

SIXTH ANNUAL REPORT

OF THE

Board of

Public Utility Commissioners

FOR THE

STATE OF NEW JERSEY

FOR THE YEAR 1915

TRENTON, N. J.
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1916

COMMISSIONERS

RALPH W. E. DONGES, President,

JOHN W. SLOCUM,*

JOHN J. TREACY,

THOMAS J. HILLERY.*

*By appointment of Governor James F. Fielder, Mr. Slocum qualified May 1st, 1915, as the successor of Mr. Hillery, whose term had expired.

REPORT.

To the Honorable James F. Fielder, Governor of the State of New Jersey:

The Board of Public Utility Commissioners respectfully submits its report for the year ending December 31st, 1915.

STATISTICS OF UTILITIES.

It is the practice of the Board to publish in a separate volume statistics giving gross and net returns, capitalization and other information with respect to each utility subject to its jurisdiction. No attempt is made, therefore, to give this information in detail in this report, but the following summary of revenues, operating expenses, etc., for the year ending December 31st, 1914, is submitted:

		<i>Operating Revenues.</i>	<i>Operating Expenses and Taxes.</i>	<i>Per Cent. of Operating Revenues.</i>	<i>Net Revenues.</i>
23	Street Railways, ...	\$19,041,299	\$12,621,522	66.2	\$6,419,777
35	Gas Companies,	13,065,924	7,683,673	58.8	5,382,251
55	Electric Light and Power Companies,	11,404,044	6,002,555	52.6	5,401,489
119	Water Companies, ..	4,844,096	2,364,378	48.8	2,479,718
15	Sewer Companies, ..	267,525	179,515	67.1	88,010
40	Telephone Companies,	9,001,801	6,488,021	72.1	2,513,779
287		\$57,624,689	\$35,339,664	61.3	\$22,285,024

Railroad companies are not included in the above. This is due to the fact that the revenues of the railroads are derived from both state and interstate business, much the greater part coming from the latter. Divisions have not been made in reporting returns to an extent sufficient to show the total sums paid for transportation of freight and passengers wholly within the state.

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In the returns from telephone companies, that part of the revenue of the New York Telephone Company derived from New Jersey business is included. In addition to the utilities referred to reports are made to the Board by municipally operated utilities. These show gross receipts for the year ending December 31st, 1914, for 77 municipal water plants of \$5,350,000, and 15 municipal electric plants of \$150,000. Adding the above to the receipts of utilities privately owned makes a total of more than \$63,000,000 spent for utility service in New Jersey in one year, exclusive of the sums paid the railroad, telegraph and express companies.

ISSUES OF SECURITIES.

As in the past, the largest issues of securities approved by the Board have been by the railroad companies. The law provides that all such issues shall be approved, and this requires at times action by the Board on proposed issues of securities, supported by property outside the state or the proceeds of which are to be used by companies whose New Jersey business is but a part of the whole. The following is a general summary of the applications granted in the year 1915 for approval of issues of securities:

<i>No. of Applications.</i>	<i>Utility.</i>	<i>Bonds.</i>	<i>Stock.</i>	<i>Notes.</i>
8	Railroads,	\$136,182,500	\$454,400	.....
7	Street Railways,	7,224,000	1,811,300	.....
11	Electric Lighting Companies,	651,000	3,453,600	.....
6	Gas Companies,	911,562	860,800	.....
14	Water Companies,	1,535,500	1,029,100	\$20,000
1	Sewer Company,	70,000	.....	.....
47		\$146,574,562	\$7,609,200	\$20,000

The name of the applicant and the amount and nature of the issue in each instance are submitted herewith.

APPROVAL OF MUNICIPAL GRANTS.

Applications for approval of ordinances and resolutions of municipalities granting privileges to public utilities were made to the Board and acted on as follows:

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<i>No. of Applications.</i>	<i>Utility.</i>
16,	Street Railways.
1,	Gas.
3,	Water.
7,	Sewer.

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These are referred to more in detail in another part of this report.

SALES OF PROPERTY.

Sales of property by utilities other than dispositions made in the ordinary course of business require the Board's approval. During the year such sales have been approved as follows:

<i>Appli- cations.</i>	<i>Utility.</i>	<i>Property.</i>
50	Railroad Companies,	Land.
1	Sewer Company,	Land.
2	Telegraph Companies,	Poles.
5	Street Railways,	Land.
1	Street Railway,	Stock.
2	Telephone Companies,	Equipment.
4	Telephone Companies,	Land.
2	Electric Light Companies,	Mortgages and stock.
5	Electric Light Companies,	Land and Property.
1	Gas Company,	Land.
10	Water Companies,	Land.
1	Water Company,	Water rights.

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FORMAL PROCEEDINGS.

All applications received by the Board for its approval of issues of securities, grants by municipalities to utilities, and sales of properties by them, are placed on its calendar for hearings. Many hearings are held also on issues joined in complaints filed against public utilities. In all, 522 hearings have been held during the year in formal proceedings, and with respect to some of these it has been necessary to continue the hearings over a number of days.

INFORMAL COMPLAINTS.

It is not the practice of the Board to place on its calendar for hearing complaints received by it, unless this is the desire of the complainants, or the complaints appear to raise some question calling for formal ruling.

In many cases complaints are informal in nature and these are referred to the Board's inspectors for investigation. During the year 364 complaints were so treated. With respect to 192 of these, the inspectors reported overcharges or faults of service with recommendations for their correction, which recommendations were accepted by the utilities. With respect to most of the other complaints, the inspectors reported that the conditions complained of had been corrected, or that no reasonable cause for complaint appeared to exist. In some cases the complaints were made of matters not within the Board's jurisdiction. In a number of cases where the utilities took exception to the inspector's recommendations, or the informal investigations did not result in correcting the conditions complained of to the satisfaction of the complainants, the complaints were placed on the Board's calendar for hearing and formal ruling. There is submitted herewith a further statement with respect to these complaints.

TYPICAL FORMAL CASES.

A change by the Pennsylvania Railroad in its winter schedule, contemplating the discontinuance of passenger trains which had been long in service between Long Branch and other stations on the New York and Long Branch Railroad and Jersey City, Trenton and intervening stations, caused a number of complaints to be made to the Board. After hearing these complaints, the Board on January 5th ordered the restoration of several trains, the operation of which appeared to be required to furnish adequate service. After a number of hearings, at which representatives of municipalities on the Greenwood Lake Division of the Erie Railroad were heard, the Board ordered the company to make what appeared to be reasonable and desirable changes in the operation of its passenger trains on the branch.

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On March 12th, the Board adopted a report holding that the railroads which had filed tariffs showing marked increases in passenger rates, which increases were suspended by the Board, had not sustained the burden of proof imposed on them by the statute to show the increases to be just and reasonable, and the increases were disapproved. The Pennsylvania Railroad, West Jersey and Seashore, Philadelphia and Reading, and Atlantic City Railroad Companies, the carriers most affected, later applied for a rehearing in order that an opportunity might be afforded to introduce additional evidence. This was granted, and the case is being reheard.

The Board has disapproved the proposed discontinuance by the Public Service Railway Company of a long established practice of selling tickets to pupils at business colleges, which tickets are good for transportation on the company's lines at a reduced rate.

Following hearing of a complaint as to the failure of the Pennsylvania Railroad Company to provide for the checking of baggage of passengers from its Summit Avenue station, Jersey City, the company notified the Board that it would establish at the station a baggage room and service for baggage and checking hand baggage.

On August 17th, the Board ordered suspended the increase in fares which would have resulted from a proposed withdrawal by the Trenton and Mercer County Traction Corporation of the sale of six tickets for twenty-five cents on its leased lines. These lines include the Trenton Street Railway Company, the Mercer County Traction Company and the Trenton, Hamilton and Ewing Traction Company. The tickets, each of which was accepted by the company as an equivalent for a five-cent fare, had been in use by the lessor companies prior to leasing to the present operating company, and this company had continued to issue them.

