supply.

Now this I conceive it to be well settled was their undoubted duty. It was so declared by Mr. Justice Van Syckel, speaking for the Court of Errors and Appeals in Olmsted vs. Morris Aqueduct, 18 Vroom, 311 at pl. 329.

A Company, which seeks and obtains a franchise to supply certain territory with water for public

and domestic uses is under a moral, and, in my judgment, a legal obligation to furnish a supply which shall equal to all emergencies which may be reasonably anticipated, including unusual drouths and unusual conflagrations, and to bear constantly in mind the prospective increase in population and a consequent increased demand for water. The evidence taken herein in Sept. 1905, showed that the Takanassee supply in the immediate preceeding Summer, was entirely inadequate and fully justified the necessity for some action on the part of the defendant Company.

The problem as presented to the old Company was not easy of solution. They could have built a reservoir to store the waters of Whale Pond Brook above Takanassee which would have prolonged their supply, according to Mr. Sherrerd, upon whose opinion I place great reliance, for about ten years. But the contour of the earth presented no favorable location for such reservoir. It would consist mainly of very shallow water which is not desirable for storage purposes, and Mr. Sherrerd's approval of the plan, I thought, and still think, was not very hearty.

Its cost would have been about $220,000, and at the end of ten years, and I think, sooner, as the evidence indicated, an insufficiency would still have arisen.

But, in addition to all that, the supply at Takanassee was not central. It was six miles away from Seabright, the northeasterly end of the territory, and the mains already laid for that populous resort were already worked to their full capacity, after having been once more duplicated. So that properly to supply Seabright would have required the laying of several miles of new mains.

Then at the end of ten years, it was said that a supplemental supply could have been found by sinking in Long Branch City artesian wells a few hun-

dred feet in depth to tap the new well-known layer of water—bearing gravel existing along the shore, precisely as predicated by Professor Cook many years ago, and from which several towns in Monmouth County derive their supply. But I am not able to say that I think this bed of water-bearing gravel which seems to be a continuous one, has been so far tested or explored as to render it certain that its storage capacity will stand unlimited draft upon it. For it must be born in mind that it is a mere storage reservoir receiving its supply of water from rain falling on an outcrop in Monmouth County some miles inland from the sea-shore, and its storage capacity is undoubtedly limited. It appears that it has been tapped by a private individual in the City of Long Branch and water drawn therefrom.

This, however, can hardly be considered as a complete test of the reliability of the storage at that point.

And if a plant had been established in the Northerly part of Long Branch depending upon this subterranean supply, it would have required, in order to make it available, the establishment and continuous maintenance of a complete additional pumping station and would have required two pumping stations constantly in operation, thereby in some respects doubling the expense.

The officers of the old Water Company looked elsewhere and fixed upon Swimming River, which rises farther in the interior, has a water shed ten times larger than that of Whale Brook Pond and empties into the Navesink River, six miles northwest of Long Branch, they then united by articles of merger with a small water company which had been organized at Deal Beach, southwest of Long Branch and was in successful operation, a small one at Seabright, and two or three others which had only a paper existence, and with the Tintern Manor

Water Company then recently organized and adopted the name of the latter.

Their pumping station is about one mile from Red Bank. From thence they laid a thirty-six inch main through Little Silver and Oceanport about eight miles to the westerly suburbs of Long Branch and there connected with a small six-inch main of the old Long Branch system.

This connection was merely temporary and quite insufficient to supply the town without the aid of the Takanassee plant until the new system could be continued into the middle of the main town, there to connect with the large mains of that system.

Besides this, from the thirty-six inch main at Little Silver they laid a sixteen inch main along the south shore of the Navesink River, through Fair Haven, Oceanic, then across Rumson Neck and the Shrewsbury River to Seabright, there connecting with the northerly end of the old Long Branch system.

This last connection was an important one in that it enabled the Company to fulfill its implied contract to supply Seabright and the other shore towns between it and Long Branch, and at the same time to reach with its flow the northerly part of Long Branch.

At the time the bill was filed and at the hearing the two plants Takanassee and Swimming River, were still in use, but the plan of the defendant was, and is, to abandon Takanassee as soon as it shall have laid in the Town of Long Branch the proper mains to enable it to do so from the Swimming River alone.

It is admitted that the new works are supposed to be amply sufficient, both as respects the supply of water and the size of the principal mains, to supply the region within its reach for fifty years to come.

Indeed, the size and costliness of the plant is a matter of complaint by the complainant, and it insists that it should not be called upon or required to pay rates for water sufficient to pay a fair return for so great an expenditure.

There is a measure of soundness and justice in this contention. The inhabitants of the Borough of Long Branch ought not to be compelled to pay water rates adjusted to pay an income on a greater outlay in a plant than is reasonably needed for its supply. Just here I make the remark that the fact that the complainant is joined with the whole breadth of Ocean Township, of which Long Branch covers only a part, is due to the fact that the municipal authorities of Long Branch voluntarily joined with those of Ocean Township in a scheme which embraced both. But I suggest that it is highly probable that it will be found in the end that the whole territory can be supplied to a better advantage as a whole by one plant than it could be if broken into parcels and supplied by several distinct plants.

I have said that a duty rested upon the old Water Supply Company to furnish and maintain a sufficient supply for the territory embraced in its articles of association so long as it appeared that the municipalities within that range relied upon it to furnish them with such supply. I think it follows that so long as those municipalities and their inhabitants tacitly acquiesced in being so supplied it does not lie in their mouths to question the wisdom of the means adopted by the Water Company to fulfill its obligation in that behalf provided the action of the latter is taken in good faith.

The selection of these means so far as relates to the chosing the source of supply is somewhat speculative at best.

In the present case there is no reason to doubt that the Water Company acted in good faith in de-

ciding to abandon the Takanassee plant, even if they made a mistake in judgment in so doing.

I am unable to believe, that the business men and capitalists who owned and controlled the Long Branch Supply, deliberately abandoned, and, so to speak, threw away their pumping plant and property and rights of diversion at Takanassee without being thoroughly satisfied that it was wise to do so.

But I do not think they did make a mistake in judgment, I do think that the evidence fully justifies them in their decision.

And here intervenes an important consideration. Any municipality supplied with water under ten year contracts and circumstances like the present, has the power, at the expiration of one of its contracts to take measures to supply itself, either by erecting completely new water works, or taking by condemnation the whole or a part of those already in existence. They hold that power in reserve both as a weapon of offense and defense against oppression by the existing Water Company. In the present case there is no reason for the belief, nor was it contended, that the contemplated change, which was, in fact, undertaken a few months prior to the expiration of the contract of 1891, was concealed from the authorities of Long Branch and that they were taken by surprise in the premises.

In short, the complainant appears to have concluded, and wisely, as I think, to accept the situation, and to obtain the best terms it could from the Water Company for its future supply.

This explanation of the situation of the parties and their relative duties brings us to the consideration of the very matter submitted, viz.:

First. What annual compensation ought the defendant to have for the supply of water which it is giving, and agree to continue to give, to the inhab-

itants of the territory covered by the Long Branch Commission?

Second. How shall that compensation be distributed between the municipality, as such, for public purposes on the one hand, and the private consumers on the other?

Third. As between the private consumers themselves?

The principal governing the first question is plain enough but difficult of application to particular cases. It becomes complex as soon as an attempt is made to apply it.

The subject has received careful consideration in two very recent cases one of Brymor vs. Butler Water Co. (1897) by the Supreme Court of Pennsylvania, 179 Penn. 231, 36 Atl. Rep. 249 and later (1900) in Kennebec Water Co. vs. Waterville 97 Maine, 185, 54 Atl. Rep. 6. In the former case the subject was brought under direct adjudication. In the latter it arose incidentally but received most exhaustive consideration and the result is sustained by a wealth of authority.

In the Pennsylvania case Mr. Justice Williams speaking for the Supreme Court at page 251 of 36 Atl. Rep. says:

"By what rule is the Court to determine what is reasonable and what is oppressive? Ordinarily, that is a reasonable charge or system of charges which yields a fair return upon the investment. Fixed charges and the costs of maintenance and operation must first be provided for. Then the interests of the owners of the property are to be considered. They are entitled to a rate of return if their property will earn it, not less than the legal rate of interest: and a system of charges that yields no more income than is fairly required to maintain

the plant, pay fixed charges and operating expenses provide a suitable sinking fund for the payment of debts, and pay a fair profit to the owners of the property, cannot be said to be unreasonable."

"This whole subject was brought to the attention of the learned judge by a request that he should find, as matter of law, that the reasonableness of the charges must be determined with reference to the expenditure in obtaining the supply, and providing for a fund to maintain the plant in good order, and pay a fair profit upon the money invested by the owners, and that a rate which did no more than this was neither excessive nor unjust. This the learned judge refused to find, saying, in reply to the request: 'We have no authority for such a ruling, and it would be unjust to the consumer, who would have to pay full cost of the water, provide a sinking fund, secure a reasonable profit upon the investment, and have no voice in the management of the business of the company. This Act of assembly in this regard can bear no such construction.' This ruling cannot be sustained.

The cost of the water to the Company includes a fair return to the persons who furnished the capital for the construction of the plant, in addition to an allowance annually of a sum sufficient to keep the plant in good repair, and to pay any fixed charges and operating expenses."

A rate of water rents that enables the Company to realize no more than this is reasonable and just Some towns are so situated as to make the procurement of an ample supply of water comparatively inexpensive. Some are so situated as to make the work both difficult and expensive. What would be an extortionate charge in the first case might be the very least at which the water could be afforded in the other. The law was

correctly stated in the defendant's request, and the Court was in error in refusing it."

In the Maine case, which is largely relied upon by the counsel for the complainant herein, the following propositions were held:

"The basis of all calculation as to the reasonableness of rates to be charged by a public service corporation is the fair value of the property used by it for the convenience of the public.

At the same time, the public have the right to demand that the rates shall be no higher than the services are worth to them, not in the aggregate but as individuals.

Sumarized, these elemental principles are the right of the Company to derive a fair income, based upon the fair value of the property at the time it is being used for the public, taking into account the cost of maintenance or depreciation and current operating expenses, and the right of the public to have no more exacted than the services in themselves are worth.

The reasonableness of the rate may also be affected for a time by the degree of hazard to which the original enterprise was naturally subjected; that is, such hazard only as may have been justly contemplated by those who made the original investment, but no unforseen or emergent risks. And such allowance may be made as is demanded by an ample and fair public policy. If allowance be sought on account of this element, it would be permissible at the same time to inquire to what extent the Company has already received income at rates in excess of what would otherwise be reasonable, and thus has already received compensation for this hazard.

In determining the present value of the Company's plant, the actual construction cost thereof, with proper allowances for depreciation, is legal

and competent evidence but it is not conclusive or controlling.

The request that "under no circumstances can the value of the plant be held to exceed the cost of producing at the present time a plant of equal capacity and modern design" should not be given. Among other things, it leaves out of account the fact that it is the plant of a going concern, and seeks to substitute one of the elements of value for the measure of value itself.

These propositions are sustained by elaborate reasoning and abundant authority. I do not think it worth while to cite the latter.

The supplying company is, as we have seen, under obligation to keep in advance of the present demand and take liberal account of the probable increase of demand due to increase of population. I think the language of Mr. Justice Dixon in Slingerland vs. Newark, 25 Vr., 62, at page 69, is apt on this point. "It would, of course, be absurd for the city to construct water works adequate only for its present wants and the prosecutor does not assert that the works now contemplated are unreasonably large in view of the city's prospective growth."

This is in strict accord with what was said (and above referred to) by Justice VanSyckle, in Olmsted vs. Morris Acquedust, 18 Vr., 329, as follows: "In a matter of extreme necessity, all contingencies must be provided for, and the supply must be so ample that a lack of water cannot be apprehended." To the same effect are the more extended remarks of Judge Parker in the Supreme Court, in the same case, reported 17 Vr., 500. The learned Judges in these cases were discussing the question of necessity for the exercise of right of eminent domain.

The argument from such premises to the present is a *fortiori*.

These considerations lead to the conclusion that the Water Company when it starts with new works, or a large addition to the original supply, is entitled to an income therefrom somewhat greater than what is due to the cost of work sufficient merely to meet the present demands. I say, "somewhat greater" for I do not mean to be understood as holding that capitalists ought to expect an immediate compensatory income from an enterprise of this character. But on the other hand it would be manifestly unjust to expect them to invest their money in a plant necessarily larger than present demands require and take as an income therefor such a sum as would satisfy an investment sufficient to meet present demands.

For here comes in again, with great force, the consideration previously mentioned, that the municipality cannot bind itself for more than ten years, and in fact, need not bind itself at all for any period, and it holds in its hand the absolute power to oust the Water Company at any time it shall so choose and may exercise that power as soon as by the increase of population and demand, the investment by the capitalists shall have become actually profitable.

This is one of the risks spoken of and provided for by the Supreme Court of Maine.

Now, let us inquire what is the cost or the fair value of the works of the defendant.

First. The Takanassee works.

They were put into the new corporation at $425,000 or rather $325,000, subject to a mortgage for $100,000 to secure outstanding bonds. That included the plant at Takanassee and all the street mains both within and without the limits of Long Branch.

It was said by Mr. Sherrerd that the mains within the limits of Long Branch just before the date of the hearing, May, 1904, could be replaced at about

$115,000, but I think that was a very low estimate, even at the then very low price of pig iron, which as we know, fluctuates largely. The mains, in fact, probably cost twice the sum mentioned. I think no estimate was made (none was given) on the value of the mains outside of the corporate limits of the Commission. To the value of the mains is to be added the removal value of the pumping engines and the fixtures and apparatus at Takanassee which was considerable.

Then $71,000 was paid for the Deal Water Works.

This brings us to the cost of the new plant, in producing proof of which a large amount of time and space were occupied. They were commenced by a contracting company under specifications of the work given in detail and were to be paid for in $1,200,000 in first mortgage bonds and divers shares of the capital stock of the par value of $100.

Difficulties were encounted in carrying out this contract according to its terms, and the plans were changed. The result of this was that the contractors were not held to their bargain but were paid in bonds and stock according to the actual amount of their expenditures.

In order to ascertain those expenditures an inventory of the work done was taken, and the cost was ascertained by the vouchers and checks furnished by the contractors.

The reliability of this mode of ascertaining the cost was fiercely attacked by counsel for the complainant, but I think this attack was not founded in justice. It is true that it was alleged, and I believe proven, that some of the persons who were interested in the construction company were also interested in the Water Company. But the committee of the Water Company who undertook to make up the cost of the new works were not interested

in the contracting company, and they went about their work and carried it through in the usual mode that business men would adopt under such circumstances. Of course, it was easy enough to measure up the fifteen or more miles of water mains laid and ascertain the sizes and the prices paid for it and the cost of laying them, and so with the cost of the pumping engines, filter plant, so far finished, and the great dam across the Swimming River.

Moreover, maps of all these works were laid before the Court, by defendant, and complainant had an opportunity to put experts upon it and give estimates of its probable cost, but did not avail itself of the chance.

The committee to ascertain this cost consisted of Ex-Senator Blodgett, who had been connected for some time with the old Company, Mr. LaMonte, its engineer and superintendent, and Mr. Conant, who at that time was its secretary and all of whom were watching the construction as it progressed.

They found that the contracting company had expended $936,000 and large sums were afterwards expended and more yet have still to be expended so that its cost may be fairly stated as $1,000,000.

The contractors, however, paid for all their work in cash.

The defendant estimates the cost including the Takanassee and Deal works at $1,500,000 and upwards, without counting the shares of stock which were issued and which may be here treated as a mere bonus.

Several distinct criticisms and objections are made to the details given of this valuation. First, it is said that the cost of the site of the reservoir, amounting to $76,000 is too great. The land itself, consisting of several hundred acres, cost $40,000 and the cost of clearing $35,500.

In fact, only about one-third or one-half of this

land has been so far covered with water and much more than the amount covered has been cleared.

The fact is that the original plan provided for a vary large reservoir, including a very high dam, but in carrying out a lower dam and smaller reservoir were adopted.

It is admitted that the present supply is ample for many years to come. I shall deduct from the total Twenty-five thousand dollars on this account.

The next item criticised is the cost of the dam itself the total cost of which was $89,500.

The objection to this is that it was laid out and erected to its present height of a width sufficient for a dam two or three times as high, and that such construction cost nearly or quite twice as much as it would have done for a dam of its present height. I think this objection is well taken, but not to the extent claimed by complainants. I shall deduct $30,000 on account of the excessive cost of the dam.

The next objection is to the size of the principal main land, viz.: about 42,000 feet of 36-inch main which was much too large and expensive, and that complainant ought not to be charged with an income on so great an outlay. Defendant admits that its plans were adapted to a future estimated growth of fifty years.

Mr. Sherrerd says, and I agree with him, that 50 years is too long for a forecast. He fixed thirty years as the usual limit. Now it is readily perceived that the difference in cost beween a thirty-six inch main and a twenty-four or thirty inch main is or may be so great that if it be saved and invested it will with the accrued interest in a period of thirty years reach a sum sufficient to lay an additional main if the first shall at that time prove to be insufficient.

I have estimated by the use of standard hydraulic tables the difference in the cost and carrying ca-

pacities of a 30-inch main and a 36-inch main. These items vary according to the squares of the diameters of the respective mains. The square of 36 is 1,296, and the square of 30 is 900. The proportion then in round figures is as 13 to 9. Applying that in practice I find that the tables give the carrying capacity of a 36-inch main with a head of one foot in 1,000 feet, length to be 15,000,000 gallons in 24 hours, and the carrying capacity of a 30-inch pipe under the same head is 9,500,000 gallons.

Now, taking the Summer population of Long Branch at 50,000 (which is double what it actually is as we shall see directly) and estimating its daily consumption, including street sprinkling, at 75 gallons per head (which in my individual judgment is 50 per cent. more than it ought to use) we have 3,750,000 gallons per day.

But supposing that consumption is confined (which, however, it is not) to 12 hours a day and call the rate 7,5000,000 gallons a day and add to that for 10 fire streams at 3,000,000 gallons a day and we have a total maximum demand of 10,500,000 gallons to be supplied through 33,000 feet of 30-inch main intervening between the Newman Springs pump and the City. Now, the tables show that a 30-inch main, 32,000 or 35,000 feet long will deliver water at the rate of 10,500,000 gallons per day under a friction head of 35 feet or 15 pounds to a square inch, which as we all know is a trifling pressure, if we add to this 40 pounds to the square inch as a proper pressure to be maintained at the hydrants we have a pressure at the pump of only 55 pounds to the square inch, which is also a very moderate water piston pressure for a steam pump.

The evidence is that the pressure at the works is maintained at sixty pounds to the square inch as a normal condition and the works are aranged so as to maintain a pressure of eighty-five pounds to the square inch.

By increasing the pressure at the water piston of the pump we can easily and readily increase the carrying capacity to 20,000,000 gallons in 24 hours, and this can be done and without improperly increasing the pressure on the steam piston by increasing the size of the steam piston as compared with that of the water piston. This is the familiar mode of arranging pumps to raise water to high altitudes, one or two or three thousand feet.

Here it is to be observed that while the old system limited the amount of pressure to the amount of head in the stand-pipe the new system inaugurated at Newman Springs, is not so limited.

It is, in fact, the Holly System, which operates without a stand-pipe, in which a constant pressure is maintained automatically.

That the estimate on a ten and one-half million gallons supply is liberal appears when we consider that the largest amount ever pumped in one day up to and including the year 1903, was 5,400,000 gallons, measured by the strokes of the pumps, from which must be deducted the "slip" estimated by Mr. Sherrerd at 10%. This was for the whole system including Seabright and the other smaller towns.

I conclude then that a 30-inch main from the dam to the pumping station (nearly two miles), and from thence to the town (over six miles), is ample, flanked, as it is, by an 18-inch main from Little Silver to Seabright, each of these aiding the other in the case of an emergency of fire.

Besides, I am entirely satisfied that the estimate for 75 gallons per head per day would be reduced below 50 gallons per day by the general introduction of meters, and such reduction of consumption, or rather of waste, will result in the saving of fuel for making steam. This I think it is the clear duty of the defendant to accomplish as soon as practicable.

By the use of the same hydraulic tables showing the relative weights of 30 and 36-inch mains and the difference in weight in lead used in joining the same I conclude that the reduction of cost of the 36-inch main laid if a 30-inch main had been used would have been one-quarter.

The total cost of the eight miles of 36-inch main with the appliances was $300,000, one-fourth of that would be $75,000, which I shall allow on that amount.

The next objection is to the item of $110,800 of interest and $7,000 of coupons paid on bonds. It is argued that while an interest account in such cases is allowable the above stated amount is too great for these works, but I think that the amount of excess, if any, is too trifling to be taken into consideration in this connection.

The next objection is to the amount paid, $425,000 for the old works. No reliable statement was made as to what those works originally cost the old Company. All that was said was that the present proprietors would not sell them for less than $325,000 besides the bonded debt. But then we must consider that there was not an actual sale for cash, but a merging into a new corporation. On the other hand, there was some actual loss in the abandonment of the old plant and the amount spent in and about the dam and pumping station at Takanassee. I estimate it at $100,000; I deduct them from the $1,500,000 as follows:

Whole cost of works,		$1,500,000
Loss on Takanassee,	$100,000	
Overcost of 36-in. Main	75,000	
Overcost of Dam,	30,000	
Overcost on Reservoir,	25,000	
	230,000	230,000
Leaving		$1,270,000

as the amount upon which defendant ought to receive dividends.

The next question is, what proportion of that sum of $1,270,000 ought to be charged, so to speak, to the defendant. The defendant suggests two-thirds. I heard from complainant no serious objections to this proportion. It accords, with the present and recent proportion of consumption of water by the complainant as compared with the total consumption. This would require the complainant to pay a fair income on $847,000.

This seems a large sum of money, but let us see what the demands of Long Branch are at present and what they are likely to become in the future.

It has about 73 miles of streets laid out on paper and ready to be improved and built upon and which according to the evidence are gradually coming into use.

Of these only 23 are at present piped and supplied with water.

The population is steadily increasing by the building of country residences, villas and small boarding houses, which latter are taking the place of the large caravansary hotels which are going out of fashion *pari passu* with the destruction of the business of gambling.

The permanent population was nearly 9,000 five years ago, and is at this time probably 100,000 or more.

The Summer population, which is also increasing, is variously estimated at from 25,000 to 100,000. The higher estimate was put upon it by Dr. Reed, formerly Mayor and a strong supporter of complainant in its present suit.

His evidence is this "it is estimated that we have a population of between 75,000 and 100,000 in the Summer." He says the permanent populaion of Monmouth Beach is probably 300 or 400 in Winter, and in Summer possibly 4,000 or 5,000. He gives

Seabright a permanent population of 500 and in Summer it is variously estimated at from 25,000 to 30,000. The same great variation probably applies to Deal.

Mr. Blodgett estimated the population of Long Branch in Summer at 50,000 to 60,000. By virtue of his position as president of one of the railroads controlling two distinct lines of transportation carrying persons to and from Long Branch. I should think his judgment more reliable than that of Dr. Reed.

Then we have the assessor of Long Branch who estimates the Summer population at 25,000.

His estimate is based upon observation of the capacity of the houses taken in making his assessment.

These are all mere guesses, not made up from any recorded observations or reliable data, unless Mr. Blodgett's may be so considered.

There is, however, a mode of reaching a safer conclusion, and that is by comparing the recorded consumption of water (as shown by the numbers of the strokes of the pumps) in the Winter months with that in the Summer.

Mr. LaMonte has furnished us with a table for the years 1891 and 1901, 1902 and 1903.

The lowest number of gallons pumped in any month in 1891 was 15,502,789 in January, the greatest was in the month of August, 49,911,478. The average per day in January was 500,000 in July 1,658,687. This makes the consumption a little more than three times greater in Summer than in Winter. Whether the sewer system had then been introduced in the town has not been shown by the evidence so far as I recollect. A sewer system in general use, as is now the case, undoubtedly has the effect of increasing the apparent consumption in Winter for the reason that people are liable

to allow their faucets to run in cold weather to avoid freezing.

Coming now to ten years later, 1901, 1902 and 1903, we find that in 1901 the smallest flow was in the month of January 40,214,260 gallons, an average of 1,297,234 daily and the greatest consumption was in August, 104,727,946, or a daily average of 3,378,320 gallons, or a little more than two and one-half times that in January. In the year 1902, the smallest consumption was again in January 42,063,518 gallons or a daily average of 1,356,887 gallons, and the greatest was in July 104,716,960 gallons a daily average of 3,377,966 gallons a day, almost precisely the same as in the month of August in the previous year, and a little more than two and one-half times the minimum amount in January.

In the year 1903 the smallest amount consumed was in the month of February 51,000,850 gallons or a daily average of 1,821,458 and the greatest consumption was in July 129,090,408, or a daily average of 4,164,206 gallons per day. Here we have the Summer flow just about two and one-half times the Winter flow.

Applying that rate here and counting the Winter population of Long Branch at this time as 10,000 we have the Summer population, for the purposes of consumption of water at least, at about 26,000 or 27,000.

If this estimate be reliable it greatly strengthens the conclusion at which I have arrived as to the capacity of a 30-inch main to supply the whole district.

Now, in fixing the share of the whole cost to be charged to Long Branch, one other consideration comes in. The municipality has acquired the habit of using a very large amount of water in sprinkling its streets in the Summer months. It uses daily in Summer, except just after a rain, 16 or 17 sprink-

ling carts which are going continuously, some of them early in the morning and late at night. Besides these are two or three maintained by the County on such streets as were improved by the County. These carts use an average of 550 gallons at a load and, except in case of rain, distribute from 26 to 32 loads each day. That will amount to nearly 300,000 gallons, or 4,000 cubic feet of water a day, enough to supply a population, for domestic purposes only, of 6,000 persons.

Taking the population to be served with water during the Summer months at 30,000 which considering the amount used for sprinkling is small enough. I think the estimate of the cost of the plant to be charged to Long Branch is none too great.

For it must be born in mind that the size and capacity of the water-works must be fitted to the highest population to be supplied precisely as if that population were permanent and not fluctuating with the season.

I also think that water-works costing $800,000 or more are none too great or costly for a town of that population.