Hearing on the question whether the increase proposed was just and reasonable was held following the entry of the order of suspension. The hearing extended over twelve days and resulted in the taking of many pages of testimony and the submission of numerous exhibits on behalf of the company and the

City of Trenton, objector to the withdrawal of the tickets. After a consideration of the record the Board decided that the company had not shown the increase to be necessary to afford it a reasonable return and disapproved the same.

During the year the Board approved a new schedule of rates filed by the Rockland Electric Company. This provided for the removal of inequalities, and for a system of charging better adapted to encourage the general use of the company's lighting service. A new schedule filed by the Bound Brook Water Company was modified by the Board's direction. A schedule of rates has been established for the New Egypt Light, Heat and Power Company, and a minimum charge fixed for the Wildwood, Anglesea and Holly Beach Gas Company.

The Seashore Gas Company, of Sea Isle City, was permitted to increase its rates, it being apparent that under its old schedule the company did not receive a reasonable return on the fair value of its property. A new schedule filed by the receiver of the Newton Gas and Electric Company, and showing marked increases in charges for electric service, was disapproved.

Following hearing of a complaint against the Hackensack Water Company, the Board decided that the company's practice of requiring consumers to pay for the installation of service pipes in the public streets was unreasonable.

In a case involving the Hillcrest Water Company the Board decided that water meters should be installed by the company at its own expense, and that the company should be responsible for ordinary maintenance.

The Board now has under way an investigation of the rates charged by the Hackensack Water Company. The Board's engineers have completed their valuation of the company's property, and a large amount of testimony has been submitted at the hearings already held in the course of the investigation. It is anticipated that the record in this case can be closed and the case go on the Board's conference list at an early date.

The larger part of the very great task of making an appraisal of the properties of the Public Service Electric Company has been completed. This is a necessary part of the Board's investigation

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of the reasonableness of the company's rates, and requires valuations of the company's power houses, the lands on which they stand, its machinery, cables, conduits, poles, wires and all other tangible property used in generating and distributing electric light, heat and power. The Board will, during the coming month, call a hearing for the introduction of testimony as to these valuations.

Reports made by the Board giving its decisions in formal proceedings are published in a separate volume. Reference is made to the foregoing as fairly typical of cases engaging the Board's attention.

GRADE CROSSINGS.

Much of the Board's time during the year has been taken by proceedings brought under the act giving the Board power to order the separation of the grades of railroads and public highways.

The Erie Railroad Company has been ordered to separate the grades at fifteen crossings of its tracks and streets and avenues in the City of Paterson. The cost of the work, in accordance with the plan approved by the Board, is estimated at approximately \$3,000,000.

The Central Railroad Company has been ordered to separate the grades of Union Avenue and its track in the township of Cranford. It is estimated that this can be done at a cost of approximately \$400,000.

The Board has started proceedings on its own motion on the question of the alteration of the grades of public highways and the tracks of the Central Railroad Company in the City of Elizabeth. The streets affected are those which cross the main line between Spring Street station and the Bay; those crossing the Broadway line from its intersection with the main line to the Elizabeth and Perth Amboy branch, and those crossing that part of the Elizabeth and Perth Amboy branch from the Elizabeth Avenue station to its intersection with the main line. The Board has caused surveys to be made and counts to be taken of traffic at the crossings within the territory mentioned, and these are now in evidence before the Board. From data so far accumu-

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lated, the Board's engineer estimates that the cost of separating the grades in Elizabeth would be approximately \$6,000,000. Because of the fact that the Central Railroad Company would be affected, the Board is conducting, concurrently with the Elizabeth case, hearings on the proposed separation of the grades of crossings of the Central Railroad and Lehigh Valley Railroad Companies in Perth Amboy.

Hearings have been called, on the Board's initiative, on the proposed separation of the grades of East Clinton Avenue, a crossing just beyond the limits of the City of Trenton, and the main line of the Pennsylvania Railroad; of two crossings of the Malaga Road and the West Jersey and Seashore Railroad in Franklin Township, Gloucester County, and of the crossing of the Shore Road and the Atlantic City Railroad in Atlantic County. The latter three crossings are main traveled highways on the way to the shore.

The Board's engineering department is now engaged in work regarded as necessary before proceeding with formal hearings on a petition brought by the City of Passaic for the separation of the grades of the Erie Railroad and the streets and avenues in Passaic, and a petition brought by the City of Somerville for the separation of the grades of the Central Railroad and Bridge Street in Somerville.

The Board has given consideration to the dangerous conditions apparently existing at the crossings of the streets and avenues in Orange and East Orange, and the track of the Delaware, Lackawanna and Western Railroad. Negotiations have been under way for some length of time between the municipalities and the railroad company with a view to arriving at a mutually satisfactory arrangement for the separation of the grades. The Board has advised the municipalities of its willingness to afford, if desired, the assistance of its engineering department in the negotiations, and has fixed a date for a conference to be held in Newark to obtain the views of the municipalities on the probability of a satisfactory issue of the negotiations, and on the advisability of the Board starting formal

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proceedings under the grade crossing act, to determine whether it should order the grades separated.

A petition brought by the Township of Ewing asking for the alteration of the grade of the highway known as the Asylum Road and the track of the Philadelphia and Reading Railway near Trenton Junction was assigned for hearing, but on representation made by the township that negotiations were under way which might result in an agreement with the railroad company for a desirable change in the direction of the highway and the substitution of an undergrade crossing for the existing grade crossing, the hearing was postponed. The Board's engineer was, at the petitioner's suggestion, directed to attend conferences at which plans for the change were discussed. The Board has been advised, recently, that the parties to the proceeding are unable to agree, and it has fixed a date for hearing on the petition before it.

The Board has, as a result of inspections heretofore made, a list of other crossings at which the conditions appear to be so dangerous as to warrant inquiry and hearing on the question of their alteration, and formal proceedings will be begun with respect to these. In such proceedings the Board must in every case afford reasonable opportunity to be heard to all those who would be affected by the separation of the grades. The parties in interest are not alone the railroad companies and the municipalities in which the crossings are located. Individual owners of properties for considerable distance on both sides of the crossing, and representatives of industrial establishments connecting by side tracks to the railroad which may have to be raised or lowered, appear at grade crossing proceedings as objectors to any plan the adoption of which would affect them adversely. Such objections, of course, cannot be permitted to outweigh a public advantage to be gained by the adoption of a plan proposed, but criticisms of the plan and suggestions for alternates must be heard and duly considered.

This takes much time in every grade crossing proceeding, but there seems to be no way in which this can be avoided. The State cannot deprive any person of property without due process

of law. It could hardly be regarded as in accordance with due process of law, if a commission to whom the Legislature had delegated power should exercise this power in a way which would result in the taking of property without reasonable notice to the owners thereof and opportunity afforded them to be heard.

Appeals have been taken to the Supreme Court from the Board's orders requiring separation of the grades in Paterson and Cranford. The cases have been argued during the present month and are now awaiting decision by the court. The decisions of the Supreme Court in these cases will be of great importance in that so far as that tribunal is concerned the validity of the existing law will be determined and the Board's method of procedure passed upon.

PROTECTION AT CROSSINGS.

While conducting proceedings in which the separation of grades at numerous railroad crossings has been under consideration, the Board has aimed also to lessen the degree of danger to users of highways now crossing railroads. During the year additional protection has been provided or conditions otherwise improved at 707 such crossings. This has included the installation of flagmen at 30, of gates at 14, and of warning bells at 54 crossings. The conspicuous crossing sign designed at the Board's direction, and adopted as a standard, has been placed at 583 crossings, which were either not marked at all, or at which the signs were not sufficiently plain to give notice to users of highways of the proximity of the crossings.

There is coming more into use as a method of protection at crossings where flagmen are not continuously maintained, devices which show red discs and red lights that work intermittently in conjunction with the crossing bell when trains are within the track circuits. The wigwagging of the red light affords an especially conspicuous warning at night. The Central Railroad Company has reported that the disc crossing signals, which with the approval of the Board it substituted for the flags ordinarily used by crossing watchmen, have proven to be an efficient method

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of warning. This signal is a circular red disc with the word "stop" in white letters across the center, the disc being held by flagmen in such a position that it will be observed by approaching travelers. Where crossings are protected by gates, this disc is attached to the gate arm, so that when gates bar the highway the signal can be plainly seen.

INSPECTION AND ENGINEERING.

In addition to making surveys and preparing plans in connection with proceedings involving proposed alterations of grade crossings, inspections have been made during the year of steam and electric railroads and reports thereon submitted to the Board by its engineers. These reports contained such recommendations as were deemed advisable for repairs and improvements. Among the recommendations were repairs to 283 railroad bridges. The reports of inspection are submitted herewith. In all, 2,261 miles of steam railroad and 925 miles of electric railway track have been covered. There are on the latter 798 bridges.

Some difficulty has been experienced in inspecting bridges on electric railways, because of inability to obtain from the companies' records complete information as to their bridges. This difficulty has been overcome by preparing a map on a scale of one mile to an inch and the location of every bridge of an electric railway has been marked thereon. Records are made from actual inspections as to the designs and condition of these bridges, and necessary repairs are insisted upon. A bridge over the Central Railroad and Morris Canal near Dover, known as Dickerson's crossing, was examined by the Board's engineer in co-operation with the State Highway Department. The old bridge at this point was inadequate to accommodate the highway traffic. The county decided to build a new bridge at a better location, and this has been done. A drawbridge over South River on line of Public Service Railway in Middlesex County did not appear to be in good condition, and after thorough inspections and analysis of stresses it was recommended

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that the bridge be rebuilt. This recommendation was accepted and the new bridge is now under construction.

A bridge over Woodbridge Creek, also in Middlesex County, was found to be in such condition that the Board ordered trolley traffic over it stopped. This is a county bridge, and, following entry of the Board's order, the county and railway company co-operated in the work of repair and materially strengthened the bridge.

Recommendations have been made and accepted for repairs to the drawbridge over the Raritan River in Perth Amboy and to the bridge of the Public Service Railway over the Lehigh Valley Railroad at Picton. The above are typical of the cases where it has been deemed advisable by the Board's Engineer of Bridges to have bridge repairs made. The railroads report to the Board results of their tests of locomotive boilers, and these reports are referred to the Board's Inspector of Boilers, who makes frequent special inspections, followed by such recommendations as seem to be advisable.

It is fair to state that recommendations of the Board's inspectors for improvements believed by them to be in the interest of safe operation are seldom questioned by the companies. When exception is taken to a recommendation, it is due to a difference of opinion between the Board's inspector and the company as to the immediate need or extent of repairs. All such differences, if not adjusted by correspondence, are made subjects of hearings, and the Board takes such formal action as seems to be necessary.

GAS AND ELECTRIC INSPECTIONS.

Inspections of railroad tracks and bridges are made by the civil engineering division of the Board's force.

Electrical and mechanical engineers are continuously employed under the direction of the Board in the investigation of conditions pertaining to gas and electric service. Power stations, substations and pole lines of electric utilities and the plants and apparatus of gas companies are included in such investigations.

The Board has adopted rules and regulations to be observed

by gas and electric utilities, and reports of failures to comply with the rules which establish standards held to be essential to the provision of good service, are promptly followed up. The Board in such cases takes action to bring about compliance with the rules.

All meter provers used by the companies in testing consumers' meters are tested and sealed by Board's inspector. Inspections have been made at a number of gas plants of the relation between the gas generating capacity and the maximum demand on the plant, noting what provisions are made for the storage of coal, oil and gas as well as what provision is made for purifying and measuring gas, the object of this being to determine whether the plant is capable of supplying adequate service in accordance with the Board's rules. Recommendations made as to improvements in plant operation and installation of additional apparatus believed by the Board's engineer to be necessary are included in reports of inspections. These are submitted to the companies, and if not complied with or good reasons are not given for their modification, the Board orders their adoption. In inspections at plants, examinations are made of the companies' records of complaints received from customers in reference to poor service. The manner in which the records are kept is noted, and whether the complaints are promptly attended to. Where the manner of handling complaints is open to criticism recommendations for improvements are made. Generally the desirability of adopting the recommendations is recognized by the management, and they are accepted. Where they are objected to and formal ruling is deemed advisable, they are made subjects of hearing.

Tests of gas and electric as well as water meters are made under the direction of the Board on payment of nominal fees, which are returned and the amounts of the same collected from the companies if the tests show the meters to be registering unfairly against the consumers.

In addition to performing the duties referred to, the Board's engineering force assists it in making inventories and appraisals incidental to rate proceedings and the consideration of applications for approvals of issues of securities.

COURT DECISIONS.

During the year, decisions have been filed by the courts in a number of appeals from the Board's orders and these have resulted in rulings upon divergent views as to the jurisdiction and power of the Board under existing laws.

The Court of Errors and Appeals on reargument affirmed the decision of the Supreme Court in the Passaic Gas Rate Case.

The Court of Errors and Appeals affirmed also a decision of the Supreme Court sustaining the Board's finding as to a reasonable compensation to be paid by the Public Service Railway Company for the operation of its cars over the Clay Street Bridge between Newark and Hudson Counties. In its decision the court held that the Legislature had power to fix the compensation to be paid for the use of a county bridge by a street railway company, and to delegate to the Board power to ascertain what a reasonable compensation would be. The court held with respect to the contention that the award was excessive, that the Board's order was amply supported by the testimony taken by it, and the court declared that it would not disturb the Board's findings unless unreasonable, or based upon some illegal principle or lacking evidential support.

The Board's order requiring the Public Service Electric Company to continue to light free of charge the public buildings of the City of Plainfield in accordance with the terms of a contract entered into between the city and its predecessor, and forming one of the conditions of the grant of the use of the streets, was set aside by the Supreme Court. The court held that to continue the free service would be an undue and unreasonable preference or advantage in contravention of the statute. An appeal has been taken from the decision of the Supreme Court to the Court of Errors and Appeals, and this case is now awaiting decision by the latter.

An order of the Board requiring the Erie Railroad Company to improve its station facilities at Little Falls was upheld by the Supreme Court. An appeal was taken by the Erie Railroad Com-

pany from the Board's order requiring it to keep on duty for twenty-four hours each day in the week flagmen at the crossings of the Belleville Turnpike and the Newark Branch and Greenwood Lake Branch of the company's road. In this case the Supreme Court decided against the railroad company's contention that the statute under which the order was made is unconstitutional in so far as it deprives the Court of Chancery of its exclusive jurisdiction over the regulation of the use of easements. The court held that the Board's order was too broad in its requirement that the crossings should be protected for twenty-four hours each day, and that the order should be modified by the Board to conform to the decision of the court.

The decision of the Supreme Court upholding the Board's refusal of approval of a lease proposed to be made by the West Jersey and Seashore Railroad Company of its railroad and franchises to the Pennsylvania Railroad Company was affirmed by the Court of Errors and Appeals. In this decision the Court of Errors and Appeals held that it was not repugnant to the Constitution for the Legislature to delegate to the Board power to approve or refuse to approve a lease proposed to be made by a railroad company of this State. The court held further that "as the matter of granting or withholding its approval is one which is left by the Legislature to the sound discretion of the Board, the Supreme Court cannot substitute its own judgment for that of this legislative agent and compel it to act upon the application for its approval in a specific way."

The Supreme Court for the reasons stated in its decision was upheld by the Court of Errors and Appeals in dismissing a writ of certiorari obtained by the Eastern Telephone and Telegraph Company against the Board, because of the Board's refusal of approval of certain ordinances granting privileges to the company.