The next question is, what is a fair income for the defendant to derive on that sum?

I have intimated that the defendant ought not to expect, at the start, a compensatory income such as that stated by Judge Williams in the Supreme Court of Pennsylvania, and by the Supreme Court of Maine, above cited but I do think they ought to get at the start a moderate rate of interest, say five per cent. on their investment after paying all expenses of operation and maintenance and a moderate allowance for depreciation in value.

This latter item as applied to the water mains is slight.

If originally laid of iron or proper quality and

properly coated on the interior they are practically immortal. They are, however, liable to diminution in carrying capacity due to the growth on the interior of tubercles of rust. This is an unascertainable quantity which varies materially with the quality of the iron, the character of the coating and the characteristics of the water.

The fire hydrants, steam pumps, boiler and filters and buildings certainly do depreciate in value each year to an appreciable extent over and above the amount which may be expended upon them for reasonable and ordinary repairs. Mr. LaMonte put this depreciation at five per cent. on all the mains and hydrants. I think that too great and fix it at one per cent. on so much of the $847,000 as is represented by the material so subject to depreciation. Just what proportion of the whole that represents must be a mere estimate, with insufficient data I put it at $600,000.

It follows that the net income which the defendant ought to receive at the start from Long Branch should be 5 per cent. on $847,000 which amounts to $42,350 and 1 per cent. on $600,000 making 6,000 and a total of $46,350.

To this must be added the costs of maintenance and administration including ordinary repairs and taxes. Mr. LaMonte has made up and submitted and been cross-examined upon a very careful estimate of those items showing the amount to be 30,000. I have carefully scrutinized it and believe it to be a fair and just estimate.

Allotting two-thirds of this to Long Branch, we have it charged with $20,000 a year.

This seems a large sum, but it must be born in mind that the works must in their size and operation be gauged to the highest population in the crowded season, and to the extravagant use in which Long Branch indulges for street sprinkling.

Taking those matters into consideration, I do not find it oppressive.

The amount then which Long Branch should pay to the Water Company is as follows: Net income on investment, $46,000; add for expenses $20,000 and we have $66,000.

We come now to the proper division of this duty laid upon the municipality at large between what is called service for public purposes, fire hydrants and street sprinkling, and what is properly called private service enjoyed by the individual citizens.

An equal distribution of this burden is a difficult problem and one not capable of exact solution, and it may be stated thus: How much of the general cost of maintaining the water supply should be assessed against the property owners as other municipal taxes are assessed, without regard to the individual benefit by each threfrom, and how much should be distributed among citizens according to the use each one makes of the water?

While probably incapable of solution with any degree of exactness, yet, it is fortunate that a mistake in its solution is not serious, since it is quite certain that a good and reliable water supply tends materially to promote the general prosperity of the municipality and increase the value of all land within its limits whether or not it is served at present with water. Lands facing on the 40 or 50 miles of unpiped streets in Long Branch are benefitted to a greater or less extent by the bare existence of the water supply and the certain availability of it for them in the future. The same remark applies with greater force to the vacant lots facing on streets already piped.

I shall first consider the case of the municipal supply.

The contested contract of November 24, 1902, framed after the schedule of rates to private consumers of June 1, 1902, had been established and

published by the Water Company, provides as follows: $25 per year for each hydrant then erected or thereafter to be erected, and $100 a year for each wagon engaged in sprinkling the streets, with liberty to the municipality to put in use as many wagons over 16 as it saw fit without further charge, and the Water Company to pay a franchise tax of at least $650 a year, which I feel sure is much less than the actual tax.

It also contained a provision that the rates for private consummation should not be increased during the ten years period of the contract.

A new table of rates to private consumers was adopted, as we have seen, on June 1, 1903, which, in some respects, reduces the rates of 1902.

This contract of November, 1902, never went into effect and at the hearing counsel for the complainant expressed his satisfaction with it as to the municipal rates and asked the Court to adopt it.

This proposition was not acceded to by the Counsel for the Water Company. He declared that if the water rates to private consumers established by the Company, either those of June, 1902, or those of June, 1903, were to be disturbed and revised by the Court, he demanded that the rates of the unexecuted contract of November, 1902, should also be revised.

In this, I think the counsel for the defendant is entirely in the right.

The offer, so to speak, of the water of the company in the Fall of 1902 to enter into the contract in question was based upon the condition that the scale of charges to private consumers of June 1, 1902, should stand unchallenged by the municipality. The income which the Water Company expected to derive was based upon estimate of income from the two sources combined. I shall therefore disregard the terms of that contract, ex-

cept so far as they indicate what was in the minds of the parties at the time.

First. The annual rent of fire hydrants.

There were on May 1, 1904, 146 fire hydrants placed and in use, as I understand, being located at intervals of an average of about 1,000 feet.

I think a fair rental of those is $25 each. That is about the average rental in the various municipalities whose rates were proven before me. In Plainfield they are charged at $15 each, but are placed much closer together and are, therefore, much more numerous in the same territory. This, in my judgment, is a wise plan, and economical in the long run, since it enables the fireman to reach a fire with a much shorter length of hose, and thereby relieves the hose from the severe strain upon it due to the pressure necessary to force a stream through a long line of it.

If the fire hydrants in Long Branch were placed as close together as in Plainfield I should feel inclined to reduce the rental.

At $25 each the rental for those in Long Branch will amount to $3,650 a year. This seems a large sum of money to pay regardless of whether or not they are used for extinguishing fires. But the charge has a substantial foundation in reason.

In the first place, the Water Company, under a serious obligation, somewhat like that of an insurance company, to keep itself in a continuous uninterrupted and unfailing readiness to furnish at each fire hydrant a sufficient supply of water under a reasonable and adequate continuing pressure.

I stop here to say that some discussion arose at the hearing as to whether any decretal condition should be imposed upon the defendant as to the degree and extent of this pressure at the fire hydrants, and it was concluded, as I understood, that there was no occasion to impose any such condition, and

it was remarked there was no authority for any such action on the part of the Court. To this I agree.

But I make this further remark, that the examination which I made into the carrying capacity of the 36-inch main, the result of which I have already stated, satisfies me that there is no appreciable danger that there will ever be a deficiency of pressure at the hydrants.

As already remarked, the normal pressure at the pump is 60 pounds, and, under ordinary circumstances, with a 36-inch main, that pressure will not be reduced at the fire hydrants to a degree which will impair their usefulness.

Moreover, the town very wisely has adopted and employs three very large steam fire engines, the successful operation of which will be affected very slightly, if at all, by a mere lack of back pressure at the fire hydrants, and these engines will always be well supplied if they find sufficient water in the main to fill them.

A failure in that respect will indicate a complete failure of the Water Company's whole system. Speaking as an amateur engineer I should say that it would not be necessary in a case of an alarm of fire to even stop the sprinkling carts.

Another solid basis for the charge of hydrant rent is found in the fact that it is necessary for the Water Company, in order to maintain a sufficient flow at the fire hydrants, to install a much larger general system of street piping than is necessary, or at all valuable, for the distribution of water for mere domestic supply. This I think they have done. The map indicates a range of sizes of mains much larger than would be required for mere domestic purposes. I find 8 and 6-inch mains laid where 6 and 4-inch mains would have been quite sufficient but for the requisition for fire purposes. This surplus size must be continued in the future, and if

the least defect in this respect is discovered it must be promptly remedied by gridironing with cross mains.

I fix $25 as a proper annual rental for fire hydrants, and the Water Company is to keep the same in repair, except when injured by external violence.

I come to the item of street sprinkling.

This item is capable of more accurate treatment. The amount of water used is capable of approximate ascertainment and the only question is, what rate shall be paid for it?

The capacity of the wagons in present use, it was agreed, would average 550 gallons each. The number of runs each would make, in an ordinary day, when not stopped by rain or drizzly weather, was also ascertained with reasonable certainty.

Moreover, the amount distributed can be ascertained with absolute certainty by the introduction of a meter for each wagon. But I do not deem that exactness to be requisite unless both parties agree to it. The principal and important matter is to settle the rate which the municipality should pay.

The evidence shows that the rates per 1,000 gallons for metered water in different municipalities varies all the way from ten to thirty cents. The variation is due first to the general cost and value of the water at the point delivered and, second, to the quantity delivered at a single outlet.

The greatest variation in price is found in the quantity delivered, and that arises out of the difference between supplying goods at wholesale and retail.

The lowest rate I have heard mentioned is that for the water furnished by the City of Perth Amboy to the municipal authorities of South Amboy by a single branch leading from its great main, through which it obtains its water from the south side of the Raritan River; and the water so taken by

South Amboy is distributed to its citizens in the ordinary way. That rate is seven cents per 1,000 gallons.

It will be perceived that the seller of the water incurs no expense whatever in cost of distribution of the water or collecting money for its proceeds.

I believe that it charges the same low rates for the very large quantities taken the year around by factories.

The other instances of rates running from seven to ten cents per thousand gallons are those of factories taking very large quantities steadily the year round.

I do not think that Long Branch can put itself in the position of claiming rates on the basis of these year-round takers of very large quantities, for the simple and sufficient reason that Long Branch takes only in the Summer time. For the other months of the year the great plant necessarily arranged for the highest consumption is for present purposes lying idle.

This last consideration is of the greatest importance not only in this connection, but in others to be hereafter considered.

Mr. Sherrerd tells us that the sale by the City of Newark to the street sprinklers is based on a rate of 15 cents per 1,000 gallons or at less rates on a sliding scale.

His evidence is not definite, but the actual charge is $6 per week for each wagon, which would be $26 a month.

I think, after a careful examination of the rates charged for measured water by other companies and cities, that those charged by the City of Perth Amboy to factories are the most reasonable and favorable to the complainant, and range from 7 to 25 cents per 1,000 gallons. Applying that here, after making allowance for the circumstances that the sprinkling is practiced only in Summer, and mainly

in the three or four months when the supply from the springs and streams is the lowest, I think that 11 cents per thousand gallons is sufficiently favorable to the complainant.

I make the average amount used by a sprinkling wagon in one month to be 372,000 gallons. In this I make no allowances for days on which sprinkling is omitted by reason of rain or mist, and I think no allowance on that account should be made, for the reason that the Water Company must make and keep up all its arrangements at the pumping station on a basis of the water being drawn every day, and it is doubtful if it will save during a rainy day any appreciable amount even in the quantity of fuel consumed.

372,000 gallons in one month at 11 cents per 1,000 gallons makes $40.92. Counsel for defendant offered at the hearing to take Forty dollars a month for each wagon, or to join the city in the expense of a meter put on each wagon at such a rate per 1,000 gallons as the Court should fix. I think this offer was reasonable and I shall adopt it. At the price for four months the amount which the City would pay for 17 wagons would be about $2,720.

I say four months, as I interpret the evidence; the full equipment of 17 wagons is only maintained during four months in the midst of the season, and that for the one month on each side of the season a less number are used.

I estimate for those extra months the probable income at that rate will bring the total amount for sprinkling up to $3,400 a year. This makes the total paid by the City for the two items in question, viz.: fire hydrants and sprinkling service, about $7,000 a year, which I think remarkably cheap.

We come now to the rates to be charged to private consumers. Here I must repeat what I said before, that the rates must be arranged so that the

defendant can have an income on a plant adapted to a population at its highest point in the course of twelve months.

The only saving by reason of the diminution of population in the Winter months arises from a saving in fuel. The same attendants at the pumping station are necessary.

Then again, the item of the cost of distribution intervenes and that depends upon the compactness with which the town is built, which affects the length of main necessary to furnish the supply.

The complainant relied greatly upon several scales of charges for water furnished by towns and small cities which own and operate their own works.

Here again a consideration of some importance intervenes, and that is the item of profit and of a provision for a sinking fund referred to and approved in the authorities to which I have already referred. It is intended to cover the risk of such enterprise.

A private capitalist who undertakes to supply a town with water sinks his money, so to speak, in the earth in a shape that he cannot readily turn it into money, and he assumes the risk of the accuracy of his engineering and the durability of his works and the permanency of their need and the probability of their requiring at some time in the future a re-casting and re-building either in whole or in part.

This latter is an experience which all the great public works of the last century have undergone.

Now, a municipality which erects its own public works assumes that risk, and sooner or later, in all human probability, it will go through the same experience of being compelled to re-build and renew.

The examples in this respect of the cities of New York and Newark are familiar to all.

However fortunate the small towns in Monmouth

County, whose present success is put forward as examples by the complainant, may have been up to this time, there is no certainty that they will not be compelled in the future to abandon and lose forever a good share of the expense already incurred. Some, in fact, have already had that experience.

For these reasons I cannot accept the rates of any of those as furnishing a proper estimate for the present case.

A municipality which permits a private company to undertake to supply it with water and gas must expect to appear, at least, to pay a little more for its supply than it might, at first, do if it undertook to furnish its own supply. Especially is this true when it is so fortunate as to have near at hand an abundant supply which is easily appropriated by simple methods.

Then if we compare the rates established by the defendant with those established by private companies furnishing water to private consumers we find a great variation in the mode of making up the items. So that a comparison in that respect is not easy. I speak now, of course, for charges for unmeasured water.

My own decided opinion is, as expresesd at the hearing, that the fairest and most satisfactory mode of charging for water is by measuring it and fixing a price by the gallon or cubic foot.

But the defendants have made their scale of charges without measurement, and the system of charging by measuring has not become so general in its use as to warrant me imposing it in this instance on the defendant, although I strongly recommend it.

The defendants make two objections to selling their water by measuring.

First, the expense involved in immediately installing 1,200 or 1,500 meters, which they assert,

and I entirely agree with them, must fall on the Water Company, because it should own and control all the meters.

Second, that it would throw an unreasonable burden on the permanent residents by unduly favoring the Summer residents, who would pay for only three or four months' supply. This last I am decidedly of the opinion can be overcome by charging a high rate, say, 25 or 30 cents a hundred cubic feet for 4 or 5 Summer months and half that for the Winter months.

Coming now to the rates they have established, and before examining them in detail, I will notice the more serious objection to them, which is, that the charge is precisely the same to those takers who use water for only three or four months and those who use it the year round. It seems to me that this rule of the Company works the hardest against the large country houses which are occupied, presumably, by persons who live in the style indicating that they can afford to pay high rates for water, and that it works in favor of the permanent resident, and this included the majority of the citizens living in a more simple style. But the point is made by the municipality, which may be supposed to have in view the interests of its permanent citizens, and it must be considered. Here, again, I must remark that the only difference that I can perceive which will be experienced by the defendant by the closing of the large country seats and villas for 8 or 9 months in the year, is in the single item of fuel, and this can only be considerable if the defendant can dispense with one or two of its pumps and clean out the fires from one or two of its boilers.

But, nevertheless, I think some allowance should be made for non-use in the winter.

Here, again, a difficulty arises. The evidence tends to show that very few of the large country

houses are entirely closed in the Winter. A caretaker or housekeeper is frequently left in possession all Winter. Then again many of the large boarding houses are occupied by the proprietors in Winter, but the guests' rooms are entirely vacant and the extra water-closets and bath-rooms are not used.

I think these difficulties can be overcome by an actual disconnection and cutting off of the fixtures not needed in the Winter season, and by reducing the charge on fixtures so disconnected to, say, two-thirds of the regular rates for the length of time they are so disconnected. This will reduce the rates for the year on fixtures not used to about four-fifths of the rates charged for those used the year round. The expense of the disconnection and the re-connection in the Fall and Spring should be borne by the water takers.

Coming now to the details of charges. It will be found quite difficult to compare it with those of other water companies just as it is difficult to compare the charges of any other two companies.

Mr. Robt. H. Kellogg, who is Secretary and Superintendent of the Middlesex Water Company supplying several towns in that County, and of the Bergen Acqueduct Company, which supplies some towns in Bergen County, has adopted an ingenious mode of making a comparison. He collected and produced the rates of 36 towns and cities mostly in New Jersey, and many of whom own their own supply, and then took as a standard a dwelling with the following water taps, viz.: one kitchen sink with hot and cold water, one water-closet, one bath-tub, one wash-stand in bath-room, and three laundry tubs.

He found the Long Branch charges for such a house to be $18.

He found 11 of the 36 to be the same. He found

8 of the 35 to be more than $18. He found 14 less than $18.

The highest was $25 in Flemington, N. J. and the lowest was $14 in Vineland, Lambertville and Rahway, N. J.

The average cost was $17.77. This result shows that I cannot interfere with the rates already established except as hereinbefore proveded unless the result of their enforcement will produce more income than the defendant is entitled to.

There is a rate by meter for laundries, liveries and boaring stables, at 35 cents per 1,000 gallons with a provision for an unmentioned lesser rate where the consumption is continued during the Winter months. I can not say that I think this is too high, provided, a reasonable allowance is made for a large quantity used in the Winter season.

Let us now inquire how these rates will work out in practice.

The income of the defendant from private takers within the limits of the Long Branch Commission for the years ending June 1, 1903-4-5 was as follows:

1903—$43,707.34
1904—$44,079.34
1905—$45,510.15

If we add to the latter for fire hydrants and street sprinkling, $7,000 and estimating for use by the County at $1,000 we have $53,510.15. Deduct from this the cost of administration, taxes, etc., $20,000 we have $34,000 to be devoted to income and depreciation of the plant, a sum which would make the income between three and four per cent. upon the amount I have allotted to the Long Branch Commission.

I believe the above statement does not include the amount paid by the City for water in its pub-

lic buildings. Add $500 for this item we have a total of $54,000.

This sum is $11,000 less than I have found is a proper income for the defendant to receive yearly from Complainant for water service.

If instead of allowing defendant five per cent. on on the $847,000 found to be complainant's share of the total cost of the works, we make it four per cent. free of taxation, the defendant will still be short Three thousand dollars of paying that moderate income.

Or to take another view. The defendant will receive between three and four per cent. from the cost of its works, without allowing anything for depreciation, except what is included in the estimate for repairs forming part of Mr. LaMonte's estimate of annual cost of maintenance and administration.

But then another element comes in. If, under the conclusions I have arrived at, the water takers are relieved of part of their annual payment by a deduction due to disconnecting fixtures in the Winter time, the annual income will be somewhat reduced. Just how far, of course, is a mere estimate. But it is quite manifest that the defendant will not under the rates which I have approved receive anything more than a fair income on their property even if the value of the works should be reduced considerably below the figure at which I have placed them. So that if I have erred against the municipality I feel quite confident that that error has not gone so far as to injure it.

I believe I have now gone over all the questions submitted to me and I shall close with one remark.

It is well nigh impossible to embody in a decree the rules and regulations and standard charges for the supply of water to a town, and it is quite impossible to so arrange them as to make the charges uniform and at the same time distribute

them equally among the different private consumers. Much must necessarily be left to negotiation in particular cases.

Some towns, as shown by Mr. Kellogg, allow the amount of frontage of an establishment to affect the charge, and this, I think, is right for reasons previously stated.

Then there is the element of vacant lots, and then when a new street is opened and partly built upon the cost of laying the mains is precisely the same as if it were immediately closely built up, and that cost, of course, enters into the cost of supplying the pioneer builders on the street. These and other matters must be taken into consideration and dealt with in a spirit of accommodation and with a desire to treat all customers alike.

The Water Company should at all times bear in mind that they are exercising a public franchise which it is to use and not abuse.

And the municipality must bear in mind that the stockholders of the Water Company are entitled to a fair income on their investment.

IN CHANCERY OF NEW JERSEY.

Between

LONG BRANCH COMMISSSION,
Complainant,

and

TINTERN MANOR WATER COMPANY,
Defendant.

On Bill, &c.

Amended Final Decree.

This cause coming on to be heard before the Court upon amended bill of complaint and the answer of the defendant and replication in the presence of Messrs. Clarence G. Van Note and Robert H. McCarter, of counsel with complainant, and William H. Corbin, Esquire, of counsel with defendant, and the testimony having been taken and the case heard orally for the Chancellor; and it appearing that the bill was filed to restrain the defendant corporation from ceasing to supply Long Branch or the private consumers therein with water for municipal purposes or from in any way interfering with the use by the complainant of the water which came through the mains and into the defendant's fire hydrants for municipal purposes and from disconnecting or disabling any of said hydrants until the further order of the Court.

And it appearing that upon the application for preliminary injunction the complainant amended its bill by tendering itself ready and willing to pay any sum that might be found by this Court for the privilege it had theretofore enjoyed of the use of water for municipal purposes through the mains of the defendant since September 21st, 1901, and by said amendment did pray that proper and fair rates

for water theretofore furnished and thereafter to be furnished to the complaint by the defendant and to be thereafter furnished to private consumers in Long Branch might be ascertained and determined by this Court; and it further appearing that the defendant, by its answer, consented that this Court take jurisdiction of the matter and fix the rates for water theretofore furnished by the defendant to the complainant and thereafter to be furnished to the complainant by the defendant and future water rates for private consumers, and that the defendant joined in the prayer of the bill to that end; and the Court having, upon the filing of the bill and upon hearing of the parties, upon condition that the bill should be amended as aforesaid, and the defendant consenting to such jurisdiction, ordered that upon the complainant making payments to the defendant as therein specified, and continuing to pay eighty per cent. of the water rates which would be due under a previously attempted contract between the parties (such payments being at the rate of Three hundred and fifty dollars per month) until the amount to be paid should be settled by the final decree of this Court, an injunction should issue pursuant to the prayer of the bill, to remain in force so long only as the complainant should pay or tender monthly, upon the fifteenth day of each month, the moneys so required to be paid; and the counsel of the respective parties having been heard, and the the Court having considered of the matter.

It is, on this fifteenth as of the eleventh day of December, nineteen hundred and five, on motion of counsel on behalf of Collins & Corbin, solicitors of defendant,, by William J. Magie, Chancellor of the State of New Jersey, ordered, adjudged and decreed, and the Chancellor doth by virtue of the power and authority in him vested, order, adjudge and decree that the price

of Twenty-five dollars per year for each fire hydrant of the defendant located on the streets and public places of Long Branch for the use of the complainant for fire purposes is a fair and just price, and it is ordered and adjudged, that the complainant pay to the defendant for the use of the said hydrants said price of Twenty-five dollars per year for each hydrant from the twenty-first day of September, nineteen hundred and one until the present time, and hereafter so long as the same shall remain in use by the complainant and until some other price is agreed upon between the parties, and the same price shall apply to any fire hydrants which the complainant has ordered to be put in place, and which the defendant has put in place since the filing of the bill, and any which may hereafter be so ordered and placed, the defendant to furnish and maintain all such hydrants in efficient order at its own expense, except that it shall not be required to bear the expense of injuries to the same by external violence; and if any such injuries occur to them, they shall, at the request of the complainant, be repaired by the defendant, but at the expense of the complainant, payable on demand.

And it is further ordered and adjudegd, that the complainant do pay to the defendant for water supplied from and after September twenty-first, nineteen hundred and one, for sprinkling streets and public places, at the rate of Forty dollars per month for each cart engaged in sprinkling said streets and public places the time to be reckoned from the date when the carts were severally put in use each year to the time when the use of the carts severally was discontinued in each year, and the same price shall apply to the water hereafter supplied to sprinkling carts by the defendant at the complainant's request, the water in all cases to be taken from the said fire hydrants specially provided for the purpose by the complainant in the

streets along the lines of the mains in Long Branch, through attachments, in all cases especially provided and maintained, and to be provided and maintained, for the purpose, by the complainant.

And it is further ordered and adjudged, that the complainant pay to the defendant for the water used since September tyenty-first, nineteen hundred and one, and hereafter to be used in the City Hall and the several Fire Engine Houses, and any other public buildings hereafter to be erected, the usual fixture rates to other consumers for similar service.

And it is further ordered and adjudged, that the complainant pay to the defendant for the water used by the complainant in the three public fountains or watering troughs since September twenty-first, nineteen hundred and one, and for water that may be used in the same or any other fountains and troughs hereafter, at the rate of eleven cents per thousand gallons of water; and inasmuch as no meters have heretofore been placed on said fountains and troughs, it is estimated and adjudged, that for the time heretofore past the complainant pay to the defendant for the use thereof since the date aforementioned at the rate of Thirty dollars per year, each, for the entire period past.

The several payments to be made by the complainant to the defendant for water heretofore supplied by the defendant shall bear interest at the rate of four per cent. from the end of each month for the amount of the bill for said month, from which payments shall be deducted the payments which have actually been made by the complainant to the defendant pending this suit, with due allowance for interest from the dates when such payments have actually been made; and the payments hereafter to be made by the complainant to the defendant for water shall be made on or before the fifteenth day of each calendar month for the

water taken during the then next previous month, and bills shall be rendered by the defendant to the complainant, as near as possible, on the first day of each month for the water taken during the then next previous month; this adjustment between the complainant and defendant for the use of water for the municipal purposes of the complainant to continue until some other adjustment shall be agreed upon between the parties. The payments to be made under this decree for water heretofore taken by the complainant shall be made within thirty days from the date thereof.

And it is further ordered, adjudged and decreed, that the schedule of annual rates made by the Tintern Manor Water Company and put in force by them June first, nineteen hundred and three, for the use of water for private consumers in Long Branch, is reasonable and fair, and the same may be continued in use by the defendant, and shall not be exceeded, except that from and after June first, nineteen hundred and six, the following change shall be made, that is to say, where private dwellings are occupied as Summer cottages or boarding houses for not more than six months of the year, and the water supply is wholly or partially cut off from such private dwellings during the residue of the year by the actual disconnection and cutting off of the fixtures not needed in the Winter season, the defendant Company shall charge to the owners of such dwellings the schedule rate for all the fixtures on the premises for one-half of a year only, and for the remainder of the year shall charge only two-thirds of the schedule rate for the fixtures so actually disconnected and disused.

And it is further ordered and adjudged, that where, at the request of the owner or occupant of a private dwelling, the water is cut off for a part of the year, such cutting off shall be at the expense of such occupant or owner, and the turning on of

the water, at his request , shall be at his expense, for which the Company may make a reasonable charge.

And it is further ordered and adjudged, that charges made for hose connections, fountains and lawn sprinklers and similar devices, shall be at the full annual rates, and shall not be subject to any reduction by reason of the water being turned off for a portion of the year.

And it is further ordered and adjudged, that the defendant Company shall have the right, by regulation, to require written notice of the cutting off or turning on as aforesaid, and need not give any heed to any cutting off or turning on of water which is done without previous written notice.

And it is further ordered and adjudged, that the defendant Company shall have the right to collect its entire schedule fixture rates for water annually in advance, as heretofore, re-paying in cash, at the option of the owner, or making allowance and deduction in the next annual bill rendered to the occupant or owner of the premises supplied with water, of the amount which should be deducted by reason of the turning off of water for a portion of the previous year, as herein provided.

Nothing in this order is to prevent the defendant corporation from installing meters in the premises of its several customers, or any of them, and requiring them to pay for the water according to its meter rates, with the minimum annual charge of Eight dollars, as heretofore.

Leave is granted to either party to apply to the Court for further directions on the basis of this decree.

W. J. MAGIE,
C.

Respectfully advised,
H. C. Pitney,
V. C.

IN CHANCERY OF NEW JERSEY.

Between

LONG BRANCH COMMISSION,
Complainant,

and

TINTERN MANOR WATER COMPANY,
Defendant.

On Bill, etc.

Notice of Appeal.

The appellant, Long Branch Commission, hereby appeals from a certain final decree entered in the above cause of the fifteenth, as of the eleventh day of December, nineteen hundred and five, and from the whole and every part thereof, to the Court of Errors and Appeals in the last resort in all cases.

Dated January 9th, 1906.

CLARENCE G. VAN NOTE,
Solicitor of Complainant.

I conceive there is good cause for appeal, in the above stated cause.

EDWIN B. WILLIAMSON,
Of Counsel with Complainant.

A true copy,
VIVIAN M. LEWIS,
Clerk.

NEW JERSEY COURT OF ERRORS AND APPEALS.

Between

LONG BRANCH COMMISSION,
Appellant,

and

TINTERN MANOR WATER COMPANY,
Respondent.

Petition of Appeal.

To the Honorable Court of Errors and Appeals in the last resort in all causes:

The petition of Long Branch Commission, the appellant in the above stated cause, respectfully shows that your petitioner finds itself aggrieved by a certain final decree, made in the Court of Chancery by his Honor William J. Magie, on the fifteenth day as of the eleventh day of December, nineteen hundred and five, in a cause wherein Long Branch Commission is complainant, and Tintern Manor Water Company is defendant, in this respect, to wit: that the said final decree adjudges and decrees that the price of Twenty-five dollars per year for each fire hydrant of the defendant located in the streets and public places of Long Branch for the use of the complainant, for fire purposes, is a fair and just price, and further in this respect that the said final decree orders and adjudges that the complainant pay to the defendant for the use of the said hydrants the said price of Twenty-five dollars per year for each hydrant from the twenty-first day of September, nineteen hundred and one until the present time, and hereafter

so long as the same shall remain in use by the complainant, and until some other price is agreed upon between the parties, and the same price shall apply to any fire hydrants which the complainant has ordered to be put in place, and which the defendant has put in place since the filing of the bill, and any which may hereafter be so ordered and placed, the defendant to furnish and maintain all such hydrants in efficient order at its own expense, except that it shall not be required to bear the expense of injuries to the same by external violence; and if any such injuries occur to them, they shall, at the request of the complainant, be repaired by the defendant, but at the expense of the complainant, payable on demand; and in this that it is further ordered and adjudged that the complainant do pay to the defendant for water supplied from and after September twenty-first, nineteen hundred and one, for sprinkling streets and public places, at the rate of Forty dollars per month for each cart engaged in sprinkling said streets and public places, the time to be reckoned from the date when the carts were severally put in use each year to the time when the use of the carts severally was discontinued in each year, and the same price shall apply to the water hereafter supplied to sprinkling carts by the defendant at the complainant's request, the water in all cases to be taken from the said fire hydrants, or other hydrants specially provided for the purpose by the complainant in the streets along the lines of the mains in Long Branch, through attachments, in all cases especially provided and maintained, and to be provided and maintained, for the purpose, by the complainant; and in this respect that it is further ordered and adjudged that the complainant pay to the defendant for the water used since September twenty-first, nineteen hundred and one, and hereafter to be used in the City Hall and the several fire engine houses, and any

New Jersey State Library

other public buildings hereafter to be erected, the usual fixtures rates charges to other consumers for similar service; and in this respect that it is further ordered and adjudged that the complainant pay to the defendant for the water used by the complainant in the three public fountains or watering troughs since September twenty-first, nineteen hundred and one, and for water that may be used in the same or any other fountains and troughs hereafter, at the rate of eleven cents per thousand gallons of water; and inasmuch as no meters have heretofore been placed on said fountains and troughs, it is in said decree estimated and adjudged that for the time heretofore past the complainant pay to the defendant for the use thereof since the date aforementioned at the rate of Thirty dollars per year each, for the entire period past. The several payments to be made by the complainant to the defendant for water heretofore supplied by the defendant shall bear interest at the rate of four per cent. from the end of each month for the amount of the bill for said month, from which payment shall be deducted the payments which have actually been made by the complainant to the defendant pending this suit, with due allowance for interest from the dates when such payments have actually been made; and the payments hereafter to be made by the complainant to the defendant for water shall be made on or before the fifteenth day of each calendar month for the water taken during the then next previous month, and bills shall be rendered by the defendant to the complainant, as near as possible, on the first day of each month for the water taken during the then next previous month; this adjustment between the complainant and defendant for the use of water for the municipal purposes of the complainant to continue until some other adjustment shall be agreed upon between the parties. The payments to be made under this decree for water

heretofore taken by the complainant shall be made within thirty days from the date thereof; and in this respect that it is further ordered, adjudged and decreed that the schedule of annual rates made by the Tintern Manor Water Company and put in force by them June first, nineteen hundred and three, for the use of water for private consumers in Long Branch is reasonable and fair, and the same may be continued in use by the defendant and shall not be exceeded, except that from and after June first, nineteen hundred and six, the following change shall be made, that is to say, where private dwellings are occupied as Summer cottages or boarding houses for not more than six months of the year, and the water supply is whollly or partially cut off from such private dwellings during the residue of the year by the actual disconnection and cutting off the fixtures not needed in the Winter season, the defendant company shall charge to the owners of such dwellings the schedule rate for all the fixtures on the premises for one-half of a year only, and for the remainder of the year shall charge only two-thirds of the schedule rate for the fixtures so actually disconnected and disused; and in this respect that it is further ordered and adjudged that where, at the request of the owner or occupant of a private dwelling, the water is cut off for a part of the year, such cutting off shall be at the expense of such occupant or owner, and the turning on of the water, at his request, shall also be at his expense, for which the Company may make a reasonable charge; and in this respect that it is further ordered and adjudged that charges made for hose connections, fountains and lawn sprinklers and similar devices, shall be at the full annual rates and shall not be subject to any reduction by reason of the water being turned off for a portion of the year; and in this respect that it is further ordered and adjudged that the defendant Company shall

have the right, by regulation, to require written notice of the cutting off or turning on as aforesaid and need not give any heed to any cutting off or turning on of water which is done without previous written notice, and in this respect that it is further ordered and adjudged that the defendant Company shall have the right to collect its entire schedule fixture rates for water annually in advance, as heretofore, re-paying in cash at the option of the owner, or making allowance and deduction in the next annual bill rendered to the occupant or owner of the premises supplied with water, of the amount which should be deducted by reason of the turning off of water for a portion of the previous year, as herein provided; and in this respect that it is in said decree stated that nothing in this order is to prevent the defendant corporation from installing meters in the premises of its several customers, or any of them, and requiring them to pay for the water according to its meter rates, with the minimum annual charge of Eight dollars, as heretofore, on the ground that the same is erroneous, and that the said decree should have otherwise ordered, adjudged and decreed in all respects than as above set forth.

Your petitioner therefore prays that the said final decree be in the particulars aforesaid reversed, set aside and for nothing holden, and that your petitioner may have such relief in the premises as to this Honorable Court shall seem meet.

CLARENCE G. VAN NOTE,
Solicitor for Appellant,
Long Branch Commission.

Formal Answer Filed

EXHIBIT C1.

Certificate of Incorporation of Long Branch Water Supply Co., produced by Defendants.

THIS IS TO CERTIFY, That, under the act of the Legislature of the State of New Jersey entitled "An Act for the construction, maintenance and operation of water works for the purposes of supplying Cities, Towns and Villages of this State with water, approved April 21st, 1876, and the acts amendatory thereof, we, Edward A. Walton, of Ridgewood, Frederick A. Potts, of Pittstown, Connor T. Jones, of Elberon, Garret A. Hobart, of Paterson, all of the State of New Jersey, George F. Baker, Charles G. Francklyn and Frank G. Brown, all of the City of New York, who have hereunto subscribed our names hereby form a company for the purpose of constructing, mantaining and operating water works in the Town of Ocean, and the Sea Side resorts of Long Branch, Monmouth Beach and Sea Bright, and the places adjacent thereto.

THAT we have adopted as the name of the said Company "THE LONG BRANCH WATER SUPPLY COMPANY."

THAT the amount of the capital stock of the said Company is Two hundred and fifty thousand Dollars ($250,000.00) divided into Twenty five hundred (2500) shares of one hundred Dollars ($100) each.

THAT the term of its existence is fifty (50) years.

THAT the number of its Directors is Seven (7).

THAT we, the said subscribers, are the Directors who shall manage the affairs of the Company for the first year, or until our successors are elected and qualified.

THAT the name of the Town, Village and Sea

Side resorts, in or for which such works are to be constructed and the business of the Company carried on, are the Town of Ocean, and the Sea Side resorts of Long Branch, Monmouth Beach and Sea Bright and the places adjacent thereto; Said Town, including said Sea Side resorts, having a population of not more than fifteen thousand and not less than five hundred inhabitants.

WITNESS our hands this Twentieth day of September, A. D. Eighteen hundred and eighty two.

E. A. Walton.
F. A. Potts.
C. T. Jones.
Geo. F. Baker.
Garret A. Hobart.
Chas. G. Francklyn.
Frank G. Brown.

State of New York, }
City and County of New York, } ss.:

On the 20th day of September A. D., 1882, before me personally came Connor T. Jones and Frank G. Brown and on the 21st day of September A. D., 1882, before me personally came Frederick A. Potts, and George F. Baker and on the 25th day of September, 1882, before me personally came Garret A. Hobart, all of whom are to me known to be the same individuals named in and who executed and signed the foregoing certificate and the contents of said certificate being by me first made known to each of the said individuals, they did severally acknowledge that they executed and signed the said certificate as their voluntary act and deed.

JOHN CHETWOOD,
Master in Chancery of New Jersey.

State of New York, }
City and County of New York, } ss.:

On the second day of November A. D., 1882, before me personally came Edward A. Walton, to me known to be one of the individuals named in and who signed and executed the foregoing certificate and the contents of the said certificate being by me first made known to him, he did thereupon acknowledge that he signed and executed the same as his voluntary act and deed.

JOHN CHETWOOD,
Master in Chancery of New Jersey.

State of New York, }
City and County of New York, } ss.:

On the 28th day of September A. D., 1882, before me personally came Charles G. Francklyn, to me known to be one of the individuals named in and who signed and executed the foregoing certificate and the contents of the said Certificate being by me first made known to him he did thereupon acknowledge that he signed and executed the same as his voluntary act and deed.

ADAM GOS,
Notary Public, N. Y. Co.

State of New York, }
City and County of New York, } ss.:

I, William A. Butler, Clerk of the City and County of New York and also Clerk of the Supreme Court for the said City and County, the same being a Court of Record, do hereby certify that Adam Gos, whose name is subscribed to the certificate of proof or acknowledgment of the annexed instrument and thereon written was at the time of taking such proof and acknowledgment a Notary Public in and for said County, duly commissioned and sworn and authorized by the Laws of said State, to take acknowledgment and proof of

deeds or conveyances for lands, tenements or hereditaments in said State, and further, that I am well acquainted with the handwriting of such Notary Public, and verily believe that the signature to said certificate of proof or acknowledgment is genuine.

In testimony whereof I have hereunto set my and affixed the seal of the said Court and County, the 29th day of September, 1882.

[L. S.]

WM. A. BUTLER,
Clerk.

WE, THE SUBSCRIBERS, James W. Conover, William H. Bennett and William H. Warner, "THE TOWNSHIP COMMITTEE" of the Township of Ocean, in the County of Monmouth and State of New Jersey and

WE, THE SUBSCRIBERS, Thomas R. Woolley, Richard J. Dobbins, Richard V. Breece, Daniel Ferris, George W. Brown, Thomas G. Chattle and John Britton, "THE LONG BRANCH COMMISSIONERS", elected and appointed under the act of the Legislature of the State of New Jersey entitled "An Act to establish The Long Branch Police, Sanitary and Improvement Commission," approved April 11th 1867, and the acts amendatory thereof DO HEREBY CONSENT that, Edward A. Walton, Frederick A. Potts, Connor T. Jones, Garret A. Hobart, George F. Baker, Charles G. Francklyn and Frank G. Brown, may form a company by the name of "THE LONG BRANCH WATER SUPPLY COMPANY" under the act of the Legislature entitled "An Act for the construction, maintenance and operation of water works for the purpose of supplying Cities, Towns and Villages of this State with water", approved April 21st 1876 and the acts amendatory thereof for the purposes of constructing, mantaining and operating water works in the said Town of Oocean and the Sea Side resorts of Long Branch, Monmouth Beach and Seabright and the places ad-

jacent thereto; Said town including said Sea Side resorts and the places adjacent thereto having a population of not more than fifteen thousand and not less than five hundred inhabitants.

AND WE FURTHER CONSENT to their so constructing, maintaining and operating water works in the said Town of Ocean and said Sea Side resorts of Long Branch, Monmouth Beach and Sea Bright and the places adjacent thereto.

AND WE FURTHER CONSENT, that said Company may lay their pipes beneath such of the public roads, streets and alleys in said Town and said Sea Side resorts and places adjacent thereto and such hydrants at the crossings or intersections of said streets and alleys as they may deem necessary for the purposes of supplying said Town of Ocean and said Sea Side resorts of Long Branch, Monmouth Beach and Sea Bright and the places adjacent thereto with water.

IN WITNESS WHEREOF, we have hereunto subscribed our names, this Seventh day of October A. D. Eighteen hundred and eighty two.

William H. Bennett
[L. S.] James W. Conover
Wm. H. Warner
Township Committee Ocean Township.

Attest.
Wm. B. Lippincott
Town Clerk.

Thomas R. Woolley,
R. J. Dobbins
R. V. Breece
T. G. Chattle
[L. S.] John T. Britton
Ferns
Daniel ~~Ferris~~
Geo. W. Brown
The Long Branch Commissioners.

Attest
James H. Woolley,
District Clerk.

State of New Jersey, }
County of Monmouth, } ss.:

On this Seventh day of October A. D. 1882, before me personally appeared William B. Lippincott to me personally known, who being by me duly sworn, said: That he is the Town Clerk of the Township of Ocean, Monmouth County, New Jersey, and that James W. Conover, William H. Bennett and William H. Warner named in and who signed the foregoing consent, are the "Township Committee" of the said Township of Ocean; that the said James W. Conover, William H. Bennett and William H. Warner signed the foregoing consent as the voluntary act and deed of such Township Committee in deponents presence and that deponent as such Town Clerk and at the request of said Township Committee, subscribed his name thereto as an attesting witness.

WM. B. LIPPINCOTT.

John E. Lanning,
Master in Chancery of N. J.

State of New Jersey, }
County of Monmouth, } ss.:

On the Twenty third day of October A. D. 1882, before me personally appeared James H. Woolley, to me personally known, who being by me duly sworn, said that he is the District Clerk of the Long Branch Police, Sanitary and Improvement Commission" and that Thomas R. Woolley, Richard J. Dobbins, Richard V. Breece, Daniel Ferris, George W. Brown, Thomas G. Chattle, and John Britton, named in and who signed the foregoing consent are the Commissioners and that the seal affixed to the said consent is the corporate seal of the said Commission. That the said Thomas R. Woolley, Richard V. Breece, Daniel Ferris, George W. Brown, Thomas G. Chattle and John Britton

severally signed such consent as the act and deed of said Commissioners, in the presence of deponent who as such District Clerk and at the request of said Commissioners, signed the name as an attesting witness and by their authority affixed the said seal thereto. That the signature of Richard J. Dobbins to foregoing consent is his genuine signature, but was not signed in deponent's presence.

JOHN E. LANNING,
Master in Chancery of N. J.

State of New Jersey, }
Department of State, }

I, Henry C. Kelsey, Secretary of State of the State of New Jersey, do hereby certify, that the foregoing is a true copy of a paper purporting to be "Certificate of Incorporation of The Long Branch Water Supply Company" as the same is taken from and compared with the original. Filed November 3d, 1882, and now remaining on file and of record in my office.

In testimony whereof, I have hereunto set my hand and affixed my official seal at
[L. S.] Trenton, this third day of November A. D., 1882.

HENRY C. KELSEY,
Secretary of State.

EXHIBIT C2.

Ordinance of Belmar.

An ordinance defining the rules and regulations for the distribution, supply and use of the public water in the Borough of Belmar, and fixing the water rents or prices therefor, and imposing penalties for the non-payment thereof.

Be it ordained by the Council of the Borough of Belmar:

Sec. 11. On and after the first day of April, 1903, all water delivered to consumers shall be measured by meters and sold at meter rates, except as hereinafter provided.

Sec. 12. That Council shall purchase or cause to be purchased suitable meters to be set in premises now unmetered, and such meters shall be installed in the several premises by and at the expense of the Borough, and under the supervision of the Water Superintendent.

Sec. 14. The meter rate per 1,000 cubic feet of water shall be $2.00.

Sec. 15. There shall be due and payable in advance on the first day of April of each and every year the sum of seven dollars and fifty cents on each tap or street or house connection, which sum shall entitle the owner or occupant of such premises to the use of six thousand cubic feet of water without further charge.

EXHIBIT C3.

Rates at Belmar before Adoption of Meter Rates.

BOROUGH OF BELMAR.

WATER RATES.

Schedule of Rates for use of Water per year.

The charge for tapping the main and laying service pipe to curb, including Corporation stop, is $7.50, and must be paid when application is made.

Rates.	Faucet.....	Wash Bowl.....	Bath Tub.....	Water Clos. Self-acting....	Each add'l W. C.....	Urinal.....	Wash Tub.....	Each add'l Wash Tub....
6 rooms and under..	$6 00	$ 25	$1 00	$1 00	$ 75	$2 00	$ 50	25
7 or 8 rooms.....	6 50	25	1 25	1 50	1 00	2 25	75	25
9 or 10 rooms.....	7 00	50	1 50	2 00	1 00	2 50	1 00	25
11 or 12 rooms.....	7 50	75	1 75	2 50	1 00	2 75	1 25	25
13 or 14 rooms.....	8 00	1 00	2 00	3 00	1 00	3 00	1 50	25
15 or 16 rooms.....	8 50	1 25	2 25	3 50	1 00	3 25	1 75	25
17 or 18 rooms.....	9 00	1 50	2 50	4 00	1 00	3 50	2 00	25
19 or 20 rooms.....	9 50	1 75	2 75	4 50	1 00	3 75	2 25	25
21 or 22 rooms.....	10 00	2 00	3 00	5 00	1 00	4 00	2 50	25
23 or 24 rooms.....	10 50	2 25	3 25	5 50	1 00	4 25	2 75	25

Each additional faucet, 25 per cent. of first faucet.

Laundries 10 00

The same for each additional faucet..... 2 50

Private stable, 1 horse, 1 faucet..... 3 00

" each additional horse..... 1 00

Hose sprinkler, ⅜ inch, 1 lot 50x150 or less. 5 00

Each additional lot or part..... 2 50

All hotels of 25 rooms and upward, and all livery stables, steam laundries and other places consum-

ing large quantities of water, will be required to use meters.

Meter rates per 1,000 cubic feet..... 3 00

Meters will be attached whenever in the judgment of the Borough Council it shall be necessary.

Rates for places not enumerated above, and for all special purposes will be determined by the Borough Council.

Water rents are payable July 1, yearly in advance; where meter is used rent will be payable weekly and the rate charged will be according to weekly consumption.

EXHIBIT C4.

Ordinance of Perth Amboy.

An Ordinance Establishing Water Regulations and Rates.

Be it ordained by the Board of Water Commissioners of the City of Perth Amboy, that regulations for the management of the water works and the rates for the use of water shall be as follows:

SCHEDULE OF WATER RATES.

Sec. 19. The following annual rates will be charged until further notice for the use of water. All services not otherwise rated shall be metered.

Dwelling Houses.

Dwelling house occupied by one family....	$6 00
Dwelling house occupied by two or more, for each family.....	6 00
Dwelling house when all are supplied through one faucet, for each family....	4 00

Stationary Tubs.

For private dwellings, each tub..... 1 00
For boarding houses and hotel tubs, each... 1 00

Bath Tubs.

For hotel or other public baths, each tub... 10 00
For boarding house, each tub..... 8 00
For private dwelling. one family..... 4 00
For private dwelling, each additional tub... 2 00
For private dwelling, two or more families, each 4 00

Water Closet Pan, Self Acting.

For hotel, restaurant and saloon, first..... 10 00
For hotel, additional, each..... 5 00
For boarding house, first..... 8 00
For boarding house, each additional..... 2 00
For private house, one family, one closet.... 3 00
For private house, each additional..... 2 00
For private house, two or more families, each closet 3 00

Urinal Self Acting Bowls.

For public houses, each..... 3 00
For private houses, each..... 2 00

Stores, Offices, Etc.

For hotels and boarding houses..... 8 00
Stores and offices, each..... 6 00
Drug stores 10 00
Bakeries 9 00
Meat markets 8 00
Fish market 10 00
For saloon or hotel bar..... 8 00
Photograph gallery 10 00
Barber shops, first chair..... 5 00
Barber shops, additional chairs, each..... 1 00

Stables.

For first four horses, each..... 2 00
For each additional horse..... 1 50
For each cow or ox..... 1 50

The above rates for stables include water for washing carriages without hose.

Yard Hydrants.

For one family 10 00
For each additional family..... 4 00

No yard hydrant shall be allowed without a shut off below the ground at the proper depth.

Hose Sprinkler.

For use of washing windows, carriages, sprinkling streets and watering lawn or garden, only the whole year or any portion of the year, use to be limited to (2) hours each day (provided that no hose sprinkler be allowed unless connected with house service), for nozzle not exceeding ¼ inch in diameter..... 4 00
For nozzle not exceeding ⅜ inch diameter.. 10 00

Steam Boiler.

Per horse power..... 2 00

Power rate to be based on square feet of grate service; provided, however, that boilers over 15 H. P. shall be metered.

Building Rates.

For each barrel of lime or cement used, 6c per barrel. Before water is turned on for building purposes an advanced payment of three ($3) dollars will be required upon each service and immediately upon completion of building a settlement in full shall be made with the Collector of Revenue.

Sec. 20. All of the above established rates are payable at the office of the Collector of Revenue semi-monthly on the 1st day of February and August in each year (excepting in cases of building permits); if not paid within thirty days thereafter the water will be shut off and not let on again except on the payment of arrears with interest at the rate of 7% per annum and a fee of $2.00 is paid.

Sec. 21. All claims for deductions shall be made in writing to the Board of Water Commissioners who have full power. No deductions shall be made on any building or part of building that may become vacant for a less period than three months to be computed from the first of February, May, August and November.

Meter Rates Per Gallon.

Sec. 22. When for three months (75 days to be a factor to establish the rate) when the quantity consumed shall average less than 1,000 gallons per day 25c. per 1,000 gals. and less than 5,000 gallons per day 20c. per 1,000 gallons. 5,000 and less than 10,000 gallons per day 15c. per 1,000 gals. 10,000 and less than 20,000 per day 13c per 1,000 gals. 20,000 and less than 25,000 gallons per day 11c per 1,000 gals. 25,000 and less than 40,000 gallons per day 10c. per 1,000 gals. 40,000 and less than 100,000 per day 9c. All over 100,000 gals. 7c. per 1,000 gallons. Provided that in no case when a meter is used shall the annual charge be less than $10.00 which minimum annual charge shall be payable in advance.

Public drinking fountains and watering troughs to be metered.

A consumption above 1,000 gallons per day to be metered.

Sec. 23. Until further notice the charge for setting meters by the Water Department will be, when special arrangements are required and meter

warranted for not less than five years (damages by freezing or malicious mischief excepted) as follows:

Meter When Not Set.

5/8	$10 50
3/4	15 50
1	22 50
1½	37 50
2	65 00
3	135 00

Meter When Set.

Sec. 24.

5/8	13 00
3/4	18 00
1	25 00
1½	42 00
2	75 00
3	145 00

Meter on Installments.

Sec. 25.

5/8	15 00
3/4	20 00
1	28 00

Payable in yearly installments of not less than 20 per cent. of the above named price.

Tapping and Corporation Cocks.

Sec. 26.

For each tap made	1 00
For each Corporation cock ½ inch	1 25
For each Corporation cock 5/8 inch	1 50
For each Corporation cock 3/4 inch	2 00
For each Corporation cock 1 inch	3 00

No connection in main larger than 1 inch will be allowed except by special permit authorized by the Board of Water Commissioners and at such rate as may be determined.

EXHIBIT C6.

Schedule of Atlantic Highlands' Rates.

Ordinance of Atlantic Highlands, p. 15.

Section 23 is also amended, and makes the following additions to water rates: 100 cubic feet or less, daily, $3 per 1,000 cubic feet; 100 to 200 feet, $2.75; 200 to 400 feet, $2.50; 400 to 800 feet, $2.25; 800 to 2,000, $2. Rates for water not enumerated above, and for all special purposes, will be fixed by the Water Commissioners upon application.

Rates for Water.