The Supreme Court upheld also the action of the Board in making applicable to the Borough of North Wildwood a rate previously fixed by the Board as a proper charge for service in the City of Wildwood by the Wildwood Water Works Company. The appeal in this case was by the borough, which claimed that

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the Board's act was in abrogation of a contract between the borough and the water company and consequently unlawful.

RECOMMENDATIONS.

Of the recommendations contained in the Board's report last year some were enacted into law and others were not adopted by the Legislature. The Board is still of the opinion that the legislation suggested but not adopted last year would add desirably to the laws providing for regulation of public utilities, and would respectfully suggest further consideration of the following:

First. An act specifically empowering the Commission to require proof when its approval of proposed security issues is asked that there has been an adequate attempt on the part of the petitioners to ascertain and to obtain the highest price at which such securities may be sold, and in default of satisfactory proof thereof to impose as a condition of granting such approval the advertising for sealed competitive bids for such securities accompanied by certified checks guaranteeing the responsibility of the bidders.

Second. An act making void all security issued by public utilities, whether put out by way of sale or by way of pledge or hypothecation, and making such unauthorized issue a misdemeanor, unless the prior approval of the Board thereof has been granted.

Third. An amendment of the General Railroad Act, and in particular Section 70 thereof, whereby the limitations to be imposed upon the bonded debt that may be incurred by a railroad company incorporated in this State by a foreign corporation as regards its property situate in this State may be made uniform, whether said company is operated independently or under lease, or by virtue of merger or consolidation with another railroad company.

Fourth. Legislation prescribing more precisely the terms under which railroad companies or other public utilities may lease or be leased to railroads or other public utilities, such legislation to

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fix the maximum term of the lease and to make mandatory the requirement that the property of the lessor company shall be at all times capable of identification either physically or by the fixing the value thereof upon the books of said lessor company and lessee company respectively.

Dated December 31st, 1915.

Respectfully submitted,

(Signed) RALPH W. E. DONGES,
President,

(Signed) JOHN W. SLOCUM,

(Signed) JOHN J. TREACY,
Commissioners.

(Signed) ALFRED N. BARBER,
Secretary.

Reports of Decisions.

Reports of decisions were filed during the year 1915 in formal proceedings as noted in the following pages. The action of the Board is indicated in the following, but the reference to the case and to the Board's decision should not be regarded as completing the published record of the proceeding. Full reports of decisions are published in separate volumes.

Volume III of "Reports of the Board of Public Utility Commissioners of the State of New Jersey," published in accordance with Section 7 of the Public Utility Act, contains decisions of the Board for the year 1915 up to July 12th. Reports of decisions filed in 1915 after July 12th will be published in Volume IV.

Rhutson Case vs. New Jersey Telephone Co.—In Re Extension of Service.

January 5th, 1915—New Jersey Telephone Company ordered to extend its service.

Numerous Complaints vs. Pennsylvania Railroad Company—In Re Withdrawals of Trains from Long Branch and Shore Points via Freehold, Jamesburg, Trenton, Camden and Jersey City.

January 5th, 1915—Pennsylvania Railroad Company ordered to operate trains Nos. 283, 298 and 224 as they were operated prior to September 15th, 1914.

In the Matter of Inspector's Recommendation Following Investigation of Accident.

January 5th, 1915—New York, Susquehanna and Western Railroad Company ordered to install a loud-toned standard crossing bell at the grade crossing of River Road (sometimes called "Paterson Turnpike") and the tracks of the New York, Susquehanna and Western Railroad east of Bloomingdale.

REPORTS OF DECISIONS.

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Hawthorne Civic League vs. Erie Railroad Company—In Re Condition of Station, and Requesting New One.

January 5th, 1915—Erie Railroad Company ordered to lay a new floor and paint the interior of the waiting-room of its station at Hawthorne.

George L. Vetrone et al. vs. Lehigh Valley Railroad Company—Petition That Railroad Company Be Required to Open Up a Crossing Across Its Tracks and to Open a Way Along the North Side of Said Railroad to the Millstone-Somerville Road.

January 5th, 1915—Petition dismissed.

Dr. J. B. Garrison, of Hopewell, vs. Philadelphia and Reading Railway Company—In Re Removal of Nightwatchman at Crossing of Philadelphia and Reading Railway at Skillman.

January 5th, 1915—Board refused to approve the withdrawal of the nightwatchman at the above crossing between April 15th and October 15th.

Chas. H. Fell, Chairman of Township Committee of Gloucester Township, vs. New Jersey Gas Company—In Re Failure of Company to Extend Gas Mains so as to Install Gas Lamps for Street Lighting at Locations Desired by the Township Committee.

January 5th, 1915—Company recommended to extend its mains and install three lamps at the locations desired, to make the necessary repairs and to furnish mantles and globes for each lamp. The responsibility for such lighting, extinguishing and cleaning the same to be assumed by the Township Committee. The price to be charged is \$25 per lamp per annum.

Question Submitted to the Board for Decision by the Passaic Water Company—In Re Objection to Paying for Water by Meter Measurement by Van Riper Manufacturing Company.

January 5th, 1915—The Board found and determined that the respondent company is entitled to measure the quantity of water sold to the complainant and to charge the regular meter rates now on file with the Board.

Petition—Central Railroad Company of New Jersey for Permission to Discontinue the Sale of Tickets, and Maintenance of an Agent at its Ledgerwood Station.

January 12th, 1915—Petition dismissed.

Petition—Wildwood, Anglesea and Holly Beach Gas Company for Permission to Establish a Minimum Charge for Gas of One Dollar per Month.

January 18th, 1915—The Board is of the opinion that the institution of a minimum charge of one dollar is, under all the circumstances, not necessary, and is unreasonable, and *fixes* as reasonable a minimum charge of seventy-five cents per month, applicable whenever the premises are occupied, of which fact the company is to have ample notice from the consumer

Horace Nixon vs. Atlantic City Railroad Company—In Re Protection of Crossing at Burlington Street, Gloucester.

January 19th, 1915—Atlantic City Railroad Company ordered to erect and install standard crossing gates at the place where the tracks of that company cross Burlington Street, Gloucester, at grade, said gates to be operated continuously between the hours of 7:30 A. M. and 8:20 P. M.; company further ordered, during the hours such crossing gates are not operated, to reduce the speed of all movements over such crossing to six miles per hour.

Anita S. Watson vs. Hillcrest Water Company—In Re Certain Rules of the Company Alleged to be Unjust and Unreasonable.

January 29th, 1915—Hillcrest Water Company ordered to notify customer when water is to be shut off, unless conditions absolutely preclude such notice; to discontinue shutting off water at night for the purpose of making new connections or changes in the distribution system.

Proposed Increases in Rates by Pemberton and Hightstown Railroad Company—The Pemberton and Hightstown Railroad Company Filed with the Board Schedules of Passenger Rates, to Take Effect February 1st, 1915, Showing Increases Proposed in Existing Rates of Fare for Transportation of Passengers Between Stations in the State of New Jersey, and Showing Also Changes or Alterations in Existing Classifications and Withdrawals of Existing Rates.

January 29th, 1915—The Pemberton and Hightstown Railroad Company, pending hearing and determination in this proceeding, ordered to suspend all such increases in individual rates, joint rates, tolls, charges, as well as commutation, mileage and other special rates, and all changes or alterations in existing classifications, and all withdrawals of existing rates, in so far as the same apply to charges for intrastate transportation between stations in the State of New Jersey, as set forth or referred to in the schedules filed.

After hearing, the Board determined that the proposed increases would not be allowed.

Application—Standard Gas Company for Approval of an Issue of Bonds in the Amount of \$22,193.

February 9th, 1915—The Board issued a report which will be found in the section of this volume referring to issues of stock, bonds, etc.

Residents of Hightstown vs. Pennsylvania Railroad Company—In Re Proposed Discontinuance of Trains Nos. 351, 282 and 357 Through Hightstown.

February 15th, 1915—The Pennsylvania Railroad Company ordered to operate daily, except Sundays and holidays, a passenger train leaving Helmetta at 5:40 P. M., and arriving at Hightstown at 6:03 P. M., the said train to be run on the same schedule and to make the same stops as the train known as "Number 357," operating between Helmetta and Hightstown, and scheduled on the Pennsylvania Railroad Company's time-table in effect November 30th, 1913.

On April 23d, after re-hearing, the above was ordered *revoked*.

Application—Phillipsburg Horse Car Railroad Company for Approval of Increase of Capital Stock.

February 16th, 1915—The Board issued a report and certificate which will be found in the section of this volume referring to issues of stock, bonds, etc.

Borough of Glen Rock vs. Bergen Aqueduct Company—In Re Extension of Service.

February 23d, 1915—The Bergen Aqueduct Company ordered to comply with the ordinance of the Borough of Glen Rock, passed August 11th, 1903, and to conform to the duties imposed upon it thereby, and to make such extensions as are requested by S. Elizabeth Robinson, Phillip C. Wadsworth, Catherine A. Wadsworth and Hannah W. Robinson, and to install a fire hydrant in front of the property of Phillip C. Wadsworth and Catherine A. Wadsworth, upon the parties named above, and the Borough of Glen Rock, complying with the conditions prescribed in the ordinance mentioned herein, which relate to extensions of the distribution system of the company, and the installation of fire hydrants, which installation and extensions the Board hereby finds are requisite to the furnishing of adequate and proper service by said company.

Township of Middletown vs. Central Railroad Company of New Jersey—In Re Protection of Palmer Avenue, Keansburg.

March 2d, 1915—The Board concludes that conditions at the grade crossing at Palmer Avenue, where same is crossed by the tracks of the Central

Railroad Company of New Jersey, make it necessary for the protection of the traveling public at such crossing that, in addition to the present signs and automatic bell, a flagman to warn the public of approaching trains be stationed at said crossing from 7 A. M. to 7 P. M. of each day during the entire year.

Otto Sigrist vs. Public Service Gas Company—In Re Extension of Mains on Fisher Avenue, Newark.

March 2d, 1915—Complaint dismissed, without prejudice.

Dr. Hugo Alexander, of Hoboken, vs. New York Telephone Company—In Re Classification of Service Furnished to Physician, Company Charging a Business Rate While Complainant Maintains That He Should Be Given a Residence Rate.

March 11th, 1915—The Board finds and determines that where a physician maintains an office other than in his residence, according to the tariff filed, the telephone located therein is properly classified as a business telephone and should be charged for at business rates.

In the Matter of Increased Rates for Transportation of Passengers Between Points in the State of New Jersey.

Following the suspension of numerous increases in passenger rates proposed by the Pennsylvania, the West Jersey and Seashore, and other railroad companies, the Board, on March 12th, 1915, filed a report in which it was held that the railroad companies had not established the justice and reasonableness of the increases.

W. T. Porch, on Behalf of C. W. Duckworth, vs. West Jersey and Seashore Railroad Company—In Re Failure of the West Jersey and Seashore Railroad Company to Provide Shelter at Cooper Station on the Pennsgrove Branch of its Railroad.

March 23d, 1915—Complaint not being pressed, the same was dismissed.

A. C. Austin, of Hasbrouck Heights, vs. Hackensack Water Company—In Re Alleged Excessive Bill for Service.

March 23d, 1915—Complaint dismissed.

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Mrs. Herbert K. Ball, of Barrington, vs. Public Service Gas Company—In Re Extension of Gas Mains so as to Furnish Complainant's Residence with Gas.

March 30th, 1915—The Public Service Gas Company ordered to extend its mains from Clement's Bridge Road along Second Avenue, Barrington, a distance of three hundred and sixty feet, to the residence now occupied by Mrs. Herbert K. Ball, and to supply gas to such residence, and to the residence occupied by Mrs. Adeline Hook, along the line of such extended main.

New Jersey Automobile and Motor Club vs. Public Service Railway Company—Petition That Public Service Railway Company Be Ordered to Install A System on its Trolley Cars by Which the Occupants of an Automobile or Other Vehicle Following a Trolley Car May Receive Notice That it is About to Stop, Also In Re Stopping of Cars Southbound on Broad Street, in the City of Newark, at the Plaza Formed by the Junction of Broad, State and Plane Streets, about One Hundred and Thirty-five Feet North of the Delaware, Lackawanna and Western Railroad Elevated Tracks.

April 6th, 1915—Complaint dismissed.

Warren P. Munsell, of Princeton Junction, vs. the Pennsylvania Railroad Company—Petition that Railroad Company Be Directed to Erect a Fence Between Complainant's Farm and the Right of Way of the Railroad Company, Which Runs Along His Farm.

April 6th, 1915—Complaint dismissed.

Willett Lippincott et al. vs. Public Service Railway Company—Petition that the Company Be Directed to Allow a Lap Over on its Camden-Haddon Heights Line so that Only One Fare Shall be Charged to the Residents of Haddon Heights from Any Point Within the Borough to Any Other Point on the Line

April 6th, 1915—Petition dismissed.

Board of Education of High Bridge vs. Central Railroad Company of New Jersey—In Re Inadequacy of Train Service for High School Pupils.

April 6th, 1915—Petition dismissed.

H. T. E. Tieman, of Woodcliffe Lake, vs. Public Service Electric Company—In Re Extension of Service to House at Hillsdale Manor.

April 6th, 1915—The Board is of the opinion that if the Electric Company is assured an annual revenue of forty-five dollars and nine cents, it is

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the duty of the company to make the extension, and upon receipt by the Board of satisfactory evidence that suitable assurance has been made to the company of a gross revenue of forty-five dollars and nine cents per annum, an order will be entered requiring the extension to be made.

Complaints Were Made that the West Jersey and Seashore Railroad Company Operated Passenger Trains Between Camden and Atlantic City, and Camden and Cape May Not Provided with Drinking Water.

Investigation Shows that the Regular Passenger Trains are Supplied with Drinking Water, but that Steel Cars Ordinarily Used in Suburban Traffic and not Equipped with Drinking-Water Facilities are Used at Times to Make up in Whole or Part the Trains for Special Excursions.

The Board on April 6th, 1915, recommended that a water cooler or some device for holding water be placed in every third car of trains so made up.

Public Service Railway Company vs. West Jersey and Seashore Railroad Company—In Re Flagging Movements of Freight Trains Over Haddon Avenue at Line and Pine Streets, in the City of Camden.

April 6th, 1915—In view of the grade of the spur from the main line track to the street at Pine Street, and the lack of view at both Line and Pine Streets, by reason of physical structures, the Board is of opinion that movements of freight trains over Haddon Avenue, at the point mentioned, should be preceded by a flagman. In reaching this conclusion, however, the Board does not intend to indicate that the trolley company should be permitted to abate the taking of precautions necessary to insure the safe passage of its cars over the railroad tracks. It is the judgment of the Board that both of the carriers using the crossings are under duty to take precautions to avert accident, and that neither can rely entirely upon the other to prevent collisions.

Ocean County Gas Company—Issue of \$40,000 Bonds.

April 6th, 1915—The Board issued a report which will be found in the section of this volume referring to issues of stock, bonds, etc.

Bergen County Agricultural Society vs. Bergen Turnpike Company, Public Service Railway Company, Lessee—In Re Tolls Exacted by Bergen Turnpike Company, Owner, and Public Service Railway Company, Lessee, for the Use of the Turnpike by Horse-drawn Vehicles.

April 12th, 1915—Petition dismissed.

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John M. Scoble vs. New York, Susquehanna and Western Railroad Company—In Re Stational Facilities at Hanford, New Jersey.

April 13th, 1915—Petition dismissed with respect to provision of path or proper means of access to or egress from the station, it appearing that the Inspector's recommendations for light in front of station, lengthening and widening of platform, and provision of better waiting-room facilities for passengers who remain in coaches for trains had been complied with.