Hydrant in yard or kitchen, 1 faucet	$6.00
Hydrant in yard and kitchen, 1 faucet	8 00
Bath	3 00
Butler Pantry Sink	3 00
Urinal	2 00
Urinator, each additional	1 00
Wash tubs	1 50
Each additional	50
Stationary wash stand in dwelling only	1 00
Each additional	50
Wash paves, 50 feet, or under	3 00
Lawn sprinkler, 1-10 inch nozzle	5 00
Washout closets, with cistern or automatic valves,	5 00
Each additional	3 00
Stores and offices, 1 faucet	6 00
Each additional	3 00
Bakery, ice cream, druggists, laundries, fish markets, barber shops, extra charge	10 00
Basins in stores and offices	3 00
Each additional	2 00
Boarding Houses, over 15 rooms or under, extra	12 00
Boarding Houses, over 15 rooms, to be metered	6 00

Private stable, 1 horse, 1 carriage, 1 faucet..	3 00
Each additional horse or cow.....	1 00
Each additional carriage.....	2 00
Rates for tapping main, ½ inch.....	3 00
¾ inch	3 50
1 inch	4 00

EXHIBIT C7.

Schedule of Red Bank Rates.

RATE FOR WATER USED THROUGH METERS.

10. The rate per 100 cubic feet is 30 cents. Meters will be read quarterly and bills presented for payment. If at the end of the year the amount used does not reach the sum of five dollars for a single house of one family, that amount will be made up by adding the difference to the last quarter's bill. If there are two families in one house the limit will be $7.50. Double houses will be treated as two separate houses.

If the quantity of water used through any one meter for any quarter amounts to over 6,000 cubic feet, a reduction of 12½ per cent. will be made. If over 12,000 cubic feet, 25 per cent. will be deducted, but to avail of these reductions the bills must be paid within 20 days after presentation.

11. Special Rates.—For all special or peculiar circumstances, or for building purposes, or for sprinkling carts, rates will be furnished on application to the Water Commissioners.

12. Tapping Fees.—At present the fee for tapping permits is placed at $6.00.

EXHIBIT C8.

2nd Schedule of Red Bank Rates.

SCHEDULE OF WATER RATES.

(These Rates are by the Year.)

Hydrant in yard or kitchen for domestic use.	$6 00
Additional faucets for domestic use, each...	2 00
Two families in same building, using same, 50 per cent additional.	
Water Closet	3 00
" " self-acting	8 00
" " " each additional...	4 00
Bath	3 00
Wash Basins	1 00
Urinals, self-acting, each.....	3 00
Yard Hydrants or Wash Pave, with screw nozzles .....$4 00 to	8 00
Fountains and Lawn Sprinklers, not over five hours per day for five months in the year—	
1-16 inch opening.....	6 00
1/8 " "	12 00
1/4 " "	24 00
One Faucet, for office or store.....$3 00 to	10 00
" " " saloon	10 00
Each additional faucet for office, store or saloon	3 00
One Horse or Cow.....	3 00
each additional	1 00
Each carriage	1 00
Measured Water, per 100 cubic feet.....	30c.

(The total charge in any case will be not less than $5 per year.)

Tapping Fees	8 00

Rates not enumerated above and for all other purposes will be determined by Water Commissioners.

EXHIBIT C9.

Schedule of Freehold Rates.

WATER RATES PER ANNUM:

Private Dwellings.

	Hydrant in yard or kitchen, or one faucet...	$6 00
10	Hydrant in yard and kitchen.....	7 00
	Bath, hot or cold water or both.....	3 00
	Water closet	3 00
	Stationary wash stand	1 00
	Stationary wash tubs, two.....	1 50
	Wash pave 40 ft. or under.....	2 50
	Every additional foot	05

Public Buildings.

20	Hydrant or one faucet.....	7 00
	Wash basin or sink.....	7 00
	Water closet, self acting.....	7 00
	Water closet, pan valve or reservoir.....	4 00
	Urinal	5 00

Hotels and Large Boarding Houses.

	Hydrant for family use, or one faucet.....	7 00
	Hotel bars with running water.....	10 00
	Hotel bars without running water.....	5 00
30	Wash basin, self-acting cock.....	3 00
	Sink, hot and cold water.....	5 00
	Bath for use of boarders.....	6 00
	Water closet, self-acting.....	6 00
	Water closet, pan valve or reservoir.....	3 00
	Stationary wash tubs	5 00
	Hydrant in yard or kitchen.....	7 00
	Hydrant in yard and kitchen.....	8 00
	Horse trough	10 00
40	Urinal	4 00

Business Places.

Bakery, one faucet	6 00
Confectionery, one faucet	6 00
Ice Cream Saloon, one faucet	6 00
Barber shop, one faucet	6 00
Drug store, one faucet	6 00
Liquor store, one faucet	6 00
Restaurant, one faucet	6 00
Slaughter house, one faucet	10 00
Photograph rooms, one faucet	6 00
Printing office, one faucet	6 00
Stores and offices generally, not less than	6 00
Blacksmith shop, one fire	6 00
Each additional fire	2 00
Carriage maker or wheelwright shop	6 00
Shops generally, one faucet, not less than	6 00
Public school, one faucet	6 00
Each additional faucet	1 00

Boarding schools will be rated according to attachments and quantity of water used.

The minimum charge for the use of water for any one property will not be less than six dollars per annum.

Rates for the use of water not enumerated above and for all special purposes, will be fixed and determined by the Water Commissioners upon application.

EXHIBIT C10.

Newspaper Clipping, Annual Report of Board of Water Commissioners, Red Bank.

ANNUAL REPORT
of the
BOARD OF WATER COMMISSIONERS
of the
TOWN OF RED BANK,
For the Year ending March 29th, 1904.

Red Bank, N. J., March 29th, 1904.

To the Honorable Board of Commissioners of the Town of Red Bank.

Gentlemen:—We respectfully submit to your consideration the following financial statement of the Board of Water Commissioners for the year ending March 29th, 1904:

RECEIPTS.

Cash on hand March 28th, 1903.....		$655 62
Cash received from consumers of water	$9,854 11	
Cash received from street and road sprinkling	416 00	
Cash received from sale of meters	273 00	
Cash received from tapping permits	72 00	
Cash received from miscellaneous	113 11	
		$10,728 22
		$11,383 84

DISBURSEMENTS.

Operating and Repairs.

Engineers' salaries	$1,360 82	
Fuel	1,479 54	
Supplies	985 78	
Repairs to machinery	105 77	
Repairs to service pipes	98 36	
Repairs to plant	239 24	
Office rent	36 00	
Commissioners' salaries	300 00	
Collector's fees	527 15	
		$5,132 66

Meters and Tapping.

Meters	$385 18	
Tapping material	184 66	
Tapping labor	74 90	
		$594 74
Interest on bonds		$5,071 35
Extension		23 68
		10,822 43
Cash on hand		561 41
		$11,383 84

Taps have been made during the year supplying 30 services.

Uncollected accounts to January 1st, 1904, $2,082.65.

John H. Cook,
John S. Applegate,
William Cullington,
Board of Water Commissioners.

EXHIBIT C11.

Rothenberg Bill, Possession of Defendant.

Page 109 of printed testimony, line 29.

EXHIBIT C13.

Stock and Dividends of Long Branch Supply Co.

Capital Stock Long Branch Water Supply Co. $250,000.00.

1886 $60,000 5% Bonds Issued

			Interest	paid	1,641.67
1887	15,000	do	"	"	3,304.45
1888	25,000	do	"	"	4,576.38
1889	and each year after		"	"	5,000.00

DIVIDENDS PAID.

Year.	Rate.	Amount.
1882		
1883	3%	7,500.00
1884	3%	7,500.00
1885	6%	15,000.00
1886	4%	10,000.00
1887	5%	12,500.00
1888	5%	12,500.00
1889	1½%	3,750.00
1890	4%	10,000.00
1891	5%	12,500.00
1892	5%	12,500.00
1893	5%	12,500.00
1894	5%	12,500.00
1895	5%	12,500.00
1896	5%	12,500.00
1897	5%	12,500.00
1898	5%	12,500.00
1899	5%	12,500.00

EXHIBIT C14.

Schedule of Freehold Rates.

WATER RATES PER ANNUM.

Private Dwellings.

Hydrant in yard or kitchen, or one faucet	$6 00
Hydrant in yard and kitchen	7 00
Bath, hot or cold water or both	3 00
Water closet	3 00
Stationary wash stand	1 00
Stationary wash tubs, two	1 50
Wash pave 40 ft. or under	2 50
Every additional foot	05

Public Buildings.

Hydrant or one faucet	7 00
Wash basin or sink	7 00
Water closet, self acting	7 00
Water closet, pan valve or reservoir	4 00
Urinal	5 00

Hotels and Large Boarding Houses.

Hydrant for family use, or one faucet	7 00
Hotel bars with running water	10 00
Hotel bars without running water	5 00
Wash basin, self acting cock	3 00
Sink, hot and cold water	5 00
Bath for use of boarders	6 00
Water closet, self-acting	6 00
Water closet, pan valve or reservoir	3 00
Stationary wash tubs	5 00
Hydrant in yard or kitchen	7 00
Hydrant in yard and kitchen	8 00
Horse trough	10 00
Urinal	4 00

Business Places.

Bakery, one faucet	6 00

Confectionery, one faucet	6 00
Ice Cream Saloon, one faucet	6 00
Barber shop, one faucet	6 00
Drug store, one faucet	6 00
Liquor store, one faucet	6 00
Restaurant, one faucet	6 00
Slaughter house, one faucet	10 00
Photograph rooms, one faucet	6 00
Printing office, one faucet	6 00
Stores and offices generally, not less than	6 00
Blacksmith shop, one fire	6 00
Each additional fire	2 00
Carriage maker or wheelwright shop	6 00
Shops generally, one faucet, not less than	6 00
Public school, one faucet	6 00
Each additional faucet	1 00

Boarding schools will be rated according to attachments and quantity of water used.

Rates for the use of water not enumerated above, and for all special purposes, will be fixed and determined by the Water Commissioners upon application.

Exhibit C15.

PRICES OF MEASURED WATER.

6,000 gallons or less per quarter, $1.50.

6,000	"	to 30,000,	25	cts. per	thousand	gals.
30,000	"	37,500,	24	"	"	"
37,500	"	45,000,	23	"	"	"
45,000	"	52,500,	22	"	"	"
52,500	"	60,000,	21	"	"	"
60,000	"	67,500,	20	"	"	"
67,500	"	75,000,	19	"	"	"
75,000	"	82,500,	18	"	"	"
82,500	"	90,000,	17	"	"	"
90,000	"	100,000,	16	"	"	"
100,000 and upwards,			15	"	"	"

EXHIBIT C16.
Schedule of Asbury Park Rates.

ORDINANCE NO. 82.

2. That there shall be due and payable, quarterly, on the first day of July, October, January and April of each and every year, the sum of one dollar and fifty cents for water service, which shall entitle each property holder to one thousand cubic feet of water, but as long as said property is connected with the water system of this city, said sum shall be due and payable as aforesaid, without regard to whether the water be taken or not, this being the minimum sum below which the city has determined that said water connections cannot be maintained without loss.

Rates.	House Rate. One Faucet....	Wash Bowl.....	Bath Tub.....	Self-Acting Water Clos....	Each Add'l Water Clos....	Urinal.....	Wash Tub.....	Each Add'l Wash Tub....
6 rooms and under..	$6 00	$ 25	$1 00	$1 00	$ 75	$2 00	$ 50	25
7 or 8 rooms.....	6 50	25	1 25	1 50	1 00	2 25	75	25
9 or 10 rooms.....	7 00	50	1 50	2 00	1 00	2 50	1 00	25
11 or 12 rooms.....	7 50	75	1 75	2 50	1 00	2 75	1 25	25
13 or 14 rooms.....	8 00	1 00	2 00	3 00	1 00	3 00	1 50	25
15 or 16 rooms.....	8 50	1 25	2 25	3 50	1 00	3 25	1 75	25
17 or 18 rooms.....	9 00	1 50	2 50	4 00	1 00	3 50	2 00	25
19 or 20 rooms.....	9 50	1 75	2 75	4 50	1 00	3 75	2 25	25
21 or 22 rooms.....	10 00	2 00	3 00	5 00	1 00	4 00	2 50	25
23 or 24 rooms.....	10 50	2 25	3 25	5 50	1 00	4 25	2 75	25

Stores, Offices, etc., one faucet or bowl.....	$4 00
" " each additional faucet..	2 00
Private stable, 1 horse, 1 faucet.....	3 00
" " each additional horse.....	1 00
Hose sprinkler, 3/8 inch, 1 lot 50x150 or less..	5 00
Each additional lot or part.....	2 50
Meter rates, per 1,000 cubic feet.....	1 00

EXHIBIT C17.

Same as Schedule "J" on La Monte's Table of Schedules.

APPROXIMATE NUMBER OF GALLONS OF WATER PUMPED 1883-1885.

	Total water pumped gallons.	Average per day.
1883.		
January	2,944,866	94,996
February	2,501,216	89,328
March	2,840,256	91,621
April	2,787,214	92,907
May	4,817,718	155,410
June	13,446,348	448,211
July	28,824,196	929,812
August	28,635,830	923,736
September	16,482,098	549,403
October	4,232,838	136,543
November	2,711,675	90,389
December	2,776,023	89,549
	113,000,278	309,589
1884.		
January	3,383,720	109,152
February	3,542,306	122,149
March	4,281,568	138,115
April	3,333,446	111,114
May	6,598,884	212,867
June	21,658,939	721,964
July	31,126,711	1,004,087
August	25,154,601	811,438
September	24,063,182	802,106
October	9,040,264	291,621
November	3,345,618	111,520
December	4,424,532	142,727
	139,953,771	383,435

1885.		
January	3,623,099	116,874
February	3,824,548	136,591
March	4,892,908	157,835
April	4,785,883	159,529
May	7,300,016	235,484
June	26,396,744	879,891
July	35,981,175	1,160,683
August	27,337,792	881,864
September	18,221,916	607,397
October	8,314,263	268,202
November	4,241,598	141,386
December	4,562,664	147,182
	149,482,606	409,541

EXHIBIT C18.

The same as "D8 C" on La Monte's Table of Schedules, being Earnings, Operating Expenses and Taxes.

EARNINGS, OPERATING EXPENSES AND TAXES, 1882 TO 1899.

1882.		
Earnings		$18,106.35
Operating Expenses	4,604.37	
Taxes	948.00	
	$5,552.37	

1883.		
Earnings		$22,644.00
Operating Expenses	$5,872.90	
Taxes	934.00	
	$6,806.90	

	1884.		
	Earnings		$24,007.00
	Operating Expenses	$6,754.77	
	Taxes	1,024.00	
		$7,778.77	
	1885.		
	Earnings		$24,845.78
	Operating Expenses	$6,935.59	
	Taxes	1,312.00	
		$8,247.59	
	1886.		
	Earnings		$26,197.99
	Operating Expenses	$7,761.88	
	Taxes	1,237.00	
		$8,998.88	
	1887.		
	Earnings		$28,584.06
	Operating Expenses	$7,379.83	
	Taxes	1,385.60	
		$8,765.43	
	1888.		
	Earnings		$30,055.10
	Operating Expenses	$9,004.26	
	Taxes	1,647.00	
		$10,651.26	
	1889.		
	Earnings		$31,778.62
	Operating Expenses	$9,487.09	
	Taxes	1,591.00	
		$11,078.09	

1890.			
Earnings		$35,706.00	
Operating Expenses	$9,887.14		
Taxes	1,643.20		
	$11,530.34		
1891.			
Earnings		$35,184.19	10
Operating Expenses	$11,384.69		
Taxes	1,780.65		
	$13,165.34		
1892.			
Earnings		$38,779.00	
Operating Expenses	$10,465.22		
Taxes	2,079.55		
	$12,544.77		20
1893.			
Earnings		$40,842.56	
Operating Expenses	$10,594.25		
Taxes	1,962.27		
	$12,556.52		
1894.			30
Earnings		$40,874.46	
Operating Expenses	$11,391.84		
Taxes	2,020.49		
	$13,412.33		
1895.			
Earnings		$41,362.62	
Operating Expenses	$10,788.98		
Taxes	1,883.48		40
	$12,672.46		

	1896.		
	Earnings		$43,602.09
	Operating Expenses	$10,787.52	
	Taxes	2,080.00	
		$12,867.52	
	1897.		
	Earnings		$45,590.50
	Operating Expenses	$11,844.07	
	Taxes	1,961.70	
		$13,805.77	
	1898.		
	Earnings		$47,764.84
	Operating Expenses	$16,291.41	
	Taxes	2,206.17	
		$18,497.58	
	1899.		
	Earnings		$49,730.29
	Operating Expenses	$14,174.34	
	Taxes	2,089.38	
		$16,263.72	

Exhibit C19.

TOTAL NUMBER OF TAPS.

Long Branch Commission	1,363
Ocean Township North of Long Branch Commission	325
Ocean Township South & West of Long Branch Commission	21
Seabright Borough	283
Borough of Deal	155
Eatontown Township Old Lines	49
do New Lines	7
Shrewsbury Township	55
	2,260

EXHIBIT C20.

Contract of August 21st, 1900, between The Construction Company and The Water Company.

Agreement made this 21st day of August, 1900, by and between the Independent Telephone and Telegraph Construction Company, party of the first part, and the Tintern Manor Water Company, party of the second part;

WITNESSETH:

WHEREAS, On the 20th day of August, 1900, the President and Treasurer of the party of the second part were authorized and directed by resolution, passed at a meeting of the Board of Directors thereof held on said day, to procure an execution of the contract between the parties hereto, for the acquisition of property and the construction of the water system of the party of the second part, in accordance with the terms of the agreement heretofore made, under which both parties hereto have been heretofore acting.

NOW THEREFORE:

In consideration of the sum of one dollar ($1.00) paid by the party of the second part to the party of the first part, receipt whereof is hereby acknowledged, and of other good and valuable considerations mutually interchanged as hereinafter stated, it is mutually agreed together as follows:

FIRST—The party of the first part agrees to complete the construction of the water system of the party of the second part, in accordance with the plans, specifications and estimates of its Chief Engineer, F. E. Pratt; which plans, specifications and estimates are hereby made a part of this contract, as though specificially incorporated

therein; such construction to consist in general terms of the following:

1. The purchase of one thousand (1,000) acres of land for a reservoir; and clearing and grubbing of the same below flow line, and the raising of necessary bridges and roads across the reservoir.

2. The construction of a concrete core and earth embankment dam, with necessary pipe and controlling apparatus; all in accordance with the plans, specifications and estimates on file in said engineer's office at Red Bank, New Jersey.

3. The building of a 36 inch cast iron gravity pipe line from dam to filter plant, a distance of 17,500 feet, according to said plans and specifications.

4. The erecting of a plant consisting of 12 tanks of the New York Filter Manufacturing Company type, each unit to be of one million (1,000,000) gallons, daily capacity.

5. The building and erecting of the necessary power and pumping apparatus with foundation, to deliver at least twenty million (20,000,000) gallons of water daily.

6. The construction of necessary buildings and foundations to enclose the filters, pump and power installation.

8. The purchasing of all rights of way for pipe lines.

9. The construction upon foundation of a 30 foot by 100 foot stand-pipe, according to said plans and specifications.

10. The construction of 30,200 feet of 36 inch cast iron pipe line from pump station near Red Bank to Long Branch; 33,465 feet of 18 inch cast iron pipe from standpipe to Seabright; 4,315 feet

of 12 inch pipe from Oceanport to Stone Road between Eatontown and Long Branch; 5,550 feet 10 inch pipe to Eatontown, and 3,070 feet 8 inch pipe from the 12 inch pipe to Wolf Hill; 5,890 feet 10 inch pipe from Little Silver depot to Shrewsbury; 6,000 feet 12 inch pipe along Rumson Road, and all necessary 6 inch pipe in towns of Eatontown, Little Silver, Oceanport, Fair Haven, Oceanic and Seabright; not to exceed 30,000 feet in all; together with all necessary valves, bends and appurtenances with all pipes; all in accordance with the plans and specifications aforesaid. And, in addition thereto, to purchase and lay about twelve miles of 6, 8 and 12 inch mains at Long Branch as extension to the Long Branch Water Supply Company plant.

SECOND—Said party of the first part furthermore agrees to purchase the entire capital stock of the "Long Branch Water Supply Company," and of the "Deal Water Company," and to deliver same to the party of the second part or to its order on or before the 1st day of January, 1901.

THIRD—Said party of the second part agrees, in consideration of the performance by the party of the first part, of the terms and conditions of this contract, to issue one million two hundred thousand ($1,200,000) of its bonds, secured by its morgtage for two million dollars ($2,000,000) upon its property and franchises; and also, seven thousand nine hundred and sixty-five (7,965) shares of its capital stock; and to deliver same to the party of the first part as follows:

1. Five hundred thousand dollars ($500,000) of its first mortgage bonds and seven thousand nine hundred and sixty-five (7,965) shares of its capital stock, on the first day of September, 1900.

2. Payments to be made thereafter in bonds,

under monthly estimates by the said Chief Engineer, as the work of construction shall progress; such payments to be certified to in writing by the said Chief Engineer, and the amount of such monthly estimate, less 10 per cent. thereof to be reserved by the party of the second part until the satisfactory completion and delivery of all of the work to be performed by the party of the first part, and the delivery of the capital stock of the "Long Branch Water Supply Company" and of the "Deal Water Company," shall be payable to the party of the first part, in its first mortgage bonds, as hereinafter stated.

(Signed)
INDEPENDENT TELEPHONE AND
TELEGRAPH CON. CO.,
By J. J. JERMYN,
President.

Attest:
JNO. L. WENTZ,
Secretary.

Seal of Construction Co.

TINTERN MANOR WATER CO.,
By J. J. JERMYN,
President.

Attest:
CECIL CAMPBELL HIGGINS,
Secretary.

Seal of T. M. Water Co.

State of New Jersey, } ss.:
County of Monmouth, }

Be it known, that on this 21st day of August, 1900, before me, the subscriber, a Master of Chancery and a Notary Public in and for said County and State, duly commissioned and sworn and residing and being therein, personally appeared Cecil Campbell Higgins, who being by me duly sworn according to law on his oath, says that

he is the Secretary of the Tintern Manor Water Company, a corporation created and existing under and by virtue of the Law of the State of New Jersey, the party of the second part named in, and which signed the within agreement; that he knows the seal of the said corporation; that the seal now affixed to the said agreement purporting to be the seal of the Tintern Manor Water Company is, in fact, the common seal thereof; that Joseph J. Jermyn is the President of the said corporation; and did, by its order, sign, seal and deliver the said agreement as the voluntary act and deed of the said corporation in the presence of said deponent, at the execution thereof, subscribed his name as a witness thereto.

All which is hereby certified.

(Signed)
JAMES STEEN,
[L. S.] M. C. C. and Notary Public.

State of New Jersey, }
County of Monmouth, } ss.:

Be it known, that on this 21st day of August, 1900, before me, the subscriber, Master in Chancery and a Notary Public in and for the County and State, duly commissioned and sworn and residing and being therein, personally appeared John L. Wentz, who being by me duly sworn according to law, on his oath, says that he is the Secretary of the Independent Telephone and Telegraph Construction Company, a corporation created and existing under and by virtue of the Laws of the State of New York, the party of the first part named in and which signed the within agreement; that he knows the seal of the said corporation; that the seal now affixed to the said agreement purporting to be the seal of the Independent Telephone and Telegraph Construction Company, is in fact the common seal thereof; that

Joseph J. Jermyn is the President of the said corporation, and did, by its order, sign, seal and deliver the said agreement as the voluntary act and of the said corporation in the presence of said deponent; and that he, the deponent did, at the execution thereof, subscribe his name as a witness thereto.

All of which is hereby certified.

(Signed)
JAMES STEEN,
M. C. C. and Notary Public.

[L. S.]

EXHIBIT E.

Consolidation Agreement, July 2, 1901, also offered by Complainant.

THIS JOINT AGREEMENT, made the second day of July, nineteen hundred and nine, between The Long Branch Water Supply Company, a corporation of New Jersey, party of the first part; The Sea Bright Water Supply Company, a corporation of New Jersey, party of the second part; the Deal Water Company, a corporation of New Jersey, party of the third part; the Tintern Manor Water Company, a corporation of New Jersey, party of the fourth part, and Middletown Water Company, a corporation of New Jersey, party of the fifth part, being corporations organized for the purpose of carrying on business of the same or similiar nature, to wit, the business of supplying water, the said several corporations acting by their Directors respectively,

WITNESSETH, That in consideration of the mutual agreement and covenants herein contained in the said parties have agreed and do hereby covenant and agree as follows:

FIRST—The said five corporations are hereby

merged and consolidated into corporation to be known and called by the name of:

TINTERN MANOR WATER COMPANY.

SECOND—The number of directors of said consolidated corporation shall be seven, and the names and places of residence of the first directors and officers of such consolidated corporation, who shall hold their offices until their successors shall be chosen or appointed, are as follows:

DIRECTORS.

Joseph J. Jermyn.....Scranton, Penn.
Rufus Blodgett.....Long Branch, N. J.
William C. Hendrickson.....Belle Mead, N. J.
James Steen.....Eatontown, N. J.
Cecil C. Higgins.....New York City, N. Y.
Frank E. Pratt.....Red Bank, N. J.
John L. Wentz.....Scranton, Penn.

OFFICERS.

President—Joseph J. Jermyn....Scranton, Penn.
Vice President—Rufus Blodgett.Long Branch, N. J.
Secretary—Cecil C. Higgins....N. Y. City, N. Y.
Treasurer—John L. Wentz.....Scranton, Penn.

THIRD—The capital stock of the consolidated corporation is two million dollars, divided into twenty thousand shares of par value of one hundred dollars each, all of which is full paid non-assessable common stock.

FOURTH—The manner of converting the capital stock of each of the said consolidated corporations into the stock of said new or consolidated corporation is as follows:

All of the stock and bonds of the Long Branch Water Supply Company and the Deal Water Company are to be cancelled, surrendered and retired. All the shares of stock of the Middletown Water

Company and The Sea Bright Water Supply Company are to be surrendered, cancelled and retired, such surrender, cancellation and retirement to be effected by the shareholders of the present Tintern Manor Water Company. The twenty thousand shares of the capital stock of the consolidated company are not to be issued to the present holders of the stock of the existing Tintern Manor Water Company, at the rate of two shares for one share, and the existing shares of the Tintern Manor Water Company are to be cancelled and retired.