Township Committee of the Township of Cranford—Alteration of the Crossing at Grade of the Tracks of the Central Railroad Company of New Jersey and Union Avenue, Cranford.

Following hearings on this petition the Board, on April 16th, 1915, ordered the Central Railroad Company of New Jersey to substitute for the grade crossing complained of a crossing not at grade, in accordance with a plan approved by the Board and made part of its order.

Board of Finance of the City of Paterson—Alteration of Crossings at Grade of Certain Streets and Avenues in the City of Paterson and the Tracks of the Erie Railroad Company.

This petition was made the subject of a number of hearings, following which the Board, on April 20th, 1915, ordered the crossings at grade to be altered, by the substitution of crossings not at grade, in accordance with a plan prepared by the engineering department of the Board, which plan was made part of the Board's order.

C. A. Nutting et al. vs. Public Service Railway Company—In Re Rate of Fare on Bloomfield Avenue Line.

April 27th, 1915—Complaint dismissed.

Civic Association of Montville vs. Delaware, Lackawanna and Western Railroad Company—In Re Approaches to the Railroad Station at Towaco from the South Side of the Tracks, and to the Post Office from the North Side of the Tracks, and Requesting that Subway be Erected at the Station Providing a Passageway from the South Side of the Tracks to the Station.

April 27th, 1915—The Board having no authority to make an order respecting a division of expense as between the parties to this proceeding, recommended that a subway be constructed at the old Glenview Road crossing, and the expense borne by arrangement between the parties hereto.

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William Flemer, Inc., vs. West Orange Water Company—In Re Exaction by Company of Payment by Complainant of Unpaid Account of Former Owner of Premises Before Furnishing Service to Said Premises.

April 30th, 1915—Complaint dismissed by the Board with recommendation for repayment, as restitution of payment wrongfully exacted can be compelled only through the courts.

George S. White vs. New Jersey and Pennsylvania Traction Company—Application for Approval of New Grade Crossing.

May 11th, 1915—Petition dismissed.

Trenton, Lakewood and Seacoast Railway Company—Issue of \$200,000 Stock and \$320,000 Bonds.

May 26th, 1915—The Board issued a report which will be found in the section of this volume referring to issues of stock, bonds, etc.

National Turn Verein vs. New York Telephone Company—In Re Rate Charged for Semi-Public Pay Station.

May 28th, 1915—Petition dismissed, without prejudice to a reconsideration of the portion of the schedule involved in this proceeding at any time in the future.

Delaware and Atlantic Telegraph and Telephone Company—Application for Approval of Ordinance Enacted by the Council of the Borough of Alpha December 28th, 1914.

June 1st, 1915—Board withheld its approval of the ordinance and the petition was dismissed.

Board of Trade of Irvington vs. Lehigh Valley Railroad Company—In Re Passenger Train Service on Irvington Branch.

The Lehigh Valley Railroad Company was, on January 5th, 1915, ordered to operate two trains in the mornings between Irvington and West Elizabeth, and a return train in the evenings leaving West Elizabeth.

June 2d, 1915—The Board, after hearing and consideration of evidence as to use of the trains, permitted the Lehigh Valley Railroad Company to withdraw the same.

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Joseph F. Murphy, of Long Branch, vs. Tintern Manor Water Company—In Re Discontinuance of Service on Account of Nonpayment of an Alleged Delinquent Bill, Which Bill Was Due from a Former Tenant, the Complainant Having a Deposit with the Water Company.

June 4th, 1915—The Board is without power to require a company to make refunds, and on this account no order was entered. The Board, however, recommended that the company refund to Mr. Murphy the amount of the bill paid by him in liquidation of a debt of a former tenant.

New Egypt Light, Heat and Power Company—Application for Rehearing in the Matter of Certain Rates and Schedules for Electric Service as Fixed by the Board in its Report of September 15th, 1914.

June 4th, 1915—The Board found and determined that a lower base rate combined with a quantitative discount would apparently give the best results to the company and the customers, and permitted the filing of the schedule in accordance with its conclusion.

Seashore Gas Company of Sea Isle City—Application for Permission to Increase its Rates from \$1.25 per Thousand Cubic Feet to \$1.75 per Thousand Cubic Feet.

June 8th, 1915—The Board concluded that the company had not justified an increase to \$1.75, but had shown warrant for an increase to \$1.50 per thousand cubic feet. The application, therefore, was denied, with leave to file a schedule fixing a rate of \$1.50 per thousand cubic feet.

James L. Myles vs. Atlantic City Railroad Company and Public Service Railway Company—In Re Bridge on King's Highway, at Haddon Heights; the Public Service Railway Company Refusing to Carry Footway Over the End of the Bridge to the Pavement on the North Side of the Trolley Tracks.

June 8th, 1915—On account of the question of jurisdiction of the Board in the matter, the complaint was dismissed, with leave to the Board of Freeholders of the County of Camden to make future application to this Board for relief if such application proves necessary.

Hoboken Manufacturers' Railroad Company—Application for Permission to File a New Tariff Carrying a Charge for Placing Cars of Ice and Coal on Private Switch or Siding.

June 8th, 1915—Permission to charge the increased rate denied.

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New York Telephone Company—Application for Approval of Ordinance of the Township of Piscataway, Middlesex County, New Jersey, Adopted December 1st, 1914.

June 8th, 1915—The Board withheld its approval of the ordinance.

Borough of Beach Haven—Application for Permission to Extend Centre Street Over Tracks of the Long Beach Railroad.

June 10th, 1915—Application dismissed, without prejudice to the filing of a new petition when Dock Road is vacated over the tracks.

Fidelity Land Company—Application for Permission to Extend Pennsylvania Avenue Over the Tracks of the Barnegat and Beach Haven Railroad.

June 10th, 1915—Application dismissed.

P. B. Meerbott, of Secaucus, vs. New York Telephone Company—In Re Alleged Excessive Rate Charged for Direct Line Service to Residence in Secaucus.

June 10th, 1915—Complaint dismissed.

Rockland Electric Company—Application for Permission to File New Schedule of Rates.

June 14th, 1915—The Board found and determined that a rate for metered lighting service of thirteen cents per kw. hr. less one cent per kw. hr. for payment within fifteen days is a just and reasonable rate, and the schedule filed may be put into effect.

Public Service Railway Company—Application for Approval of Ordinance of the Borough of Highland Park, Passed July 13th, 1914—In Re Double Tracking on Raritan Avenue.

June 14th, 1915—The Board decided, Commissioner Treacy dissenting, that the substitution of a double track street railway for a single track from a place where such double track is already extended for a distance of 1,810.42 feet was an act legislative in character and not requiring compliance with the provisions of the Limited Franchise Act.

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Lawton M. Burdick vs. Tintern Manor Water Company—In Re Discontinuance of Service on Account of Complainant Not Paying Bill for Service to Entire Building, When He Only Occupied One-half the Building.

June 14th, 1915—The Board decided that the tenant could not be held liable for service furnished prior to August 13th, 1914, on which date complainant paid the company a sum equal to one-half the annual charge for the entire building.

Morris County Traction Company—Derail at Summit, New Jersey. The Board's Inspector Recommended Derail be Discontinued, and "Stop" Sign Installed. The Recommendation was Opposed by the Mayor and Council of the City of Summit.

June 15th, 1915—The Board is of the opinion that a derail, in its present location, serves the good purpose of bringing the car to a stop, or to a condition of control, which is proper, if not necessary, on the incline from the bridge to the boulevard. The recommendation of the Inspector was disapproved.

Dr. J. L. Lane vs. Tuckerton Water Company—In Re Unsatisfactory Service to House and Barn Owing to Service Pipe Being Clogged.

June 15th, 1915—The Board recommended that the respondent clean the connection at the main with the service pipe running to petitioner's house and barn.

Borough of Seaside Heights vs. Philadelphia and Long Branch Railroad Company—Application for Approval of New Grade Crossing on Hamilton Avenue.