FIFTH—The directors of the consolidated corporation are to be elected by the stockholders annually in the month of January, pursuant to the By-Laws of said corporation, and the officers are likewise to be elected annually in January by the Board of Directors.

SIXTH—The consolidated corporation will assume the existing mortgage given by the Tintern Manor Water Company to the Guarantee Trust Company of New York, to secure the payment of bonds to an amount not exceeding two million dollars, which mortgage is dated March 31st, 1900 and also all existing contract, debts and obligations of the several constituent companies, with the exception of the bonds of the Long Branch Water Supply Company and of the Deal Water Company above mentioned, which are to be cancelled and retired.

SEVENTH—The location of the principal office of the consolidated corporation in this State is at Heisley's Building, Long Branch, Monmouth County, New Jersey, and the name of the agent therein and in charge thereof upon whom process against the corporoation may be served is:

WELLINGTON LAMONT.

In testimony whereof, the corporate seals of said

five respective corporations have been hereto affixed and duly attested by the signatures of the Presidents and Secretaries of said corporations respectively, and these presents have been signed by a majority of the directors of each of said corporations the day and year first above written.

THE LONG BRANCH WATER SUPPLY CO.,

By J. J. JERMYN,
President.

Attest:

F. E. PRATT,
[L. S.] Secretary.

J. J. Jermyn,
R. Blodgett,
Jno. L. Wentz,
F. E. Pratt,
Cecil Campbell Higgins,
James Steen,
Wm. C. Hendrickson,
Directors.

THE SEA BRIGHT WATER SUPPLY COMPANY,

By R. BLODGETT,
President.

Attest:

WELLINGTON LAMONT,
[L. S.] Secretary,

J. J. Jermyn,
R. Blodgett,
F. E. Pratt,
James Steen,
Wellington LaMont,
Directors.

DEAL WATER COMPANY,

By J. J. JERMYN,
President.

Attest:
JNO. L. WENTZ,
[L. S.] Secretary.

J. J. Jermyn,
Jno. L. Wentz,
Directors.

TINTERN MANOR WATER COMPANY,

By J. J. JERMYN,
President.

Attest:
CECIL CAMPBELL HIGGINS,
[L. S.] Secretary.

J. J. Jermyn,
Jno. L. Wentz,
James Steen,
Cecil Campbell Higgins,
Wm. C. Hendrickson,
Directors.

MIDDLETOWN WATER COMPANY,

By JAMES STEEN,
President.

Attest:
WELLINGTON LAMONTE,
[L. S.] Secretary.

John L. Wentz,
F. E. Pratt,
James Steen,
Cecil Campbell Higgins,
Wellington LaMonte,
Directors.

(Here follow acknowledgments by all the parties, dated July 2, 1901, before William H. Corbin, Master in Chancery, taken in Monmouth County, N. J.)

I, FRANCIS E. PRATT, Secretary of the Long Branch Water Supply Company, do hereby certify that at a meeting of the stockholders of the said Long Branch Water Supply Company held at the usual place of meeting, upon this twenty-fourth day of July, Anno Domini, nineteen hundred and one, and whereof twenty days' notice of the time, place and object of such meeting had been mailed to the last known post office address of each of said stockholders, the within joint agreement of merger consolidation of

"THE LONG BRANCH WATER SUPPLY COMPANY,"
"THE SEA BRIGHT WATER SUPPLY COMPANY,"
THE "DEAL WATER COMPANY,"
THE "TINTERN MANOR WATER COMPANY" and
THE "MIDDLETOWN WATER COMPANY,"

entered into by and between the directors of the said several companies, was taken into consideration, and a vote by ballot being had for the adoption or rejection of the same, the votes of the holders of two-thirds of all the capital stock of said

LONG BRANCH WATER SUPPLY COMPANY

(and upwards) were cast for the adoption of said joint agreement of merger and consolidation, and no votes were cast in opposition.

All of which is hereby certified the day and year first above written.

Witness my hand as Secretary and the Corporate Seal of said Company.

FRANCIS E. PRATT, [L. S.]
Secretary.

I, WELLINGTON LAMONTE, Secretary of the Sea Bright Water Supply Company, do hereby certify that at a meeting of the stockholders of the Sea Bright Water Supply Company, held at the usual place of meeting, upon the twenty-fourth day of July, Anno Domini nineteen hundred and one, and whereof twenty days' notice of the time, place and object of such meeting had been mailed to the last known post office address of each of said stockholders, the within joint agreement of merger and consolidation of

"THE LONG BRANCH WATER SUPPLY COMPANY,"
"THE SEA BRIGHT WATER SUPPLY COMPANY,"
THE "DEAL WATER COMPANY,"
THE "TINTERN MANOR WATER COMPANY" and
THE "MIDDLETOWN WATER COMPANY,"

entered into by and between the directors of the said several companies, was taken into consideration, and a vote by ballot being had for the adoption or rejection of the same, the votes of the holders of two-thirds of all the capital stock of the said

SEA BRIGHT WATER SUPPLY COMPANY

(and upwards) were cast for the adoption of said joint agreement of merger and consolidation, and no votes were cast in opposition.

All which is certified the day and year first above written.

Witness my hand as Secretary and the Corporate Seal of said Company.

WELLINGTON LA MONTE, [L. S.]
Secretary.

I, John L. Wentz, Secretary of the Deal Water Company, do hereby certify that at a meeting of the stockholders of the said Deal Water Company, held at the usual place of meeting, upon this

twenty-fourth day of July, Anno Domini nineteen hundred and one, and whereof twenty days' notice of the time, place, and object of such meeting had been mailed to the last known post office address of each of said stockholders, the within joint agreement of merger and consolidation of

"The Long Branch Water Supply Company,"
"The Sea Bright Water Supply Company,"
The "Deal Water Company," the
"Tintern Manor Water Company" and the
"Middletown Water Company."

entered into by and between the directors of the said several companies, was taken into consideration, and a vote by ballot being had for the adoption or rejection of the same, the votes of the holders of two-thirds of all the capital stock of the said

Deal Water Company

(and upwards) were cast for the adoption of said joint agreement of merger and consolidation, and no votes were cast in opposition.

All of which is hereby certified the day and year first above written.

Witness my hand as Secretary and the Corporate Seal of said Company.

JOHN L. WENTZ, [L. S.]
Secretary.

I, Cecil Campbell Higgins, Secretary of the Tintern Manor Water Company, do hereby certify that at a meeting of the stockholders of the said Tintern Manor Water Company, held at the usual place of meeting, upon the twenty-fourth day of July, Anno Domini nineteen hundred and one, and whereof twenty days' notice of the time, place, and object of such meeting had been mailed to last known post office address of each of said stock-

holders, the within joint agreement of merger and consolidation of

"THE LONG BRANCH WATER SUPPLY COMPANY,"
"THE SEA BRIGHT WATER SUPPLY COMPANY,"
THE "DEAL WATER COMPANY,"
THE "TINTERN MANOR WATER COMPANY" and
THE "MIDDLETOWN WATER COMANY,"

entered into by and between the directors of the said several companies, was taken into consideration, and a vote by ballot being had for the adoption or rejection of the same, the votes of the holders of two-thirds of all the capital stock of the said Tintern Manor Water Company (and upwards) were cast for the adoption of the said joint agreement of merger and consolidation, and no votes were cast in opposition.

All of which is hereby certified the day and year first above written.

Witness my hand as Secretary and the Corporate Seal of said Company.

CECIL CAMPBELL HIGGINS,
Secretary.

I, Wellington La Monte, Secretary of the Middletown Water Company, do hereby certify that at a meeting of the stockholders of the said Middletown Water Company, held at the usual place of meeting, upon the twenty-fourth day of July, Anno Domini nineteen hundred and one, and whereof twenty days' notice of the time, place, and object of such meeting had been mailed to the last known post office address of each of said stockholders, the within joint agreement of merger and consolidation of

"THE LONG BRANCH WATER SUPPLY COMPANY,"
"THE SEA BRIGHT WATER SUPPLY COMPANY,"
THE "DEAL WATER COMPANY,"
THE "TINTERN MANOR WATER COMPANY" and
THE "MIDDLETOWN WATER COMANY,"

entered into by and between the directors of the said several companies, was taken into consideration, and a vote by ballot being had for the adoption or rejection of the same, the votes of the holders of two-thirds of all the capital stock of the said Middletown Water Company (and upwards) were cast for the adoption of said joint agreement of merger and consolidation, and no votes were cast in opposition.

All of which is hereby certified the day and year first above written.

Witness my hand as Secretary and the corporate seal of said Company.

WELLINGTON LA MONTE, [L. S.]
Secretary.

Endorsed:
August 6, 1901.
GEORGE WURTS,
Secretary of State.

EXHIBIT C22.
The Report of DeNyse.

To the Mayor and Commissioners of the Municipality of Long Branch, N. J.

Gentlemen:—

In accordance with the following preamble and resolution, passed by your honorable body on the evening of Nov. 21st., 1901, viz:

"WHEREAS: This Board has on several occasions, discussed the advisability of constructing a public water plant, thereof, be it"

"Resolved, That William H. DeNyse be employed as special engineer in connection with the City Surveyor, to make a preliminary survey, and to report to a special meeting of this board, to be held on Mondoy, Dec., 2nd. next, the approximate

cost of a municipal water supply equivalent in service and supply to the present system; and be it further"

"Resolved, That he be and is hereby empowered to secure such other expert assistance as he shall require in order to enable him to render a complete report on that date."

The following report is herewith respectfully submitted:

It was well known at the time the resolution was passed that the date fixed for receiving the report was allowing but very little time in which to complete the investigations, procure the necessary data and made the caluculations required in a work of this magnitude. Since receiving the official notice of the action of the board, no time has been lost, or labor spared, in the endeavor to make the report as complete as possible.

In the doing of this work we have pressed into service evey available person whose knowledge would be of any assistance in making the investigations as complete as possible.

The necessary surveys have been made to determine the length of water mains now laid within the municipality, the number of public hydrants on the lines and other items of importance pertaining to the present plant.

In making up the approximate estimate of cost of the proposed new plant, estimates have been obtained from reliable firms manufacturing and erecting all the different kinds of machinery and parts of the plant that enter into the calculation. In addition to this, estimates on the cost of the labor required in laying the pipe lines and completing the plant in every particular have been obtained from experienced contractors, who

have been engaged in water works construction for a number of years past, which make the estimate of the cost as complete and accurate as it is possible to obtain, without having all the details of construction worked out and completed plans of the entire plant made, on which to obtain estimates, which was absolutely impossible, in the short time allowed and was not contemplated by the resolutions.

On the work as a whole pertaining to the proposed new plant, the services of Messrs. Rudolph Hering and George W. Fuller, as consulting engineers, have been procured and have been of great value, because of their extended experience and practical knowledge of works of this character, as both of these gentlemen stand in the front rank of Hydraulic Engineers and Sanitary experts in this country, and have been identified with very many of the most important works of this character in the United States.

General description of the present plant.

The portion of the present plant within the boundaries of the municipality, consists of a pumping station, in which are installed three pumps, with the necassry engines, boilers, &c., the capacities of the pumps being 2,000,000, 3,000,000 and 5,000,000 gallons per day, of 24 hours, respectfully; a filter plant through which all the water is passed; a stand pipe, 80 feet in height above the base, and about 27 miles of mains laid in the streets, varying in size, from four to twenty inches, on which are located 154 public hydrants.

Water is supplied by the present plant, in addition to the municipality, to Monmouth Beach, Sea Bright, Highland Beach, Norwood Park, South Elberton, Deal Beach and other outlying territory.

The water pumped, rarely ever exceeds 3,500,000 gallons per day, of 24 hours, during the hottest

and dryest days of summer. As this quantity of water supplies not only the municipality, but all the outlying districts above mentioned, it would be a fair and generous estimate to say that not more than 2,000,000 to 2,500,000 per day, would be the maximum quantity used within the municipality, which is the measure of supply of the present plant to the municipality. Hence, the estimated cost of the plant called for by the resolution, is one capable of delivering the maximum quantity of water now supplied, viz; 2,000,000 to 2,500,000 gallons per day, of 24 hours, with the same length of mains now laid, and the same number of hydrants now in use which would be a plant "equivalent in service and supply to present system." The capacity of the plant could be increased at any time by the addition of another pump.

The Proposed new plant.

The source of supply of water can be obtained either from artesian wells, based on the assumption that wells can be put down that will yield a flow equal to the one put down for the Monmouth Ice Co., during the past summer, on the property north of North Broadway, which assumption there is no good reason to doubt, or it can be taken from a natural stream. The location of the stream from which the water could be taken is not given here for obvious reasons, suffice to say that the supply is abundant and the water of excellent quality.

Below are given estimates of the cost of two styles of plants, one taking the water from artesian wells and the other from a natural stream:

General description of proposed Artesian well plant:

The pumping station will consist of, the pump house and stack, in which will be installed two 3,000,000 gallon pumps of modern type with

boilers and all appurtenances, connections, &c. complete, and elevated tank with a capacity of 250,000 gallons, and a filter plant and house complete in all its details, with the necessary artesian wells and connections.

The distribution system will consist of 27 miles of mains, including gates and all accessories complete, and 154 hydrants.

The total estimated cost of the above plant, including ground, is $201,423.00.

The general description of the pumping station and distribution system, for a plant taking the water from a natural stream, will be the same as described above, with the exception of the artesian wells.

The total estimated cost of a plant of this character including cost of reservoir, delivery main and land, is $241,651.00.

The estimated cost of the asphalt pavement to be taken up and relaid amounts to $10521.00 which is included in the estimates of cost given above.

Dec. 2, 1901.

W. H. DeNyse,
Special Engineer.

J. W. Seaman,
City Surveyor.

Rudolph Herring & George W. Fuller,
Consulting Engineers.

Copy of Sea Bright Ordinance, Jany. 13, 1900.

AN ORDINANCE, Granting rights and franchises to the Tintern Manor Water Company.

Be it enacted by the Mayor and Council of the Borough of Sea Bright:

Section 5. That the said Tintern Manor Water

Company shall furnish the inhabitants of Sea Bright with pure, potable water, at a cost or price not to exceed that paid by the citizens of adjacent town or townships, and shall furnish such fire hydrants as the Mayor and Council shall require along the water main of the company, at a price not to exceed twenty-five ($25.00) per hydrant per year.

Section 11. That the said Tintern Manor Water Company shall furnish seven hydrants within the Borough limits, to be used for fire purposes and for street sprinkling free of charge. And this ordinance is approved, passed and adopted upon condition that said hydrants be so furnished.

Section 12. That this ordinance shall take effect immediately upon its passage.

Ordinance of Township of Shrewsbury.

ORDINANCE

Granting rights and franchises to the Tintern Manor Water Company.

BE IT ORDAINED by the Township Committee of the Township of Shrewsbury, County of Monmouth, and State of New Jersey, as follows:

SECTION TWO:—That the said Tintern Manor Water Company is hereby required to so lay, construct and maintaain said Water mains or water pipes as at intervals not exceeding one thousand feet, said mains or pipes shall have attached thereto approved apparatus for making the usual connections for street hydrants, and shall provide street or fire hydrants where the water mains may be laid, pursuant thereto, where designated by the Township Committee, at intervals of not less than one thousand feet, without any charge or

expense to the Township of Shrewsbury. Such water as may be taken from such hydrants for sprinkling roads or streets to be paid for at the regular rates referred to in this Ordinance, but for the extinguishment of fire, water shall be furnished free of expense to the Township.

SECTION FIVE:—That the said Tintern Manor Water Company shall furnish the citizens of Shrewsbury Township with pure, potable water at a cost or price not exceeding that now paid in the Town of Red Bank, after the usual discounts now allowed herein, and shall furnish such fire hydrants as the Township Committee shall require along the water mains of said Company, in addition to the hydrants one thousand feet apart hereinbefore provided for, at a price not to exceed twenty five dollars per hydrant per year, which shall include water for sprinkling roads and streets which may be taken from the hydrants furnished and paid for as aforesaid.

Eatontown Ordinance.

ORDINANCE.

Granting rights and franchises to the "Tintern Manor Water Company."

Be it ordained by the Township Committee of the Township of Eatontown, County of Monmouth and State of New Jersey, as follows:

Sec. 5. That the said Tintern Manor Water Company shall furnish the citizens of Eatontown Township, with pure potable water at a cost or price not to exceed that paid by the citizens of adjacent towns or townships, and shall furnish such fire hydrants as the Township Committee shall require along the water main of the Company at a price not to exceed twenty-five dollars ($25.00) per hydrant per year.

Sec. 12. That said Tintern Manor Water Company shall furnish hydrants for fire purposes free in the following Towns in said Township, where said Mains shall be extended through the same, namely;—three in Eatontown; one in Oceanport and one in West Long Branch, and the necessary water for such fire purposes.

EXHIBIT C25.

Hackensack Rates.

ANNUAL WATER RATES FOR BUILDINGS NOT METERED.

Approved June 10th, 1886, by the Hackensack Water Company, Reorganized.

FRONT BUILDINGS,	1 St'y.	1½ St'y.	2 St'y.	2½ St'y.	3 St'y.	3½ St'y.	4 St'y.	4½ St'y.	5 St'y.
than 15 feet	$6.90	$7.76	$8.62	$9.48	$10.36	$11.22	$12.08	$12.94	$13.80
en and under 20 feet in width	7.76	8.62	9.48	10.36	11.22	12.08	12.94	13.80	14.66
ty and not exceeding 25 ft. in width	8.62	10.06	11.50	12.66	13.80	14.96	16.10	17.26	18.00
ding 25 and not exceeding 30 ft.	10.36	12.08	13.80	14.96	16.10	17.26	18.40	19.56	20.70
ding 30 and not exceeding 40 ft.	13.80	15.52	17.26	18.98	20.70	22.42	24.16	25.88	27.60
ding 40 and not exceeding 50 ft.	15.52	18.12	20.70	22.72	24.72	26.74	28.76	30.76	32.78
ding 50 and not exceeding 60 ft.	18.98	21.56	24.16	26.62	28.18	30.18	32.20	34.22	36.22
ding 60 and not exceeding 70 ft.	22.42	25.02	27.60	29.62	31.62	33.64	35.66	37.66	39.68
ding 70 and not exceeding 80 ft.	25.88	28.46	31.06	33.06	35.08	37.08	39.10	41.12	43.12
ding 80 and not exceeding 90 ft.	29.32	31.92	34.50	36.51	38.52	40.54	42.56	44.56	46.58
ding 90 and not exceeding 100 ft.	32.78	35.36	37.96	39.96	41.98	43.98	46.00	48.02	50 02
ding 100 and not exceeding 110 ft.	35.66	38.24	40.82	42.84	44.86	46.86	48.88	50.88	52.90
ding 110 and not exceeding 120 ft.	38.52	41.12	43.70	45.72	47.72	49.74	51.76	53.76	55.78

REAR BUILDINGS.	1 St'y.	1½ St'y.	2 St'y.	2½ St'y.	3 St'y.	3½ St'y.	4 St'y.	4½ St'y.	5 St'y.
than 15 feet	$4.60	$5.18	$5.76	$6.32	$6.90	$7.48	$8 06	$8.62	$9.20
en and under 20 feet in width	5.18	5.76	6.32	6.90	7.48	8.06	8.62	9.20	9.78
ty and not exceeding 25 ft. in width	5.76	6.72	7.78	8.42	9 20	9.98	10.72	11.50	12.26
ding 25 and not exceeding 30 ft.	6.90	8.06	9 20	9.98	10.72	11.50	12.28	13.02	13.80
ding 30 and not exceeding 40 ft.	9.20	10.36	11.50	12.66	13.80	14 96	16.10	17.26	18.40
ding 40 and not exceeding 50 ft.	10.36	12.08	13.80	15.14	16.48	17.82	19.16	20.52	21.86

Basements where Hackensack Water is used will be rated as stories.
Water rents on all buildings must be paid as rated in the foregoing lists where water is introd or used.

EXTRA RATES.

(In Addition to Building Rates for Buildings not Metered.)

Baths,—$3.50 each per annum. One extra allowed without charge in houses occupied by only one family.

Bars and Saloons,—$5.80 to $17.50 each per annum.

Fire Hydrants for other than use at a fire will be charged 5 cents per minute, and only by special permit—no charge to be less than $1.00.

Fountains,—1-16 inch jet, $8.00 per annum; ⅛ inch jet, $15.50 per annum.

Green-Houses,—$4.60 per thousand square feet of surface per annum.

Horse Troughs and Hydrants on Sidewalks, $23.00 per annum.

Hose, when only held in the hand for sprinkling purposes, $3.50 per annum. Street washers in front of property not otherwise supplied with water, will be classified as Hydrants at $23.00 per annum.

Steam Engines and Boilers,—$4.60 for each horse power.

Street Sprinkling,—For each block or part of block watered, 30 cents per week, or $17.50 monthly for each cart. Payable in advance.

Each and every cart using Hackensack Water for sprinkling streets, shall have the owner's name and number of cart painted on each side of said cart in a conspicuous place, in large letters. No water will be furnished until a permit be procured for same.

Stables,—In addition to regular building rates, $1.00 per annum for each horse and cow over two.

Water Closets and Urinals,—$2.50 each per annum. One extra will be allowed without charge in all houses occupied by only one family. Only self-closing water closets and urinals will be allowed.

Special Rates will be charged for any kind of business requiring a large amount of water.

MEASURED WATER.

At the option of the Company, meters will be used and the water charged for either at the foregoing rates or at the rate of $1.75 per thousand cubic feet when the Quarterly consumption is less than 5,000 cubic feet, or $1.45 per thousand cubic feet when a larger quantity is used, which shall be in full payment of building rates for the premises where such water is consumed.

RATES FOR MEASURED WATER.

Until further notice this company will lend a meter free of charge and keep the same in repair, except in case of misuse or damage by frost, in which case the expense of repair must be borne by the consumer.

The Company will furnish new meters to replace those frozen, only on receipt of $10 to cover cost of repairs. When cost of repairs is ascertained, the balance, if any, will be returned to the consumer.

REGULAR TARIFF RATES.

When the consumption is less than 5,000 cubic feet per quarter (412 gallons per day), the rate will be $1.75 per 1,000 cubic feet (23 1-3 cents per 1,000 gallons).

When the consumption exceeds this amount and is less than 225,000 cubic feet per quarter (18,750 gallons per day), the rate will be $1.45 per 1,000 cubic feet (19 1-3 cents per 1,000 gallons).

When the consumption exceeds this amount and is less than 300,000 cubic feet per quarter (25,000 gallons per day), the rate will be $1.30 per 1,000 cubic feet (17 1-3 cents per 1,000 gallons).

When the consumption exceeds this amount and is less than 600,000 cubic feet per quarter (50,000 gallons per day), the rate will be $1.20 per 1,000 cubic feet (16 cents per 1,000 gallons).

When the consumption exceeds this amount, the rate will be $1.15 per 1,000 cubic feet (15 1-3 cents per 1,000 gallons).

Final adjustments will be made at the end of each regular quarter, which quarter's consumption shall stand by itself, and there will be no annual averaging except in case of annual guarantees.

The regular quarters shall commence on the first days of February, May, August and November.

No bill will be rendered or payment accepted for less than the following minimum rates:

Through	½	inch meter.....	$2.50	per quarter.
"	¾	"	3.00	"
"	1	"	4.00	"
"	1½	"	5.00	"
"	2	"	6.00	"
"	3	"	12.00	"
"	4	"	24.00	"
"	6	"	48.00	"

All water used in excess of the amount paid for by these minimum rates will be charged at the regular tariff rates for measured water.

DEFENDANT'S EXHIBITS.

EXHIBIT D1.

Kellogg's Schedule for Dwellings.

RATES CHARGED for supply of water to dwellings having following fixtures:

1 Kitchen Sink with hot and cold water.
1 Water Closet.
1 Bath Tub.
1 Wash-Stand in bath-room.
3 Laundry tubs.

Long Branch,	$18.00
Plainfield,	18.00
Ridgewood,	18.00
Metuchen,	18.00
New Brunswick,	21.00
Somerville,	19.00
Summit,	19.00
Madison,	18.00
Belleville,	18.00
East Orange,	15.00

	Montclair,	18.00
	Woodbridge,	18.00
	Flemington,	25.00
	Newton,	14.00
	Newark,	16.75
	Glassboro,	20.00
	Belvidere, N. J.,	21.50
	Nantucket, Mass.,	16.00
10	Bound Brook, N. J.,	21.00
	Hopewell, N. J.,	23.00
	Perth Amboy,	16.00
	Vineland, N. J.,	14.00
	Freehold, N. J.,	15.00
	Frenchtown, N. J.,	17.00
	Clinton, N. J.,	17.00
	Deckertown, N. J.,	16.50
	Beverly, N. J.,	19.00
20	Bloomfield, N. J.,	15.00
	Rahway, N. J.,	14.00
	Erie, Pa.,	19.00
	Keyport, N. J.,	16.00
	Lambertville,	14.00
	Cranford, N. J.,	18.00
	Roselle,	18.00
	Westfield,	18.00
	Carteret,	18.00
30		
40		

EXHIBIT D2.

Schedule 2.

STREETS SPRINKLED BY THE LONG BRANCH COMMISSION.

		Square Feet.
Ocean Ave. entire length	22,600'x40'	904,000
Lincoln Ave. Ocean to Norwood	3,300'x40'	132,000
So. Lincoln Ave. Lincoln to Norwood	1,300'x40'	52,000
Elberon Ave. Lincoln to Park	1,700'x36'	61,200
Park Ave. Ocean to Norwood	4,120'x36'	148,320
Sternberger Ave. Ocean to Cedar	1,325'x20'	26,500
Green Ave. Cedar to Tak. Lake drive	1,260'x44'	55,440
Cedar Ave. Ocean to Norwood	4,572'x35'	160,020
Pond Ave. Cedar to Brighton	1,043'x40'	41,720
Hollywood Ave. Norwood to Westwood	1,025'x40'	41,000
Brookdale Ave. Westwood to Brighton	3,013'x40'	120,520
Brighton Ave. Ocean to Norwood	6,100'x40'	244,000
West End Ave. Second Ave. to N. Y. & L. B. R. R.	900'x36'	32,400
Sairs Ave. West End Ave to Bath	2,380'x36'	85,680
Matilda Terrace Ocean Ave. to Second	966'x36'	34,776
Cottage Place Ocean Ave. to Second	940'x48'	45,120
North Bath Ave. entire	1,200'x36'	43,200
So. Bath Ave. Ocean to Broadway	6,977'x36'	251,172
Third Ave. Bath to Broadway	4,370'x36'	157,320
Morris Ave. Ocean Ave. to Broadway	5,535'x40'	221,400
Sheet No. 3.		
Chelsea Ave. Ocean to Morris	4,500'x44'	198,000
Second Ave. entire length	7,700'x44'	338,800
Franklin Ave. Second Ave. to Third	1,200'x36'	43,200
Garfield Ave. Second Ave. to Third	1,256'x44'	55,264
Belmont Ave. Second Ave. to Third	1,268'x28'	35,504

	No. So. Broadway Ocean to Broadway	3,200′x40′	128,000
	Broadway entire length	7,475′x42′	313,950
	Grant Ave. No. Broadway to Cooper	626′x36′	22,536
	Cooper Ave. Ocean to L. B. Ave.	1,545′x36′	55,620
	Fay St. Cooper Ave. to Seaview Ave.	900′x100′	90,000
	Seaview Ave. Ocean Ave. to Long Branch Ave.	1,900′x36′	68,400
10	Atlantic Ave. Ocean Ave. to Rockwell	6,023′x36′	216,828
	Liberty St. Broadway to Atlantic	4,435′x38′	168,530
	Union Ave. Second Ave. to Rockwell	2,000′x44′	88,000
	Monmouth Ave. Liberty St. to Rockwell	900′x44′	39,600
	Central Ave. Liberty St. to Rockwell	933′x44′	41,052
	Rockwell Ave. Broadway to N. J. S. R. R.	975′x28′	27,300
20	Sixth Ave. Broadway to N. J. S. R. R.	950′x33′	31,350
	Lippincott Ave. Broadway to N. J. S. R. R.	934′x33′	30,822
	Seventh Ave. Broadway to N. J. S. R. R.	1,142′x36′	41,112
	Fourth Ave. Broadway to Chelsea Ave.	1,250′x28′	35,000
	So. Fifth Ave. Broadway to Chelsea		
30	Ave.	1,200′x44′	52,800
	Morril St. Broadway to Bath Ave.	1,128′x36′	40,608
	Pearl St. Broadway to Norwood Ave.	1,193′x25′	29,825
	Division St. Morris to Bath Ave.	1,350′x36′	48,600
	Sheet No. 3.		
	Norwood Ave. Broadway to So. limits of Conn.	13,700′x33′	452,100
	Washington St. Broadway to N. J. S. R. R.	2,100′x36′	75,600
40	Harrison St. entire length	500′x28′	14,000
	Branchport Ave. Broadway to N. J. S. R. R.	2,171′x33′	71,643

Grand Ave. Broadway to N. J. S. R. R.	2,231′x30′	66,930
Myrtle Ave. Broadway to No. line Jno. Foster	1,000′x36′	36,000
Hoey Ave. Cedar to Brighton	1,183′x40′	47,320
Westwood Ave. Third to Cedar	7,673′x38′	291,574
Prospect St. Morris to Bath	1,332′x36′	47,952
Clinton Place entire length	200′x30′	6,000
Sheet No. 1.		
Rockwell Ave. N. J. S. R. R. to Atlantic Ave.	2,875′x36′	103,500
	21,265	760,519

1902—Same.

Off. 1903.—		
Westwood Ave. Third Ave. to Cedar	7,673′x38′	291,574
Norwood Broadway to So. limits of Com.	13,700′x33′	452,100
Brighton Ave. Ocean to Norwood Ave.	6,100′x40′	244,000
Cedar Ave. Norwood to Westwood Ave.	750′x35′	26,250
	28,223	1,013,924

1901.

Lin. ft.	Sq. ft.
89,282	3,493,052
55,027	2,057,537
21,265	760,519
165,574	6,311,108
31.3 mi.	701,234 Sq. yds.

1902—Same.

1903.

137,351 Lin. ft.	5,297,184 Sq. ft.
26.0 mi.	588,576 Sq. yds.

LENGTH AND AREA OF STREETS SPRINKLED IN LONG BRANCH COMMISSION.

1901—1902.

Kind of Road.	Lineal feet.	Miles.	Sq. feet.	Sq. yards.
Gravel	122,706	23.23	4,699,514	522,168
Stone & Gravel	28,223	5.34	1,013,924	112,658
Asphalt	14,645	2.77	597,670	66,408
Total	165,574	31.34	6,311,108	701,234

1903.

Gravel	122,706	23.23	4,699,514	522,168
Asphalt	14,645	2.77	597,670	66,408
Total	137,351	26.00	5,297,184	588,676

EXHIBIT A.
Dover Water Rates.

D. R. HUMMER,
Insurance.
Richards Building,
Dover, N. J.

Dover, N. J., June 26, 1903.

Mr. Robert M. Kellog,
Metuchen, N. J.

Dear Sir:—

Replying to your favor of the 24th. concerning water rates, would say our charges for manufacturers, are 12c per hundred cubic ft.; for hotels using from fifteen to twenty thousand cu. ft. a quarter, 15c per hundred cu. ft.

Dwelling house rates are 20c per hundred cu. ft. with minimum charge of $2.00 per quarter.

All our service is metered, so far as it is practicable.

Yours very truly,
Water Commissioners,
By D. R. Hummer, Clerk.

EXHIBIT B.

Passaic Water Co.

METER RATES FOR DOMESTIC PURPOSES.

$2.25 per 1,000 cu. ft. (30c. per 1,000 gals.) for the first 6,000 cu. ft. per quarter.

$1.50 per 1,000 cu. ft. (20c. per 1,000 gals.) for the second 6,000 cu. ft. per quarter.

$ .75 per 1,000 cu. ft. (10c. per 1,000 gals.) for all water in excess of 12,000 cu. ft. per quarter.

5 per cent. discount will be allowed on all bills paid within 15 days.

No bill will be rendered or payment accepted for less than the following minimum rates:

Where 5/8″ meter is used $3.00 per quarter.
" 3/4″ " " " $3.75 " "
" 1″ " " " $5.00 " "

Paterson, N. J., July 1, 1898.

EXHIBIT C.

Hoboken Water Rates.

ANNUAL WATER RATES FOR BUILDINGS IN THE CITY OF HOBOKEN.

FRONT BUILDINGS.

	1 St'y.	1½ St'y.	2 St'y.	2½ St'y.	3 St'y.	3½ St'y.	4 St'y.	4½ St'y.	5 St'y.	5½ St'y.	
Less than 15 ft. in width.	$5.30	$5.95	$6.65	$7.30	$7.90	$8.65	$9.30	$9.90	$10.65	$11.25	$1
Exceeding 15 and not exceeding 20 ft. in width.	5.95	6.65	7.30	7.90	8.65	9.30	9.90	10.65	11.25	12.00	1
Exceeding 20 and not exceeding 25 ft. in width.	6.65	7.75	8.80	9.75	10.65	11.55	12.35	13.25	13.80	15.00	1
Exceeding 25 and not exceeding 30 ft. in width.	8.00	9.30	10.65	11.55	12.35	13.25	14.15	15.05	15.85	16.85	1
Exceeding 30 and not exceeding 40 ft. in width.	10.65	11.90	13.25	14.60	15.85	17.20	18.45	19.80	21.15	22.65	2
Exceeding 40 and not exceeding 50 ft. in width.	11.90	13.85	15.85	17.40	18.90	20.55	22.05	23.60	25.10	26.40	2
Exceeding 50 and not exceeding 60 ft. in width.	14.60	16.55	18.45	20.45	21.60	23.05	24.65	26.20	27.70	29.60	3
Exceeding 60 and not exceeding 70 ft. in width.	17.20	19.20	21.15	22.70	24.20	25.75	27.30	28.80	30.40	32.25	3
Exceeding 70 and not exceeding 80 ft. in width.	19.80	21.80	23.75	25.30	27.30	28.35	30.05	31.50	33.05	34.90	3
Exceeding 80 and not exceeding 90 ft. in width.	22.50	24.50	26.45	28.00	29.50	31.05	32.60	34.10	35.65	37.60	3
Exceeding 90 and not exceeding 100 ft. in width	25.10	27.10	29.10	30.60	32.15	33.65	35.20	36.70	38.25	40.25	4
Exceeding 100 and not exceeding 110 ft. in width	27.30	29.65	31.25	32.75	34.40	35.90	37.45	39.00	40.50	42.40	4
Exceeding 110 and not exceeding 120 ft. in width	29.50	31.50	33.50	35.00	36.55	38.10	39.60	41.60	42.75	44.65	4

REAR BUILDINGS.

	1 St'y.	1½ St'y.	2 St'y.	2½ St'y.	3 St'y.	3½ St'y.	4 St'y.	4½ St'y.	5 St'y.	5½ St'y.	S
Less than 15 ft. in width.	$3.50	$3.95	$4.40	$4.85	$5.30	$5.75	$6.20	$6.65	$7.10	$8.75	$
Exceeding 15 and not exceeding 20 ft. in width	3.95	4.50	4.85	5.30	5.75	6.20	6.65	7.10	7.55	9.00	
Exceeding 20 and not exceeding 25 ft. in width.	4.40	5.15	5.95	6.50	7.05	7.65	8.20	8.85	9.45	10.00	1
Exceeding 25 and not exceeding 30 ft. in width.	5.30	6.20	7.05	7.65	8.20	8.80	9.45	10.00	10.65	11.25	1
Exceeding 30 and not exceeding 40 ft. in width.	7.05	7.90	8.85	9.75	10.65	11.50	12.35	13.25	14.15	15.15	1
Exceeding 40 and not exceeding 50 ft. in width.	7.90	9.30	10.65	11.60	12.60	13.70	14.70	15.75	16.75	18.00	1

Rear buildings are those in rear of building on same lot fronting street.

Should front building be removed, the rear building will be charged as front building.

Mansard or French roofs, cellars and basements finished or occupied and used for kitchen or la dry purposes shall each count one story.

Garrets with pitched roofs, finished room used for sleeping purposes, will be charged half story.

ANNUAL WATER RENTS.

Water rents on all buildings must be paid as rated in the foregoing lists, where the water is introduced or used. Where the water is not introduced or used, nor connections made with distributing pipes, two-thirds of the foregoing rates will be charged on all buildings fronting upon any street, avenue, lane or alley in which distributing pipes are laid in front of such premises; provided said buildings are located within 100 feet of street line.

EXTRA RATES.

Bath—Private, $2.70 each per annum. When house is occupied by one family only, an extra bath-tub will be allowed without additional charge.

Baths in public houses, hotels, boarding houses, barber shops, bathing establishments, and in all public institutions, and known as public baths, $4.50 each per annum.

Bars and Saloons—$9.00 each per annum.

Families—Dwellings having more than two families will be charged $1.80 for each additional family.

Fountains—In yard, with 1-16 inch jet, $6.10 per annum; with ⅛ inch jet, $13.50 per annum.

Fountains will only be allowed to run from April 1st to November 1st in each year.

Greenhouses—$3.50 per 1,000 square feet of surface per annum.

Horse Trough and Hydrants on sidewalks, $17.50 each per annum. To be used only from April 1st to December 1st in each year. All horse troughs and hydrants must be connected with sewer, and must have separate connection from house service.

Hotels and Boarding Houses—In addition to regular building rates, 90 cents per annum for each bed over six (6).

Markets—Meat, fish and oyster stalls, $1.80 to $3.60 per annum.

Milk Stores—$1.80 to $2.70 each per annum.

Photograph Galleries—$4.50 to $9.00 each per annum.

Street Washers or Hand Hose—For washing sidewalks or windows and sprinkling streets, $2.70 each per annum. When used for other purposes an extra assessment will be charged.

Stables—In addition to regular building rates 90 cents per annum for each horse or cow over two (2).

Steam Engines and Boilers—$3.60 per annum for each horse power.

Steam Heating and Apparatus—From $4.50 to $45.00 per annum.

Slaughter Houses, rendering establishments and all other buildings requiring a large amount of water will be assessed in proportion to amount of water used.

Soda Fountains and Beer Fountains where water is used, $4.50 each per annum; with extra jet, $9.00 each per annum.

Street Sprinkling—$15.00 per month for each truck or wagon used, payable in advance.

Water Closets and Urinals—Self-closing, in private houses, $1.80 each per annum. Not self closing, in private houses, $13.50 each per annum. Self-closing, public, $3.60 each per annum. Dwelling houses occupied by one family only will be allowed an extra water closet and urinal (self-closing) without additional charge.

Only self-closing water closets and urinals will be allowed hereafter.

MEASURED WATER.

At the option of the Board of Water Commissioners, meters will be used and the water charged for at either the foregoing rates or at the rate of

$1.35 per 1,000 cubic feet, when the quarterly consumption is less than 5,000 cubic feet, or $1.12½ per 1,000 cubic feet when a larger quantity is used.

MONTHLY RATES.

When, at the option of the Board, bills for measured water are made payable monthly, and the consumption is:

Between 250,000 and 1,500,000 cubic feet per month, $1.00 per 1,000 cubic feet.

Between 1,500,000 and 2,500,000 cubic feet per month, 90 cents per 1,000 cubic feet.

Between 2,500,000 cubic feet and over, per month, 85 cents per 1,000 cubic feet.

Meters will be removed at the option of the Board and regular rates charged whenever the quantity of water used will not warrant their continuance.

PRICES ON WATER TAPS

On and After January 1st, 1904.

½ inch.....	$10.00	2 inch.....	$45.00
⅝ inch.....	12.50	3 inch.....	60.00
¾ inch.....	15.00	4 inch.....	75.00
1 inch.....	20.00	6 inch.....	90.00

Oven 6 inch Special Rates.

A special permit, signed by the Water Registrar, must be obtained for all taps.

Exhibit D.

Jersey City Water Rates.

SCHEDULE.

	NUMBER OF STORIES						
FRONTAGE.	1	1½	2	2½	3	4	5
Less than 15 feet..	$3.00	$3.50	$4.00	$4.50	$5.00	$5.50	$6.00
15 ft. and under 20 feet	3.50	4.00	4.50	5.00	5.50	6.00	6.50
20 ft. and under 25 feet	4.00	4.50	5.00	5.50	6.50	7.50	8.00
25 ft. and under 30 feet	4.50	5.50	6.00	6.50	7.50	8.50	9.00
30 ft. and under 40 feet	5.50	6.50	7.00	7.50	8.50	9.50	10.00
40 ft. and under 50 feet	6.50	7.50	8.00	8.50	9.50	10.50	11.00

Brick or stone buildings to be charged double the above rates.

OR FRONT BUILDINGS.	1 St'y.	1½ St'y.	2 St'y.	2½ St'y.	3 St'y.	3½ St'y.	4 St'y.	4½ St'y.	5 St'y.	6 St'y.
than 15 feet in width.....	$6.25	$7.05	$7.85	$8.65	$9.40	$10.20	$11.00	$11.75	$12.55	$14.15
feet and under 20 feet in idth	7.05	7.85	8.65	9.40	10.20	11.00	11.75	12.55	13.35	14.95
feet and not exceeding 25 et in width.....	7.85	9.20	10.45	11.50	12.55	13.60	14.65	15.65	16.70	18.80
eeding 25 feet in width and ot exceeding 30 feet.....	9.40	11.00	12.55	13.60	14.65	15.65	16.70	17.75	18.80	20.90
eeding 30 feet in width and ot exceeding 40 feet.....	12.55	14.15	15.70	17.25	18.80	19.85	21.95	23.55	25.10	28.20
eeding 40 feet in width and ot exceeding 50 feet.....	14.15	16.45	18.80	20.60	22.50	24.30	26.10	27.95	29.80	33.55
eeding 50 feet in width and ot exceeding 60 feet.....	17.25	19.65	21.95	23.80	25.65	27.45	29.25	31.15	32.95	36.65
eeding 60 feet in width and ot exceeding 70 feet.....	20.40	22.80	25.10	26.95	28.75	30.60	32.40	34.25	36.10	39.75
eeding 70 feet in width and ot exceeding 80 feet.....	23.55	25.90	28.20	30.10	31.90	33.70	35.55	37.40	39.20	42.90
eeding 80 feet in width and ot exceeding 90 feet.....	26.65	29.05	31.35	33.20	35.05	36.85	38.65	40.55	43.35	46.05
eeding 90 feet in width and ot exceeding 100 feet.....	29.80	32.15	34.50	36.35	38.10	40.00	41.80	43.65	45.50	49.15
eeding 100 feet in width and ot exceeding 110 feet.....	32.40	34.75	37.10	38.95	40.75	42.60	44.45	46.25	48.05	51.70
eeding 110 feet in width and ot exceeding 120 feet.....	37.05	37.35	39.70	41.50	43.40	45.20	47.00	48.85	50.70	54.35
eeding 120 feet in width and ot exceeding 130 feet.....	37.60	40.00	42.35	44.50	46.00	47.85	49.65	51.50	53.30	56.90
eeding 130 feet in width and ot exceeding 140 feet.....	40.25	42.60	44.95	46.75	48.60	50.45	52.25	54.10	55.95	59.60
eeding 140 feet in width and ot exceeding 150 feet.....	42.85	45.20	47.55	49.40	51.20	53.05	54.90	56.70	58.50	62.15
eeding 150 feet in width and ot exceeding 160 feet.....	44.95	47.85	49.65	51.50	53.30	55.15	57.00	58.80	60.60	64.25
eeding 160 feet in width and ot exceeding 170 feet.....	47.00	49.90	51.70	53.55	55.40	57.20	59.05	60.90	62.70	66.35
eeding 170 feet in width and ot exceeding 180 feet.....	49.60	51.95	53.80	55.65	57.45	59.30	61.15	62.95	64.80	68.40
eeding 180 feet in width and ot exceeding 190 feet.....	51.20	54.10	55.90	57.75	59.55	61.40	63.25	65.05	66.90	70.50
eeding 190 feet in width and ot exceeding 200 feet.....	53.30	56.20	57.95	59.85	61.65	63.45	65.35	67.15	68.95	72.60
eeding 200 feet in width and ot exceeding 210 feet.....	54.55	57.75	59.55	61.40	63.25	65.05	66.90	68.75	70.55	73.80
eeding 210 feet in width and ot exceeding 220 feet.....	56.45	59.30	61.15	62.95	64.80	66.65	68.45	70.30	72.10	75.75
eeding 220 feet in width and ot exceeding 230 feet.....	58.00	60.90	62.70	64.55	66.35	68.20	70.00	71.90	73.70	77.40
eeding 230 feet in width and ot exceeding 240 feet.....	59.55	62.50	64.25	66.10	67.90	69.75	71.60	73.40	75.80	79.95
eeding 240 feet in width and ot exceeding 250 feet.....	61.15	63.25	65.85	67.65	69.50	71.35	73.15	75.00	76.85	80.50

FOR REAR BUILDINGS.	1 St'y.	1½ St'y.	2 St'y.	2½ St'y.	3 St'y.	3½ St'y.	4 St'y.	4½ St'y.	5 St'y.
s than 15 feet in width.....	$4.15	$4.75	$5.20	$5.70	$6.25	$6.80	$7.30	$7.85	$8 35
'eet and under 20 feet in width....	4.75	5.20	5.70	6.25	6.80	7.31	7.85	8.35	8.90
feet and not exceeding 25 feet in idth	5.20	6.10	7.00	7.65	8 35	9.05	9.75	10.45	11.15
eeding 25 feet in width and not :ceeding 30 feet.....	6.25	7.30	8.35	9.05	9.75	10.45	11.15	11.80	12.55
eeding 30 feet in width and not :ceeding 40 feet.....	8.35	9.40	10.45	11.45	12.55	13.60	14.65	15.65	16 70
eeding 40 feet in width and not :ceeding 50 feet.....	9.40	10.95	12.55	13.75	15.00	16.10	17.45	18.65	19.85

Mansard or French roofs, cellars and basements finished or occupied and used for kitchen and laundry purposes shall each count one story.

Garrets with pitched roofs, finished room used for sleeping purposes will be charged ½ story.

*Rear Buildings are those having a building in rear of building on same lot fronting street.

Steam Heating Apparatus in Theatres or Public Buildings or Halls.—$25.00 per annum or meter at option of Water Assessor.

Steam Heating—Steam Heating, Hot Air or Hot Water Apparatus, in apartment houses, $10.00, in private houses, $1.00 per annum.

Steam Engines and Boilers.—$4.00 per annum for each Horse Power where water is not measured by meter.

Slaughter House.—Rendering establishments and all other buildings requiring large quantities of water, metered.

Soda Fountains.—Where water is introduced $10.00 each per annum, when not connected with city water $3.00 per annum.

Steam Boats and Shipping.—Must in every case be charged by meter. See page 12.

Soda Water and Cider Manufactories.—Metered.

Steam Drills.—$4.00 per horse power.

Street Sprinkling.—$25.00 per month. Each and every cart using water for sprinkling streets will have the owners name and number of cart painted on each side of said cart, in a conspicuous place, in large letters. No water will be furnished by the Board of Street and Water Commissioners until a permit be procured for the same. All permits must be paid for in advance.

Stone Work (Polishing).—$7.00 per annum.

Soap Manufactories.—Metered.

Tenement Houses.—In addition to building rates $2.00 per annum will be charged for each family over two (2). No reductions will be made for vacant apartments.

Urinals (in private houses).—$2.00 each per annum must be self-closing. In public houses, $5.00 each per annum, must be self-closing. None others allowed in future. No reduction whether connected with the water or not. $15.00 each per annum if not self-closing or trough.

Telephone or Telegraph Battery Rooms.—$1.00 per annum, per Battery, or Meter.

Water Closets (Tank in apartment or private houses).—$3.00 each per annum. In Hotels, Saloons, Barber Shops, Club Rooms and other public places, $5.00 each per annum. Full charge for Sink or Wash Tray connections.

Privy in yard if flushed by City water $5.00 per seat.

Water Power Machines.—Water Motors and other apparatus used for running machinery, air pumps or elevators worked by water power, metered.

Water Motor Machines for Church Organs.—From $20.00 to $100.00 per annum.

MEASURED WATER.

At the option of the Board of Street and Water Commissioners, meters will be used, and the water charged for, at the rate of $1.50 per 1,000 cubic feet, read quarterly.

MONTHLY RATES.

When at the option of the Board, bills for measured water are made payable monthly, and the consumption is less than 100,000 cubic feet per month, $1.35 per 1,000 cubic feet.

Bet. 100,000 and 500,000 cubic feet per month, $1.25 per 1,000 cubic feet.

" 500,000 and 1,000,000 cubic feet per month, $1.15 per 1,000 cubic feet.

" 1,000,000 and 1,500,000 cubic feet per month, $1.05 per 1,000 cubic feet.

" 1,500,000 and 2,000,000 cubic feet per month, $ .95 per 1,000 cubic feet.

" 2,000,000 and 2,500,000 cubic feet per month, $ .85 per 1,000 cubic feet.

" 2,500,000 cubic feet and over, $ .75 per 1,000 cubic feet.

EXHIBIT E.

New Brunswick Water Rates.

OFFICE OF THE WATER COMMISSIONERS

of the City of New Brunswick, N. J.

WATER RATES.

Water will be furnished to private families for all culinary and domestic purposes, in accordance with the number of persons (including servants) in the family as follows:

For a family of three persons, $6 per annum, and for each additional persons $1 per annum.

Tenement Houses for each family,	$6.00

In addition to the above will be charged for:

Wash Basins,	$1.00
One Bath Tub,	4.00
Stationary Wash Tubs,	2.00
One Water Closet,	5.00
Urinals,	3.00
Street Washers,	5.00
Street Washer for corner property,	7.00
A Hose Bibb, when hose is used, is chargeable as a street washer.	
Garden Hydrants,	5.00
Fountains—minimum rate,	25.00
Private stable for each horse or cow,	2.00
Stores,	6.00
Office,	4.00
Drug Stores,	10.00
Bakeries—minimum rate,	8.00
Butcher Shops,	8.00
Boarding Houses,	15.00

For all other purposes not above enumerated, and where meters are not used, special rates will be made.

All meter rates One Dollar per 1,000 cubic feet.

Agreement between Long Branch Commission and Long Branch Water Supply Co., dated Sept. 21, 1891.

SCHEDULE 1.

THIS AGREEMENT made this Twenty-first day of September, A. D. Eighteen Hundred and Ninety one. BETWEEN THE LONG BRANCH POLICE, SANITARY AND IMPROVEMENT COMMISSION A municipal Corporation, party of the first part; AND THE LONG BRANCH WATER SUPPLY COMPANY. (Body Corporate) party of the second part; both of the County of Monmouth and State of New Jersey.

Witnesseth:—That the said parties for and in consideration of each of the covenants and agreements by it herein agreed to be performed, agree and covenant to and with each other as follows, viz:—

FIRST:—The party of the first part hereby gives and grants to the party of the second part, its successors or assigns, the sole and exclusive privilege of supplying to said party of the first part, water for all municipal purposes of every kind, including water for sprinkling purposes, fire purposes, for the use of all municipal buildings and for all other purposes that the said party of the first part may desire, for ten years from the date hereof, and no longer.

SECOND:—The party of the second part shall have the right to extend its main and to make all necessary excavations, in any streets or public places subject to such reasonable rules, regulations, or ordinances as the party of the first part have made, may make or prescribe. The party of the first part shall pay for the water supply as at present furnished, an annual rental of Four Thousand

dollars payable quarterly; the first days of APRIL, JULY, OCTOBER AND JANUARY in each year and shall pay in addition thereto the sum of forty dollars each year for each hydrant hereafter to be erected, payable in the manner and at the time above specified. This provision not to apply to new hydrants taking the place of old or defective hydrants.

THIRD:—If the grade or location of any Street is changed by the party of the first part on which hydrants are located, as they now exist or may hereafter exist under this agreement, then the expense of replacing hydrants, and relaying pipe in such changed grade or location shall be borne by the party of the first part.

FOURTH:—The party of the second part shall pay an annual sum of Two Hundred and Fifty Dollars to the party of the first part on the first day of July in each and every year during the continuance of this agreement.