June 22d, 1915—The Borough not having shown a present urgent need for the crossing for its own advantage, the petition was denied.

Nixon Piano Company vs. Central Railroad Company of New Jersey—In Re Rejection of Claim for Repairs to Player-Piano Damaged in Transit, on Account of Complainant not Submitting Written Claim to the Railroad Company Within Four Months After the Delivery of the Player-Piano.

June 22d, 1915—Complaint dismissed.

Oscar Barnett Foundry Company vs. Lehigh Valley Railroad Company—In Re Claim for Castings Broken in Transit Between Irvington and Garwood, New Jersey.

June 22d, 1915—Complaint dismissed.

Application—Frederic V. Pitney, Receiver of the New Jersey and Pennsylvania Railroad Company, for a Compromise and Settlement of the Arrears of Taxes Due from Said Railroad Company to the State of New Jersey.

June 28th, 1915—The Board found and determined that it is in the public interest that there should be a compromise and settlement of the taxes due the State, and fixed the sum which should be paid, and recommended that the State remit all taxes and interest in excess of the sum fixed, provided said sum be paid to the State on or before November 1st, 1915. The report of the Board was sent to the Governor, who approved same July 1st, 1915.

City of East Orange—Application for Permission to Establish a Crossing at Grade Over the Tracks of the Delaware, Lackawanna and Western Railroad Company at North Eighteenth Street.

July 6th, 1915—Application dismissed.

Borough of Fair Haven vs. Monmouth County Electric Company—In Re Service on Fair Haven Division.

July 6th, 1915—The Board recommended (1) that the extra car known as the Fair Haven Tripper shall be operated on the eleven o'clock run Saturday night; (2) that whenever baseball games or other public events occur the service be augmented by the addition of at least one car; (3) that an Inspector be stationed at the Red Bank depot of the New York and Long Branch Railroad from five o'clock P. M. until the arrival of 6:38 P. M. train from New York (Saturdays and Sundays excepted), and that the schedule be arranged so that the cars will leave after the arrival of the various commuter trains from New York.

Raritan River Railroad Company—Application for Authority to Issue \$210,000 of Additional Capital Stock.

July 12th, 1915—The Board issued a report which will be found in the section of this volume referring to issues of stock, bonds, etc.

Ocean County Gas Company—Application for Approval of Issue of \$20,000 Stock, and Approval of the Transfer of \$12,680 of Stock of Tuckerton Gas Company.

July 12th, 1915—The Board issued a report which will be found in the section of this volume referring to issues of stock, bonds, etc.

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Andover Gardens Company vs. Delaware, Lackawanna and Western Railroad Company—Petition for Order Directing the Railroad Company to Connect with a Private Siding on Complainant's Property.

July 12th, 1915—Complaint dismissed.

Borough of Farmingdale vs. Farmingdale Lighting Company—In Re Service.

July 12th, 1915—The Board recommended the placing by the Farmingdale Lighting Company of a transformer of sufficient capacity near the outskirts of the Borough and the installation of more small transformers throughout the town to reduce the losses in secondary lines. The Board further recommended that a regulating transformer be installed at or near Freehold to counteract the effect of the loss in the circuit from Englishtown, and the loss from Freehold to Farmingdale.

While Investigating the Service Furnished by the Farmingdale Lighting Company, it was Learned that Widely Different Discounts were Allowed, Discriminating in Discounts in Favor of its Officers and Employees, on the Ground they Receive no Salary or Other Compensation.

July 12th, 1915—The Farmingdale Lighting Company ordered to discontinue the discrimination in rates in favor of directors, officers and employees of the company.

The Bergen Turnpike Company and Public Service Railway Company, Lessee of the Turnpike Company, Allege that a Situation of Danger Exists at the Points Where the Turnpike Crosses the Tracks of the New York, Susquehanna and Western Railroad Company and the Tracks of the West Shore Railroad Company, in the Village of Ridgefield Park, and Ask the Board to Initiate a Proceeding for the Elimination of Such Grade Crossings.

July 12th, 1915—The Board announced the following: "We do not pass upon the question of danger, or whether the Board should take jurisdiction under the law. We decline to move in the matter, solely because we believe the public interest is better served by the devotion of our time and energies and those of our limited staff, to situations in other localities that seem to us to more imperatively require action."

Farmers' Transportation Association, Inc., of Burlington County, vs. Pennsylvania Railroad Company and Adams Express Company—Petition for Special Train Service to Afford Early Deliveries of Perishable Products at Jersey City.

July 12th, 1915—The Board dismissed the complaint with the recommenda-

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tion to the Pennsylvania Railroad Company that it make a particular effort to maintain the schedule of the train regularly used by the petitioners.

Bell Electric Motor Company vs. Public Service Electric Company—In Re Threat to Discontinue A. C. Service Under Motor Contract on Account of Generation by Complainant of Direct Current by Driving Direct Current Generator with A. C. Motor.

July 27th, 1915—Complaint dismissed.

Hearing on the Board's Own Motion on Changed Schedule of the Pennsylvania Railroad Company, Effective June 30th, 1915, on Points Between Trenton and Long Branch and Intermediate Stations.

July 27th, 1915—Board announced that it did not appear that it would be justified in finding that the railroad company failed to provide adequate service between the points under consideration on its summer schedule then in effect.

Chester L. Hall et al. vs. Erie Railroad Company—In Re Changes in Train Service on the Greenwood Lake Division.

July 27th, 1915—The Board issued a report suggesting a readjustment of the schedule, and on August 17th, 1915, the Board ordered the Erie Railroad Company (1), to stop at Pequannock the train now listed on its schedule as No. 518 regularly each day of the operation of said train; (2), to run through to Little Falls, instead of Midvale, the train listed on the schedule as No. 501, leaving Jersey City at 11:45 P. M., each day of the operation of said train; (3), to run through to Midvale, instead of Little Falls, the train listed on the schedule as No. 503, leaving Jersey City at 12:45 P. M., each day of the operation of said train; (4) to rearrange its schedule of passenger train movements so that the train now listed on its schedule as No. 529, leaving Jersey City at 5:34 P. M., will run regularly on each day of the operation of said train to Essex Fells, instead of Midvale, and stop regularly each day of such operation at North Newark; and (5), to run to Midvale the train now listed on the schedule as No. 585, leaving Jersey City at 5:45 P. M., each day of the operation of said train. On September 21st, 1915, the Board ordered that sections 4 and 5 of said order of August 17th be amended to read as follows: (4), to rearrange its schedule of passenger train movements so that the train now listed on its schedule as No. 529, leaving Jersey City at 5:34 P. M., will run regularly on each day of the operation of said train to Essex Fells, instead of Midvale; (5), to run to Midvale the train now listed on the company's schedule as No. 585, leaving Jersey City at 5:45 P. M., and stop regularly each day of such operation at North Newark.

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In Re Proposed Discontinuance by the Trenton and Mercer County Traction Corporation of the Sale of Tickets for Transportation on Street Railways Operated by it at the Rate of Six Tickets for Twenty-five Cents.

August 17th, 1915—The Board entered an order suspending the increase in the existing individual and special rate, and the change or alteration of the existing classification, as proposed by the company, and fixed a time for hearing.

December 13th, 1915—The Board found and determined that the proposed withdrawal of the sale of six tickets for twenty-five cents by the Trenton and Mercer County Traction Corporation, and the increase, change or alteration in charge, rate or classification which would result therefrom, would not be just and reasonable, and disapproved the same.

Knickerbocker Ice Company, a New Jersey Corporation, Ice Manufacturing Company and Interborough Ice Company, New York Corporations—Application for Approval of Merger of the Three Corporations.

September 20th, 1915—The application was dismissed.

Several Complaints vs. The Morris County Traction Company—Regarding the Operation of Cars on the Morris Turnpike Between Elizabeth and Springfield Junction.