FIFTH:—The party of the second part shall extend its pipes to any place, the party of the first part may desire upon the condition that there shall be a hydrant placed by the party of the second part for every five hundred feet of such extension for which the party of the first part shall pay an annual fee of Forty dollars.

SIXTH:—The party of the second part shall furnish hydrants wherever the party of the first part may hereafter request for each of which the party of the first part shall pay an annual fee of Forty Dollars.

SEVENTH:—The party of the second part shall remove all defective hydrants and replace them with first class hydrants of the best make and this contract is made upon the express condition that the party of the second part shall maintain and conduct its system throughout in a thoroughly first

class manner, so that there shall be at all times a complete and adequate supply of water for all municipal purposes whatever and for the use of all the inhabitants of said municipality; the water to be furnished shall always be of a first class quality.

EIGHTH:—The exclusive privilege of furnishing water for the private use of the residents of said municipality is hereby granted to the party of the second part for the term aforesaid upon condition that the rates charged for the use of said water to property owners shall not exceed the rates charged at the present time; but the party of the second part, instead of furnishing water unmeasured at a yearly rate, may if it so elect supply water to any premises through a meter and charge therefor twenty cents per one Thousand Gallons.

NINTH:—Upon the failure of the party of the second part to perform any of the covenants herein agreed to be performed, this contract shall instantly cease and determine.

IN WITNESS WHEREOF, the parties hereto have caused each of their corporate seals to be hereto affixed and this AGREEMENT to be signed by their Presidents and attested by their Secretary and Clerk the day and year first aforesaid.

Geo. M. Brown,
President.

[SEAL.]

Attest:
R. Jerome Van Brunt,
District Clerk.

The Long Branch Water Supply Co.
By Geo. F. Baker,
President.

[SEAL.]

Attest:
Whitney Conant,
Secretary.

Agreement of Nov. 24, 1902, between Long Branch Commission and Tintern Manor Water Co.

SCHEDULE B.

This agreement, made this 24th day of November, 1902, between the Long Branch Commission, a municipal corporation located in the Township of Ocean, in the County of Monmouth, and State of New Jersey, party of the first part; and the Tintern Manor Water Company, body corporate, located at Long Branch, in the County of Monmouth, and State of New Jersey, party of the second part;

Witnesseth, that the said parties for and in consideration each of the covenants and agreements by it herein agreed to be performed, agree and covenant to and with each other as follows, viz: First, the party of the first part hereby gives and grants to the party of the second part, its successors and assigns, the sole and exclusive privilege of supplying the said party of the first part with water for all municipal purposes, including water for sprinkling purposes, fire purposes, for the use of all municipal buildings, and for public fountains and for all other purposes that the said party of the first part may desire, for ten years from the date hereof and no longer.

Second. The party of the second part shall have the right to extend its mains and make all necessary excavations in any streets or public places, subject to such reasonable rules, regulations or ordinances now established or as the party of the first part may make or prescribe. The party of the first part shall pay for the water supply agreed to be furnished an annual rental of twenty-five dollars ($25) per hydrant each year for fire hydrants now erected or to be hereafter erected on the line of the mains of the Water Company as the party

of the first part may require and the compensation therefor to run from the date hereof for all fire hydrants hereafter to be erected from the date of their erection, also a further rental of one hundred dollars ($100) per year per wagon for each wagon engaged in sprinkling the streets with water, provided that the total rental for sprinkling purposes in any year during the period of this contract shall not exceed sixteen hundred dollars ($1,600) per year for said wagons, and in case the party of the first part shall require it is further agreed that the party of the first part may use as many sprinkling wagons as they shall reasonably require for the purposes of sprinkling streets of Long Branch and in no year during the life of this contract shall the yearly rental for sprinkling purposes exceed the said sixteen hundred dollars and the party of the first part shall be permitted to use as many wagons in excess of sixteen as they shall require for the said purposes. The whole of the rent above expressed shall be paid in equal monthly payments for both fire hydrants, and for sprinkling purposes at the end of each and every month during the continuance of this contract.

Third. The party of the second part shall pay an annual sum of six hundred and fifty dollars ($650) to the party of the first part on the first day of July in each and every year during the continuance of this agreement. Said sum to be credited on the franchise tax, which may be assessed against the company for the benefit of the commission.

Fourth. The said party of the second part shall also furnish fire hydrants wherever the party of the first part may hereafter request along the line of its street mains for each of which additional hydrants the said party of the first part shall pay an annual fee of twenty-five dollars ($25) in manner and time above specified and the said party of

the second part shall extend its mains along any public street within Long Branch wherever directed by the said Long Branch Commission, provided the said Long Branch Commission shall in giving such direction at the same time authorize the erection of fire hydrants upon such new mains at the rate of at least one for each thousand feet in length of main, and the party of the second part shall from time to time remove all defective fire hydrants and replace them with first-class fire hydrants of the best make and shall at all times supply a complete and adequate supply of water for all municipal purposes hereinbefore enumerated and also for the use of the inhabitants of the Long Branch Commission on the line of the mains which water shall always be of first-class quality for the various purposes for which it shall be used and of such quality as may be approved by the State Board of Health.

Fifth. This contract is granted upon the express condition that the rates charged for the use of the water to property owners, residents and private consumers shall not be increased during the term of this contract.

Sixth. The party of the second part hereby agrees that in opening streets and laying water mains and placing hydrants in streets as required by this agreement, it will restore the streets to as good condition as they were prior to the laying of said mains or hydrants and to the satisfaction of the said party of the first part, and during the progress of any such work it will not unnecessarily hinder or obstruct travel upon the public streets, and the party of the second part further agrees at all times to furnish a sufficient supply of water for all purposes, both public and private use, and at an adequate pressure at the hydrant for all purposes. It being understood that for extinguishing fires the commission has and uses steam fire engines, for

which engines the water company will provide an adequate supply of water through its said mains and fire hydrants. and the company guarantees at all times to keep the whole system in perfect repair during the period of its contract, excepting in case of unavoidable accidents, which the party of the second part will remedy as soon as possible.

Seventh. The party of the first part agrees to use the water above stipulated with reasonable care and safeguard against unnecessary waste.

Eighth. Upon the failure of the party of the second part in good faith to perform any of the covenants of this agreement herein agreed to be performed, the party of the fist part shall have the right to demand of the party of the second part the immediate fulfillment of all the covenants herein mentioned, which demand if not complied with within thirty days from date of such notice, this agreement shall cease and determine.

In witness whereof, the parties hereto have caused each of their corporation seals to be hereto affixed and attested by their respective clerk and secretary and the signature of their appropriate officers of the day and year first aforesaid, in duplicate.

The Long Branch Commission.
By

[SEAL.]
Attest:

Clerk.
Tintern Manor Water Company.
By
R. Blodgett, President.

[SEAL OF TINTERN MANOR WATER CO.]
Attest:
Wellington LaMont,
Secretary.

EXHIBIT D5.
Monmouth Shore Sheet of State Topographical Map.

EXHIBIT D6.
Navesink Sheet of Same.

EXHIBIT D7.
Contract of Settlement of March 6th, 1903, between Tintern Manor Water Co. and Independent Telephone and Telegraph Construction Co.

MEMORANDUM OF AGREEMENT,

made this sixth day of March, nineteen hundred and three, between the Tintern Manor Water Company of the one part (hereinafter called the Water Company), and the Independent Telephone & Telegraph Construction Company, of the other part (hereinafter called the Construction Company).

WHEREAS, The parties hereto entered into an agreement for the construction of waterworks in Monmouth County, New Jersey, dated August twenty-first, nineteen hundred, whereby the Water Company was to pay the Construction Company twelve hundred thousand dollars in bonds and seven thousand nine hundred and sixty-five shares of its capital stock; and

WHEREAS, Since the making of said contract the said Water Company has been merged and consolidated with the Long Branch Water Supply Company, the Deal Water Company, the Seabright Water Supply Company and the Middletown Water Company into a new corporation called the

Tintern Manor Water Company, under an arrangement whereby every holder of one share of the old Tintern Manor Water Company is entitled to two shares of the new company, and therefore the said Construction Company would be entitled to a double allowance of the shares of said Tintern Manor Water Company; and

WHEREAS, During the progress of the construction of said waterworks divers changes have been, by mutual understanding, made in the works, among which are the omission of the stand-pipe, the raising of the dam to a height of twenty feet only for the present, although it has foundations sufficient for a dam to be raised for the full height contemplated in the contract, and the purchase for the reservoir of only about six hundred and fifty acres instead of one thousand acres contemplated in the contract, and the supplying for the present pumping capacity of fifteen million gallons per day instead of twenty million gallons per day, and the changing of the location of the pumping plant and the purchase of lands and rights of way in consequence thereof, and the changing of routes of mains, changing the pumping power from gas to steam and divers other changes as the work has progressed, making the work in divers respects more expensive and more valuable; and

WHEREAS. The waterworks are not nearly completed and will soon be completed by the Construction Company and made ready to be put in use, which the Construction Company is to do at its own expense; and

WHEREAS, The Board of Directors of the two corporations have been in conference over the entire matter, and in view of changed conditions and changes in plans have come to a settle-

ment of all matters between the two corporations on the basis hereinafter stated.

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

FIRST—The Construction Company will promptly proceed to setting of pumps and filters, bricking in the boilers and other items of work not yet completed, so that the work shall be entirely complete and ready for use by the first day of May, nineteen hundred and three, and will pay all bills and indebtedness which they have incurred in the construction of the plant, so that the same shall be free from all liens and claims whatsoever.

SECOND—In lieu of the price mentioned in the original contract, the Water Company will pay to the Construction Company fourteen hundred thousand dollars in its first mortgage bonds of the issue mentioned in said original contract and deliver the same to the Construction Company, bearing the coupons which mature April first, nineteen hundred and three, and will also pay to the Construction Company shares of the original Tintern Manor Water Company, five thousand four hundred and sixty-five, instead of the number of shares mentioned in the original contract, which shares will, upon their surrender, entitle the said Construction Company to ten thousand nine hundred and thirty shares of the consolidated corporation. And inasmuch as seven thousand four hundred and sixty-five of said original shares have already been delivered to said Construction Company, they agree forthwith, upon the execution hereof, to return to the water company two thousand of said shares; the said change in payment being in effect a payment of two hundred thousand dollars more in bonds than was originally contemplated and two hundred and fifty thousand dollars less of shares of the original

company than is provided for in said contract of August twenty-first, nineteen hundred, being the equivalent of five hundred thousand dollars in the shares of the consolidated corporation.

THIRD—Inasmuch as the Construction Company has already received first mortgage bonds of the par value of fourteen hundred thousand dollars, the interest whereon has been paid by the Water Company only to the extent of thirty-one thousand and fifty dollars, it is agreed that the Construction Company shall forthwith surrender cancelled all the coupons representing the interest on said bonds up to October first, nineteen hundred and two, being coupons from numbers one to five inclusive, attached to the said bonds, except so far as the same have already been cancelled and paid by the said sum of thirty-one thousand and fifty dollars.

FOURTH—Inasmuch as some of the lands purchased for the said Tintern Manor Works have been purchased in the name of individuals, to wit, in the name of Joseph Jermyn, the Ocean Mills property of about eleven acres; in the name of John L. Wenz, the Lovetts Hill property of about seven acres at Red Bank.

It is further agreed by the Construction Company that they will cause the said two parcels of land to be forthwith conveyed by proper deeds to the Water Company so as to vest the title thereof, free of encumbrance, in the Water Company; and if there be any further property, real or personal, that has been purchased by the Construction Company, or in the name of individuals, the same are to be promptly conveyed to the Water Company.

FIFTH—The said Construction Company hereby bargains, sells and conveys to the said Water Company all tools, appliances, fixtures, pipe, lead, lumber and other material and supplies of

every sort in Monmouth County, New Jersey, which it acquired in the course of the construction of the Tintern Manor Works.

In witness whereof, the parties to this agreement have caused their respective common seals to be hereto affixed and duly attested and these presents to be signed and delivered by their respective Presidents by order of their respective boards of directors the day and year first above written.

TINTERN MANOR WATER COMPANY,
By R. BLODGETT,
President.

Attest:
WELLINGTON LAMONTE,
[L. S.] Secretary.

INDEPENDENT TELEPHONE AND TELEGRAPH COMPANY,
By GEO. N. JERMYN,
President.

Attest:
CHARLES WEST,
[L. S.] Secretary.

In consideration of one dollar to us in hand paid by the Tintern Manor Water Company and the settlement by said Company with the Independent Telephone and Telegraph Construction Company, of which we are the principal owners, upon terms satisfactory to us, we, Joseph J. Jermyn and John L. Wentz, do jointly and severally promise and agree to pay to said Tintern Manor Water Company the following sums of money on the days below stated, the same to be applied by said Company, of which bonds we are holders of a large proportion:

March 15, 1903, $12,500.
September 15, 1903, $12,500.
March 15, 1904, $12,500.
September 15, 1904, $12,500.

Witness our hands and seals this sixth day of March, A. D. nineteen hundred and three.

Witness: (Signed)
W. H. CORBIN. J. J. JERMYN. [L. S.]
JOHN L. WENTZ. [L. S.]

MINUTES.

OF

AN ADJOURNED MEETING OF THE BOARD OF DIRECTORS OF THE TINTERN MANOR WATER COMPANY, HELD MARCH 6th, 1903, AT 12 O'CLOCK NOON, AT JERSEY CITY.

PRESENT: Messrs. Blodgett, Conant, Walton and La Monte.

Mr. Walton presented a written report of the special committee appointed to investigate the matter of the relations of this company with the Independent Telephone and Telegraph Construction Company, which was filed and considered at length. After discussion, Mr. Walton reported that the committee and the officers of the company had been in consultation with Board of Directors of the Construction Company, and had arrived at a basis of settlement embodied in a written contract, and thereupon moved the adoption of the following resolution:

RESOLVED, That the following contract be adopted by this company and executed as a settlement between this company and the Independent Telephone and Telegraph Construction Company for the construction of the water works in Monmouth County:

(Here insert contract of March 6th, 1903).

The roll was called, and the following directors voted aye:

Messrs. Blodgett, Walton, Conant and La Monte.

Whereupon the resolution was declared to be carried, and the officers proceeded, in the presence of the board, to execute the contract.

On motion, Mr. La Monte was appointed a committee to attend to the collecting and cancellation of the past due coupons of the bonds of this company which are to be surrendered pursuant to the terms of the contract just adopted.

On motion the board thereupon adjourned.

W. LAMONTE,
Secretary.

MINUTES

OF

MEETING OF THE BOARD OF DIRECTORS OF THE INDEPENDENT TELEPHONE AND TELEGRAPH CONSTRUCTION COMPANY, HELD AT JERSEY CITY, MARCH 6th, 1903, AT 12 O'CLOCK NOON.

Present: Messrs. George B. Jermyn and Charles West, being a majority of the directors.

Mr. Jermyn in the chair.

Mr. West reported that the directors had been in conference with the directors of the Tintern Manor Water Company for several weeks, with a view to a settlement of all matters between the two companies, growing out of the construction of the Tintern Manor Water works in Monmouth County, New Jersey, and that a basis of settlement had been arrived at which was emobdied in a written form of contract which he presented. He thereupon moved the adoption of the following resolution:

Resolved, That this company settle all matters between this company and the Tintern Manor

Water Company by the execution of the following contract:

(Here insert contract of March 6, 1903).

The roll was called and the motion was adopted. Messrs. G. B. Jermyn and Charles West voted aye, and thereupon the contract was executed on behalf of this company and delivered.

Secretary.

EXHIBIT D8.
LaMonte's Schedules.

IN CHANCERY OF NEW JERSEY.

Between

LONG BRANCH COMMISSION,
Complainant,

and

TINTERN MANOR WATER COMPANY,
Defendant.

Affidavit.

State of New Jersey, } ss.:
County of Hudson, }

Wellington La Monte, being duly sworn according to law, on his oath says: I am Secretary of the Tintern Manor Water Company, the defendant in the above cause. I have carefully prepared the annexed Schedules—from Schedule "A" to Schedule "H," inclusive—from the books and other data in the possession of the defendant company, and they are in all respects true, accurate and correct, ac-

cording to the best of my knowledge, information and belief, and correctly show the capitalization, earnings, expenses and details of the property of the corporation. Schedule "I" hereto annexed is a schedule of the rates for water charged by the Company in Long Branch at the present time. This schedule has been in force since June First, Nineteen Hundred and Three. I have also carefully laid out upon the map to be presented herewith (which is made up of the Official Topographical Sheets issued by the State of New Jersey—scale 2,000 feet to the inch), all the water pipe lines of Tintern Manor Water Company, and indicated the sizes of each, and also indicated the location of all hydrants in Long Branch upon said lines, and the location of the pumping stations. Said map gives a correct exhibit of the works of the Company.

I have added Schedule "J," showing approximately the number of gallons pumped in the several years, which is taken from the record of the number of strokes of the pumps, and, I believe, fairly represents the true amount actually pumped.

WELLINGTON LAMONTE.

Subscribed and sworn to at Jersey City, N. J., this first day of April, A. D. 1904, before me,

Samuel S. Moore,
Notary Public of N. J.

SCHEDULE A1.

Cost of the Plant to the Tintern Manor Water Company.

Capital Stock outstanding,	$1,600,000.00
Mortgage Bonds, Tintern Manor Water Co.,	$1,400,000.00
Mortgage Bonds, Long Branch Water Supply Co.	$100,000.00
	$3,100,000.00

SCHEDULE A2.

Actual Cost of Plant in Cash and Stock to the Independent Telephone and Telegraph Construction Company.

A. For the Long Branch Water Supply Co. Plant, Cash paid	$325,085.56
B. Deal Water Co. Plant. Cash paid	71,805.50
C. Middletown Water Co. Incorporation. Cash paid	400.00
D. Newman Springs Reservoir, Dam, Land and Rights of Way, Piping, Pumping Station, Filter Plant, and Rumson Division pipe lines. Cash paid	936,740.77
New Mains added to Plant by Tintern Manor Water Co. Cash cost	19,871.11

N. B. The above figures of cash cost of plant in Item "D" ($936,740.77) are reckoned up to March 8, 1903, the date of a settlement between the Water Co. and the Construction Co. By that agreement the Construction Company was to continue and complete the work, and also to pay $50,000.00 to the Water Company. This part of the contract has been, in the main, fulfilled, and the cash cost of it is esti-

mated at		70,000.00
Long Branch Underlying Bonds.....		100,000.00
		$1,523,902.94
To Long Branch Water Supply Co., as part payment for Long Branch plant, Stock of the Tintern Manor Water Co., of the par value of.....	$500,000.00	
To Frank E. Pratt, Engineer, for services in construction of the new plant, as per contract, stock of Tintern Manor Water Co., of the par value of	50,000.00	
		550,000.00
		$2,073,902.94

SCHEDULE "B."

Number of Taps and Gross Revenue, 1901, 1902, 1903.

Year 1901.

Tintern Manor Water Company.			
Total Number of Taps	1,876	Revenue	$55,780.92
Number of Taps in Long Branch Com.	1,268	"	$37,346.14

Year 1902.

Total Number of Taps	1,950	Revenue	$65,810.00
Number of Taps in Long Branch Com.	1,318	"	$43,707.34

Year 1903.

Total number of Taps	2,260	Revenue	$69,848.04
Number of Taps in Long Branch Com.	1,363	"	$44,276.02

(N. B. No account taken of earnings from Long Branch Municipal uses after September 21, 1901.)

TOTAL NUMBER OF TAPS.

April 1, 1904.

Long Branch Commission	1,363
Ocean Township North of Long Branch Commission	325
Ocean Township South & West of Long Branch Commission	21
Seabright Borough	283
Borough of Deal	155
Eatontown Township Old Lines	49
do New Lines	7
Shrewsbury Township	55
	2,260

SCHEDULE "C."

Earnings, Operating Expenses and Taxes, 1891, 1901, 1902, 1903.

1891.

Earnings,	$35,184.19	
Operating Expenses,		$11,384.69
Taxes,		1,780.65
		$13,165.34

1901.

Earnings,	$55,780.92	includes Long Branch Com. to Sept. 21, 1901.
Operating Expenses,		$13,919.21
Taxes,		3,334.74
		$17,253.95

1902.

Earnings,	$65,810.00	does not include Long Branch Com.
Operating Expenses,	$14,733.23	
Taxes,	4,951.47	
	$19,684.70	

1903.

Earnings,	$69,848.04	does not include Long Branch Com.
Operating Expenses,	$23,586.26	
Taxes,	4,878.13	
	$28,464.39	

EARNINGS, OPERATING EXPENSES AND TAXES 1882 TO 1899.

1882.

Earnings		18,106.35
Operating Expenses	4,604.37	
Taxes	948.00	
	5,552.37	

1883.

Earnings		22,644.00
Operating Expenses	5,872.90	
Taxes	934.00	
	6,806.90	

1884.

Earnings		24,007.00
Operating Expenses	6,754.77	
Taxes	1,024.00	
	7,778.77	

	1885.		
	Earnings		24,845.78
	Operating Expenses	6,935.59	
	Taxes	1,312.00	
		8,247.59	
	1886.		
10	Earnings		26,197.99
	Operating Expenses	7,761.88	
	Taxes	1,237.00	
		8,998.88	
	1887.		
	Earnings		28,584.06
	Operating Expenses	7,379.83	
	Taxes	1,385.60	
20		8,765.43	
	1888.		
	Earnings		30,055.10
	Operating Expenses	9,004.26	
	Taxes	1,647.00	
		10,651.26	
	1889.		
30	Earnings		31,778.62
	Operating Expenses	9,487.09	
	Taxes	1,591.00	
		11,078.09	
	1890.		
	Earnings		35,706.00
	Operating Expenses	9,887.14	
40	Taxes	1,643.20	
		11,530.34	

1891.			
Earnings		35,184.19	
Operating Expenses	11,384.69		
Taxes	1,780.65		
	13,165.34		
1892.			
Earnings		38,779.00	
Operating Expenses	10,465.22		
Taxes	2,079.55		
	12,544.77		
1893.			
Earnings		40,842.56	
Operating Expenses	10,594.25		
Taxes	1,962.27		
	12,556.52		
1894.			
Earnings		40,874.46	
Operating Expenses	11,391.84		
Taxes	2,020.49		
	13,412.33		
1895.			
Earnings		41,362.62	
Operating Expenses	10,788.98		
Taxes	1,883.48		
	12,672.46		
1896.			
Earnings		43,602.09	
Operating Expenses	10,787.52		
Taxes	2,080.00		
	12,867.52		

	1897.		
	Earnings		45,590.50
	Operating Expenses	11,844.07	
	Taxes	1,961.70	
		13,805.77	
	1898.		
	Earnings		47,764.84
	Operating Expenses	16,291.41	
	Taxes	2,206.17	
		18,497.58	
	1899.		
	Earnings		49,730.29
	Operating Expenses	14,174.34	
	Taxes	2,089.38	
		16,263.72	

SCHEDULE "D."
Operating Expenses, Classified.

TINTERN MANOR WATER COMPANY, JANUARY 1, 1903, TO JANUARY 1, 1904.

(Excluding interest.)

Taxes,		$4,878.13
General Expenses.		
Legal Expenses,	$1,030.29	
Salaries and other expenses,	3,452.54	
Official expense,	1,141.35	
Miscellaneous Expense,	1,502.20	
Insurance,	506.00	
Street Foreman and Laborers,	587.44	
Repairs to Hydrants,	166.69	
Repairs to Mains,	638.15	
Tools and Sundries,	91.41	
Lowering Mains,	32.47	
Buildings and Grounds, West End,	415.12	
Horse and Wagon,	233.07	
Setting Water Meters,	99.62	
		$9,896.35
Operating Expenses, West End Station.		
Engineers and Firemen,	$2,575.48	
Repairs to Pumps,	48.92	
Repairs to Boilers,	30.74	
Repairs to Filters,	79.13	
Oil Packing and Waste,	356.68	
Tools and Sundries,	118.01	
Lighting Engine House,	272.00	
Coal,	4,271.80	
Alum,	1,195.85	
Miscellaneous Expense,	66.10	
		$9,014.71

Operating Expenses, Newman Springs Station.

Engineers and Firemen,	$1,429.22	
Repairs to Pumps,	7.20	
Oil Packing and Waste,	221.58	
Tools and Sundries,	72.76	
Lighting Engine House,	42.62	
Coal,	1,847.40	
Alum,	242.62	
Repairs to Engine House,	133.75	
Miscellaneous Expense,	207.45	
		$4,204.60

Operating Expenses, Deal Station.

Engineers and Firemen,	$227.30	
Coal and Supplies,	243.30	
		470.60
		$28,464.39

SCHEDULE "E."

Details of Income.

DETAILS OF INCOME OF TINTERN MANOR WATER COMPANY JUNE 1, 1903, TO JUNE 1, 1904, NOT INCLUDING LONG BRANCH COMMISSION BILL FOR MUNICIPAL PURPOSES.

		$69,848.04
Number of families, 1 faucet, 2,173 at $8.00 each	$17,384.00	
" " additional faucets, 138 at $2.00 each	276.00	
" " Bath Tubs, including Wash Bowl, 1,415 at $4.00 each	5,660.00	
" " Additional Bath Tubs not including Wash Bowl, 764 $2.00 each	1,528.00	
" " Shower Baths, 15 at $5.00 each	75.00	

"	"	Water Closets, 1,833 at $4.00 each	7,332.00
"	"	Additional Water Closets, 1,548 at $3.00 each	4,644.00
"	"	Additional Wash Bowls, 1,153 at $1.00 each	1,153.00
"	"	Pantry Sinks, 646 at $2.00 each	1,292.00
"	"	Stationary Wash Tubs, 846 at $1.00 each	846.00
"	"	Additional Wash Tubs, 1,488 at $.50 each	744.00
"	"	Urinals, self acting, 35 at $3.00 each	105.00
"	"	Hose Connections, 1,447 at $5.00 each	7,235.00
"	"	Private Stables, 617 Horses $4.00 each	2,468.00
"	"	Additional Horses, 965 at $2.00 each	1,930.00
"	"	Horse Troughs on Sidewalk, 3 at $10.00 each	30.00
"	"	Dry Goods, Grocery Stores, Offices, &c., 234 at $5.00 each	1,170.00
"	"	Barber Shops, Bakeries, Ice Cream Saloons, Drug Stores, Laundries, Photographers, Fish Markets, 66 at $10.00 each	660.00
"	"	Bath Houses, Greenhouses, Casinos, 34	490.00
"	"	Churches and Shops, 18	161.00
"	"	Hotels, 29	4,123.00
"	"	Dwellings (Contract), Boarding Houses, &c., 28	1,899.00
"	"	Saloons, 39	405.00
"	"	Automobile Stables, Boilers, Motors, 17	487.00

"	" Gas and Sewer Works, 2	660.00
"	" Railroads, 2	3,700.00
"	" Borough, Township & Private Hydrants and Street Sprinkling,	2,860.00
	Miscellaneous Accounts,	377.50

40 Water Meters on following Services:

2 Bathing Houses.
3 Laundries.
1 Ice Machine.
3 Bath Houses.
2 Steamboat Docks.
1 Greenhouse.
1 Shirt Factory.
22 Livery Stables.
3 Automobile Stables.
1 Electric Light Station.
1 Beef House. 2,995.88

$72,690.38

Less Vacancies—June 1—1903 to June 1—1904, $2,842.34

$69,848.04

SCHEDULE "F."

Mains and Hydrants.

NUMBER OF FEET OF LENGTH AND SIZE OF PIPE LINES.

Tintern Manor Water Company, Total	41,947 feet	36″	Pipe.
	1,456 "	24″	"
	1,280 "	20″	"
	36,354 "	18″	"
	2,817 "	16″	"
	27,937 "	12″	"
	14,880 "	10″	"
	95,475 "	8″	"
	111,853 "	6″	"
	49,269 "	4″	"
	2,600 "	2″	"
	385,868 "		"

Total 73 miles and 428 feet.

Tintern Manor Water Company.			
Pipe in Long Branch Commission,	1,280 feet	20″	Pipe.
	2,817 "	16″	"
	18,140 "	12″	"
	9,213 "	10″	"
	55,280 "	8″	"
	50,063 "	6″	"
	9,215 "	4″	"
	146,008 "		"

In Commission, 27 miles and 3,448 feet.
Outside of Commission, 45 miles and 2,260 feet.

HYDRANTS.

Number in Long Branch Commission.
All being 3-way Hydrants with one 4 inch steamer opening and two 2½ inch hose connections... 146

SCHEDULE "G."

Capacity of Pumping Stations.

West End Station.

1 Worthington Pump capacity 2,500,000 Gals. in 24 hours.
1 Holly Pump " 6,000,000 " " " "

Total capacity of pumps 8,500,000 Gals. in 24 hours.

1 Steam Boiler capacity 87 Horse power
2 " " " 85 " " each.

Total capacity of boilers 257 Horse Power.

8 Pressure Filters capacity 250,000 Gals. each in 24 hours.
2 " " " 500,000 do.

Total capacity of Filters 3,000,000 Gals. in 24 hours.

Newman Springs Station.

1 Worthington Pump capacity 3,000,000 Gals. in 24 hours.
1 " " " 6,000,000 " " " "
1 " " " 6,000,000 " " " "
to be added.

Total capacity of pumps, 15,000,000 Gals. in 24 hours.

5 Steam Boilers, capacity 125 Horse Power each.

Total capacity of boilers 625 Horse Power.

12 Gravity Filters, capacity guaranteed to be 1,000,000 Gals. each in 24 hours.

Total capacity of Filters, 12,000,000 Gals. in 24 hours.

Deal Station.

1 Worthington Pump, capacity 500,000 Gals. in 24 hours.
1 Steam Boiler, " 30 Horse Power.

SCHEDULE "H."

Population of the Whole of Ocean Township, and of the Part Thereof Known as Long Branch.

Year.			Ocean Township.	Long Branch.
1880			6,027	3,833
1885			7,540	5,140
1890			10,209	7,231
1895			10,933	7,333
1900	Ocean	4,251		
	L B	8,872		
	Seabright	1,198		
	Deal	70		
		——	14,391	8,872

SCHEDULE "I."

Tintern Manor Water Co. Rates, June 1, 1903.

ANNUAL RULES, RATES AND REGULATIONS.

TINTERN MANOR WATER COMPANY,

Principal Office,

Long Branch, N. J.

Commencing June 1st, 1903, and until further notice, the following rates will be charged annually for water:

Private Dwellings.

Private Dwellings, occupied by one family, for one inside faucet..... $8 00

Yard hydrants or outside fixtures are prohibited.

For each additional faucet to be used by the same family		2 00
" one bath tub, including wash bowl		4 00
" each additional bath tub, not including wash bowl		2 00
" one water closet (pan or tank)		4 00
" each additional water closet (pan or tank		3 00
Hopper water closets are prohibited.		
" each additional wash bowl		1 00
" each pantry sink		2 00
" one stationary wash tub		1 00
" each additional wash tub		50
" urinals (self acting)		3 00

Hose Use.

" each hose connection, on lot 50 ft. x 150 ft., or less		5 00
Fountains and automatic lawn sprinklers, spray nozzles, or similar sprinkling devices, except when held in the hand, are only allowed under special contract with this company.		
" each additional lot, or part of lot		5 00
Lawn sprinklers will not be allowed between 6.30 a. m. and 6.30 p. m.		

Private Stables.

" private stables, one horse, one faucet		4 00
" each additional horse		2 00
" each horse trough on sidewalk		$10 and upwards.
Each trough is to be fitted with a proper ball cock to prevent waste, and this is to be kept in order.		

Stores, Offices, Etc.

Dry goods, grocery stores, offices, etc., one faucet		5 00

For each additional faucet..... 2 00

Bakeries, restaurants, ice cream saloons, druggists, barber shops, photographers and fish markets, one faucet... $10 and upwards.

Hotels, boarding houses and saloons to be rated.

Laundries, livery and boarding stables to be metered.

Meter Rates.

Commencing with the 1st day of June in each and every year the rate for water supplied through one meter on any one service pipe will be as follows:

30c. per 1,000 gallons for the first 200,000 gallons used.

25c. per 1,000 gallons for the second 200,000 gallons used.

20c. per 1,000 gallons for the third 200,000 gallons used.

15c. per 1,000 gallons for all water used in excess of 600,000 gallons in any one year.

A minimum annual rate of not less than $8.00 will be charged on all services supplied by meter.

All bills for water supplied by meter measurements are due when presented. If not paid the supply may be discontinued without further notice.

Other rates not enumerated given on application.

1. Water rates are payable annually IN ADVANCE on the 1st of June. On the 15th of July following the water company will have the right to cut off the water without notice from all premises that are in arrears for water rates.

2. Where two faucets are used, one for hot and one for cold water, both emptying into one vessel, but one charge will be made for both.

3. In cases where fixtures supplied with water are used by more than one family, each family will be charged for at above rates.

4. Payment must be made for all fixtures connected with the Company's mains (through which water may be supplied), whether used or not.

5. Any water-taker who shall permit water to be taken from his or her premises for use on any other premises, whose occupants do not take water in the ordinary way from this company, will be charged, and be considered liable to pay for such additional use of the water.

6. The Company reserves the right to decline to connect or maintain connection with plumbing which is or becomes unsatisfactory to the Company, and to shut off water where there is misuse or waste of water, also temporarily in case of necessity.

7. When the water is turned on and used any part of the year the annual rate will invariably be charged.

8. When the water is introduced into a property, a charge will be made for all purposes for which it may be used, no allowance being made for wells or other sources of supply.

9. Applications for the supply of water must state fully and truly all purposes for which it is to be used.

10. When a tap is made there shall be a stop and waste cock placed at the sidewalk, in accordance with the rules established by the Company.

11. The expense of tapping, etc., to be paid for by the consumer.

12. The service pipes must be laid below frost.

13. No person not authorized by the Company

will be allowed, under any circumstances, to interfere with any pipe, apparatus or fixture belonging to the Company.

14. No person will be allowed to use the street hydrants except by written permit from the Company.

15. No hydraulic ram or other machinery shall be operated with water from the taps except by agreement with the Company.

16. Consumers will not be allowed to make branches from their service pipes to other premises not specified in their permits, nor to furnish other premises with water.

17. Agents of the Company are to be allowed access at the proper hours of the day to all parts of the premises where the water is used, for the purpose of inspections deemed necessary by the Company.

18. Consumers are required to keep their service pipes and the house plumbing in repair, and to avoid a waste of water.

19. The Company reserves the right to decrease or limit the quantity of water used whenever, in the judgment of the Company, it is necessary or expedient to do so.

20. Yard hydrants or outside fixtures are prohibited.

21. Whenever two or more parties are supplied by the same service pipe, the failure of any one of the number to pay the water rents when due, or to comply with any rule, shall authorize the Company to turn the water off from said pipe until the rates, terms and conditions are complied with.

22. But one service or supply pipe will be allowed any one property.

23. Water for building purposes will only be furnished upon the application of the owner, or authorized agent, who shall obtain a permit and pay for the same in advance.

24. The penalty for violation of the above regulations will be the stoppage of the supply, and it will not be resumed except on payment of expense of shutting off, etc., and upon satisfactory understanding that no future cause of complaint shall arise.

The Company reserves the right to make changes from time to time in its Rules, Regulations and Rates.

SCHEDULE "J."

Gallons of Water Pumped.

Approximate number of gallons of water pumped. The amount being taken from the number of strokes of the pumps and does not include the water pumped at the Deal Station.

1891.	Amount per month.	Average per day.	Largest amount per day.
January	15,502,769	500,089	691,470
February	14,899,542	532,130	806,970
March	15,424,918	497,578	650,718
April	18,950,732	631,691	1,170,870
May	28,262,076	942,069	1,478,476
June	40,838,814	1,361,293	1,782,346
July	51,419,308	1,658,687	1,989,280
August	49,911,478	1,610,047	1,881,978
September	38,118,246	1,270,608	1,586,586
October	20,828,366	671,882	1,145,430
November	15,435,169	514,505	765,080
December	20,868,084	673,164	971,496
	330,459,502	905,368	
1901.			
January	40,214,260	1,297,234	1,479,540
February	41,137,577	1,469,199	1,647,482
March	40,322,992	1,300,741	1,575,038
April	35,846,159	1,194,871	1,418,620
May	46,091,228	1,502,942	2,032,554
June	80,717,889	2,673,929	3,998,354
July	98,473,679	3,176,570	4,357,482
August	104,727,946	3,378,320	3,846,780
September	82,976,749	2,765,891	3,315,274
October	47,343,068	1,527,195	1,831,300

	November	38,947,202	1,298,240	1,509,570
	December	41,617,722	1,387,257	1,510,550
		698,416,471	1,913,469	
	1902.			
	January	42,063,518	1,356,887	1,484,650
10	February	42,138,114	1,504,932	1,569,952
	March	42,236,632	1,362,472	1,706,206
	April	41,183,763	1,372,792	1,602,482
	May	51,155,661	1,650,182	2,436,484
	June	97,494,542	3,249,818	3,872,766
	July	104,716,960	3,377,966	3,885,844
	August	100,557,764	3,243,798	3,508,264
	September	81,374,149	2,712,471	3,446,144
	October	54,868,231	1,769,942	2,765,592
20	November	47,166,642	1,572,221	3,140,898
	December	59,047,862	1,904,769	2,162,308
		764,003,838	2,093,161	
	1903.			
	January	61,215,618	1,974,697	2,284,154
	February	51,000,850	1,821,458	2,177,048
	March	52,672,086	1,699,099	2,000,402
30	April	59,070,504	1,969,016	2,312,926
	May	102,458,361	3,305,108	4,872,388
	June	105,370,639	3,512,354	4,953,568
	July	129,090,408	4,164,206	5,401,054
	August	122,402,987	3,948,451	4,594,443
	September	97,176,535	3,239,217	4,683,364
	October	73,262,336	2,363,301	2,982,770
	November	64,989,830	2,166,327	2,698,710
	December	80,442,468	2,594,918	3,057,402
40		999,152,622	2,737,404	

LAMONTE'S SCHEDULES.

Approximate Number of Gallons of Water Pumped 1883-1885.

1883.	Total water pumped, gallons.	Average per day.
January	2,944,866	94,996
February	2,501,216	89,328
March	2,840,256	91,621
April	2,787,214	92,907
May	4,817,718	155,410
June	13,446,348	448,211
July	28,824,196	929,812
August	28,635,830	923,736
September	16,482,098	549,403
October	4,232,838	136,543
November	2,711,675	90,389
December	2,776,023	89,549
	113,000,278	309,589
1884.		
January	3,383,720	109,152
February	3,542,306	122,149
March	4,281,568	138,115
April	3,333,446	111,114
May	6,598,884	212,867
June	21,658,939	721,964
July	31,126,711	1,004,087
August	25,154,601	811,438
September	24,063,182	802,106
October	9,040,264	291,621
November	3,345,618	111,520
December	4,424,532	142,727
	139,953,771	383,435

1885.		
January	3,623,099	116,874
February	3,824,548	136,591
March	4,892,908	157,835
April	4,785,883	159,529
May	7,300,016	235,484
June	23,396,744	879,891
July	35,981,175	1,160,683
August	27,337,792	881,864
September	18,221,916	607,397
October	8,314,263	268,202
November	4,241,598	141,386
December	4,562,664	147,182
	149,482,606	409,541

D9.

Balance Sheets Showing Cost of Works.

TINTERN MANOR WATER COMPANY.

Balance Sheet as at January 15th, 1903.

ASSETS.			LIABILITIES.		
Cost of Construction.			Accounts Payable.		
Reservoir	27,903 67		U. S. Cast Iron Pipe Co.	12,149 29	
Dam	57,134 38		Flood & Sherrill	17,600 00	
Land & Right of Way	56,174 16		N. Y. Continental Filter Co.	19,000 00	
Piping	384,850 43		H. R. Worthington Co.	44,850 00	
Lead Yarn & Material	37,498 37				93,599 29
Pipe Laying	46,816 63		J. J. Jermyn Advances		952,605 73
Engineering	13,854 27		Dr. J. L. Wentz Advances	267,069 09	
General Construction Work	83,739 21		" Bills Payable	20,000 00	
Filter	45,000 00		" Long B. Water Co.	437 72	
Pumps	44,850 00				287,506 81
		797,821 12	C. C. Higgins Note		5,000 00
Purchase Long Branch Plant	325,085 56		W. C. Hendrickson		700 00
" Deal Plant	71,805 56				
Middletown Water Co. (Incorp. Fres.)	400 00				
		397,291 12			
Interest	110,799 74				
Legal Expenses	5,103 05				
General Expenses	14,828 42				
Bond Coupons	6,976 50				
Taxes	1,190 87				
		138,898 58			
Due by James Stern	1,013 67				
" " C. C. Higgins	3,001 57				
" " Pom. & Mid. Water Co.	868 12				
" " Lindsey Water Co.	303 64				
" " W. G. & El. Lt. Co.	193 00				
		5,380 00			
Cash on Hand		21 01			
		1,339,411 83			1,339,411 83

EXHIBIT D10.

Report of Directors' Committee on Ascertaining Cost of Works, &c., March 6, 1903.

To the Board of Directors
of the Tintern Manor Water Company.

The Committee appointed to examine accounts and advise concerning a settlement with the Independent Telephone & Telegraph Constructing Company for building the Tintern Manor Water Works submit the following report:—

At the request of the Committee, Mr. F. E. Pratt the Engineer in charge of construction, furnished sworn statements of the amount and kind of pipe laid, and cost for same; of lands bought for reservoir site, pumping station and standpipe; quantities and cost of masonry, earth work & etc. in the Dam, and supplies etc. on hand.

By examination of Maps and inquiry, these statements were in main confirmed.

The prices paid for the work were reasonable as compared with prices for similar work at other places. The price paid for land for reservoir site averages $61.73 per acre.

A Statement of disbursements by the Construction Company for material, work, interest & etc., together with copies of the contracts for pumps and filters were furnished by Mr. Jermyn. The amounts given in same were checked by comparisons and computations based on Mr. Pratt's estimates. Memoranda of prices for pipe and lead prevailing at the time of purchase for the work were obtained independently of dealers and others, and in all cases showed the prices paid were at the market.

The charge for engineering expenses seems reasonable.

In order to further satisfy themselves the Com-

mittee requested Mr. La Monte to go to Scranton and there examine checks and vouchers for disbursements for the work. This he did, and from his report the Committee are convinced that the disbursements by the Construction Company of $1,334,031.83 for the purchase of the Long Branch and Deal plants, for furnishing material and machinery, and for building and completing the Tintern Manor Water Works, are as claimed.

The Committee recognize that the increase in the size of the mains over the sizes first intended; the abandonment of the pumping to stand pipe system; the addition of a filter plant, and the change from gas to steam for pumping engines, are all in line of improvement to the plant.

The Committee note that an item of $31,050.00 paid for interest (coupons) by the Water Company, and which they claim the Construction Company should allow for, is disputed by the Construction Company. The same has been the subject of conference but no adjustment of it has been made.

The settlement with the Construction Company having to be made in bonds of the Water Company, the amount and price of same must be agreed upon by your board.

Mar. 5th, 1903.

Respectfully submitted,

(Signed) R. Blodgett.
Whitney Conant.
E. A. Walton.

EXHIBIT D11.

Summary of Pipe Laid.

TINTERN MANOR WATER CO.

F. E. Pratt.

Sizes.	Number of feet laid.	Cost of laying.	Cost of laying, per foot.	Remarks.
36″	31,946.5	$29,946.21	$0.94	Includes 947′ pile bridges.
24″	1,456.	2,345.51	1.61	
18″	36,004.5	11,542.29	.32	Includes 468′ flexible pipe.
12″	4,396.7	747.44	.17	
10″	5,666.9	1,620.60	.305	Includes repairs to roads.
10″	5,666.9	806.60	.142	Exclusive " " "
8″	2,915.6	425.36	.146	
6″	1,200.	181.45	.151	All short connections to mains.
Totals	83,586.2	$46,808.86		

APPROXIMATE WEIGHTS.

Sizes.	Approximate tons of lead.	Approximate lbs. of lead.
36″	7,986.6	266,200.
24″	134.	6,100.
18″	2,988.37	90,010.
12″	192.40	7,320.
10″	232.34	7,552.
8″	90.38	2,916.
6″	20.06	1,000.
24″—18″ Flex.		5,000.
	11,644.15	386,098.0

36″ pipe from Dam to Pumping Station:

	Wt. tons.	Cost to lay.
9,795.5 ft. common	2,448.8	$1.24 per ft.
205.7 " flex.	52.	.99 " "

EXHIBIT D13.

Dividends Paid.

CAPITAL STOCK LONG BRANCH WATER SUPPLY CO.

$250,000.00.

1886	$60,000	5% Bonds Issued		
			Interest paid	1,641.67
1887	15,000	do	" "	3,304.45
1888	25,000	do	" "	4,576.38
1889 and each year after			" "	5,000.00

Year.	Rate.	Amount.
1882		
1883	3%	7,500.00
1884	3%	7,500.00
1885	6%	15,000.00
1886	4%	10,000.00
1887	5%	12,500.00
1888	5%	12,500.00
1889	1½%	3,750.00
1890	4%	10,000.00
1891	5%	12,500.00
1892	5%	12,500.00
1893	5%	12,500.00
1894	5%	12,500.00
1895	5%	12,500.00
1896	5%	12,500.00
1897	5%	12,500.00
1898	5%	12,500.00
1899	5%	12,500.00

EXHIBIT D14.

Order by Long Branch to Lay Mains, June 22, 1900.

Office of the
Long Branch Commissioners,
Town Hall.

Thomas B. Woolley, Collector.
R. Jerome Van Brunt, Clerk.

Long Branch, N. J., June 22d, 1900.

Mr. Whitney Conant,
Sec'y Long Branch Water Supply Co.:

Dear Sir:—At the last meeting of the Long Branch Commissioners the following resolution was adopted and I was directed to notify you to proceed at once with the work:

Resolved, That the Long Branch Water Supply Company be ordered to lay a main through Brighton avenue, from the plug now on Brighton avenue, west of the New York and Long Branch Railroad, to Norwood avenue; and through Norwood avenue, from High street to the plug in front of the Rothschild cottage; and through Belmont avenue, from Second avenue to Third avenue; and through Rockwell avenue, from Monmouth avenue to Joline avenue, providing they put the new plugs not less than 1,000 feet apart; and that the Clerk be and is hereby directed to notify the Long Branch Water Supply Company to proceed at once with the work.

Yours respectfully,
R. Jerome Van Brunt,
Clerk.

(Seal of the Long
Branch Commission.)

EXHIBIT D15.

Order by Long Branch to Lay Mains, June 10, 1901.

Office of the
Long Branch Commissioners,
Town Hall.

R. Jerome Van Brunt, Clerk.

Long Branch, N. J., June 10, 1901.

Long Branch Water Supply Company:

Gentlemen:—

At the last meeting of the Long Branch Commissioners, held Thursday, June 6, 1901, I was directed to notify the Long Branch Water Supply Company to place a fire hydrant on Westwood avenue, near Long Branch brook, and connect the same with the water main.

Yours respectfully,
R. Jerome Van Brunt,
Clerk.

(Seal of the Long
Branch Commission.)

EXHIBIT D16.

Bill for Arrearages Due.

THE LONG BRANCH COMMISSION.

To the Tintern Manor Water Co. Dr.

For water furnished as follows:

From Sept. 21, 1901, for 146 Hydrants for fire purposes.
From Sept. 21, 1901, for water for street sprinkling.
From Sept. 21, 1901, for water furnished 7 Fire Engine Houses.
From Sept. 21, 1901, for water furnished 3 Public drinking fountains.

CREDITS.

Aug.	17,	1903	By Cash	4,000.00
"	21,	"	do	4,000.00
Sept.	15,	"	do	350.00
Octo.	15,	"	do	350.00
Nov.	14,	"	do	350.00
Dec.	15,	"	do	350.00
Jany.	15,	1904	do	350.00
Feby.	15,	"	do	350.00
Mar.	15,	"	do	350.00
Apr.	15,	"	do	350.00
				$10,800.00

EXHIBIT D17.

Schedule of Water in Engine, Houses, etc.

FIRE ENGINE HOUSES.

Elberon Fire Eng. Co. No. side Lincoln Ave.

1 Family 1 Sink	$8.00	
1 Water Closet	4.00	
1 Wash bowl	1.00	
Meeting Room 1 Faucet	5.00	
1 Water Closet	4.00	
Engine Room 1 Faucet	5.00	
2 Horses 1 Faucet	6.00	
Cellar 1 Faucet	2.00	
		$35.00

West End Fire Eng. Co. Brighton Ave.

Engine Room 1 Faucet	5.00	
1 Wash bowl	1.00	
1 Urinal	3.00	
1 Water Closet	4.00	
2 Horses 1 Faucet	6.00	
Second floor Sleeping Rooms 1 faucet	5.00	
		24.00

Oceanic Fire Co. Norwood Ave.

Engine Room 1 Faucet	5.00	
1 Wash bowl	1.00	
1 Water Closet	4.00	
2 Horses 1 Faucet	6.00	
Single House 1 Family	8.00	
		24.00

Neptune Eng. Co. Branchport Ave.

Engine Room 1 Faucet	5.00	
1 Water Closet	4.00	
2 Horses 1 Faucet	6.00	
Meeting Room 1 Faucet	5.00	
		20.00

Phil Daly Hose Co. Second Ave.

Engine Room 1 Faucet rear	5.00	
1 Water Closet	4.00	
2 Horses 1 Faucet	6.00	
Barber Shop 1 Sink	10.00	
1 Water Closet	4.00	
1 Family & Meeting Room 1 Sink	13.00	
1 Water Closet	4.00	
		46.00

O. D. Byron Hose Co. Atlantic Ave.

Engine Room 1 Faucet	5.00	
2 Horses	6.00	
Meeting Room 1 Sink	5.00	
		16.00

Atlantic Eng. Co. Third Ave.

Engine Room 1 Faucet	5.00	
2 Wash bowls	2.00	
5 Horses 1 Faucet	12.00	
1 Water Closet	4.00	
Outside 1 Faucet	5.00	
		28.00
		$193.00

Exhibit A of Sept. 6, 1905.

See p. 578.

Exhibit B.

COST OF RESERVOIR.

See p. 582.

Exhibit C.

COST OF DAM.

See p. 582.

Exhibit D.

PIPE LINE DAM TO PUMPING STATION.

See p. 583.

Exhibit E.

PIPE LINES EAST OF PUMPING STATION.

See p. 584.

Exhibit F.

PUMPING STATION.

See p. 584.

Exhibit G.

PIPE.

See p. 585.

Exhibit H.

VALVES AND SPECIAL CASTINGS.

See p. 586.

Exhibit I.

LEAD AND YARN.

See p. 586.

Exhibit R.

DETAIL COST PER FOOT OF WATER MAINS.

See p. 587.

Exhibit S.

ESTIMATED COST OF NEWMAN SPRINGS PUMPING PLANT, COMPLETE.

See p. 588.

Exhibit T.

ESTIMATED COST OF RUNNING TINTERN MANOR WATER CO. PLANT FROM NEWMAN SPRINGS PUMPING STATION.

See p. 588.

Exhibit D19.

IN CHANCERY OF NEW JERSEY.

Between

THE LONG BRANCH COMMISSION,
Complainant,

and

TINTERN MANOR WATER COMPANY,
Defendant.

The following statement is made pursuant to the request of the Vice-Chancellor dated October 6, 1905, showing the gross income from private takers for the fiscal years ending June, 1902; June, 1903; June, 1904, and June, 1905, in the limits of the Long Branch Commission:—

Year ending June 1, 1902,	$35,448.30
Year ending June 1, 1903,	43,707.34
Year ending June 1, 1904,	44,079.34
Year ending June 1, 1905,	45,510.15

State of New Jersey, ss.:

Wellington LaMonte, being duly sworn, on his oath says that the foregoing is a correct statement of the gross income from private takers in the limits of the Long Branch Commission for the periods above stated.

WELLINGTON LAMONTE.

Subscribed and sworn to at Jersey City, this 12th day of October, 1905, before me

Samuel S. Moore,
Notary Public of N. J.