September 21st, 1915—The Morris County Traction Company ordered to put its tracks along Morris Avenue, between Union Center and Springfield Junction, in proper operating condition, and operate its eastbound cars on the eastbound track, and its westbound cars on the westbound track between said Union Center and Springfield Junction, and, in order to accomplish this operation, to construct a crossover in Morris Avenue east of Main Street in the Township of Springfield. The Board recommended that the powerful trolley lights now in use on the cars be dimmed on all public highways.

City of Long Branch vs. Monmouth County Electric Company—Condition of Road.

September 21st, 1915—Company ordered to place the brick pavement in Branchport Avenue, Long Branch, between its rails and eighteen inches on either side thereof in safe and proper repair for public travel over it from a point opposite the southerly line of Russell Avenue to a point opposite the northerly line of Hampton Avenue.

Borough of Lavallette—Application for Approval of Crossing of Tracks of the Pennsylvania Railroad Company at Grade, at President Avenue.

September 28th, 1915—Application dismissed.

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Town of Kearny vs. Erie Railroad Company—In Re Protection of Grant Avenue Crossing.

September 28th, 1915—The Erie Railroad Company ordered to protect the crossing at Grant Avenue, Kearny, where the tracks of the Newark branch of said company cross said avenue at the same level, covering all train movements between the hours of 7 P. M. and 1 A. M., by a flagman, to give warning of the approach of any and all locomotives, cars or trains of cars to be operated across Grant Avenue on the said Newark branch of the Erie Railroad Company, or by maintaining and lowering during the hours aforesaid, crossing gates upon the approach of any and all locomotives, cars or trains of cars.

The Delaware and Atlantic Telegraph and Telephone Company—Application for Approval of an Ordinance of the City of Absecon, Enacted May 26th, 1915.

October 5th, 1915—The Board withheld its approval of the ordinance. The Board, however, suggested that if the Delaware and Atlantic Telegraph and Telephone Company or the city authorities desire a further hearing of the matter the Board would afford such opportunity.

Hudson and Manhattan Railroad Company—Petition for Approval of the Issuance of \$615,500 Face Value of its First Lien and Refunding Mortgage Bonds.

October 11th, 1915—The Board issued an order, which will be found in the section of this volume referring to issues of stock, bonds, etc.

Inspector's Report on Condition of Track of Trenton and Mercer County Traction Corporation on West State Street, in the City of Trenton.

October 11th, 1915—In view of the admission by the corporation that reasonable cause for complaint existed as to the condition of its track on West State Street between Willow and Calhoun Streets, and of its assurance that it would immediately begin and promptly finish work which it claimed would remove such cause, the Board announced that it would not enter any order in this matter. "Should the corporation fail to do the work as proposed without delay, or should it appear that this work does not fulfill the corporation's claims, the matter will be reopened and further consideration given to the question of requiring replacement of the track."

Lehigh Valley Railroad Company—Application for Permission to Change the Location of Shelter Shed Near South Plainfield to Peny's Crossing, a Distance of About Two Thousand Feet South from its Present Position.

October 19th, 1915—The Board granted the permission asked for.

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Manufacturers and Property Interests Association et al. vs. Pennsylvania Railroad Company and Hudson and Manhattan Railroad Company.

October 25th, 1915—Petition dismissed (by majority report, Commissioner Treacy filing a dissenting opinion).

Application of petitioners for rehearing granted.

Thomas F. Logan et al. vs. The Central Railroad Company of New Jersey et al.—In re Délay in Shipments of Milk Between Pennington and Jersey City.

October 26th, 1915—The Central Railroad Company of New Jersey advised to take such steps as may be necessary to insure the arrival of train No. 50 at Jersey City daily, so that the milk may be placed at the milk platform not later than 11 P. M.

Bound Brook Water Company—Petition for Permission to File New Schedule of Rates.

October 26th, 1915—The Board fixed a rate schedule, to go into effect with the quarter commencing January 1st, 1916, and recommended its adoption.

In Re Inspector's Report on Bridge Over Woodbridge Creek, Maurer, in Middlesex County, New Jersey.

October 28th, 1915—The Public Service Railway Company ordered to stop the operation of its cars over said bridge, pending repairs to the same to be approved by the Board.

In Re Proposed Increase, Change or Alteration in Charges by the Wildwood Gas Company, by Putting Into Effect a Rule Which Would Provide for a Charge of One Dollar to Each Customer for Whom Gas is Turned On, and an Additional Charge of One Dollar to Each Customer Using Gas and to Whom the Supply is Discontinued.

November 1st, 1915—The Board suspended, until February 1st, 1916, the said increase, change or alteration.

In Re Investigation of the Question Whether the Wildwood Gas Company Furnishes Safe, Adequate and Proper Service.

November 1st, 1915—The Board initiated proceedings for the purpose of determining whether the Wildwood Gas Company gives to its customers, to whom it proposes to discontinue the supply of gas, reasonable notice.

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In the Matter of Filing the Report of Finances and Operations by the Patrons Telephone Company for the Year Ending December 31st, 1914.

November 5th, 1915—The Patrons Telephone Company ordered to file its report with the Board.

In Re Discontinuance by Public Service Railway Company of the Sale of Tickets at a Reduced Rate for Transportation of Pupils in Attendance at and Traveling to and from Schools Over Its Several Lines.

November 9th, 1915—The Board found and determined that the increase, change or alteration which would be effected by the discontinuance of the sale of tickets for the transportation of pupils traveling to and from school over the lines of the Public Service Railway Company would not be just and reasonable, and disapproved the same.

Borough of Butler—Application for Approval of an Ordinance of the Township of Pompton, Passed July 26th, 1915.

November 9th, 1915—The Board withheld its approval of the ordinance and the application was dismissed.

Receiver of the Newton Gas and Electric Company—Petition for Approval of New Schedule of Rates for Electricity.

November 26th, 1915—The Board disapproved of the proposed increase in rates. In the judgment of the Board the problem admits of but one solution, and that is the sale of the property in Chancery proceedings.

Albert J. Glenum, of Barrington, vs. Public Service Gas Company—In Re Refusal to Extend Service.

December 6th, 1915—The Board ordered the Public Service Gas Company (upon the said Albert J. Glenum entering into a written contract to afford the said company from the sale of gas to complainant's premises, business to the extent of \$24 per annum, and upon the production by complainant to the company of a plan or statement by the proper municipal authorities indicating the official established grade of Barrington Avenue) to establish, construct, maintain and operate such extension of its existing facilities as is necessary in order that the premises of Albert J. Glenum may be supplied with gas. The Board further ordered the Public Service Gas Company, upon the completion of such extension, to supply Albert J. Glenum with gas at the same rate and under the same conditions that other consumers of gas residing at premises in Barrington are supplied.

Mrs. E. E. Whitney, of Delawanna, vs. Yantacaw Water Company—In Re Insufficient Supply of Water to Houses Owned by Complainant.

December 7th, 1915—The Yantacaw Water Company ordered to supply water to the house of Mrs. E. E. Whitney on Delawanna Avenue, under such pressure that there will always be an adequate supply at the fixtures on the second floor of said house.

Dr. Edwin Betts, of Newark, vs. Proprietors of the Morris Aqueduct—Alleged Insufficient Water Supply on the Second Floor of Complainant's Residence at Morris Plains Due to Lack of Pressure.

December 7th, 1915—Complaint dismissed.

Samuel M. Gilmore, of Hackensack, vs. Hackensack Water Company—In Re Cost of Replacing Service.

December 7th, 1915—The Board determined that the practice of the company, requiring the consumer to pay for the installation of service pipe within the public streets and the stopcock should be disapproved as an improper and unreasonable charge.

New Jersey and Pennsylvania Traction Company—Application for Approval of Proposed Increased Rates for the Transportation of Passengers Between Trenton and Princeton from Fifteen to Twenty Cents, with Corresponding Increases for Intermediate Points.

December 14th, 1915—The Board disapproved the proposed increase in rates.

Borough of Red Bank vs. Monmouth County Electric Company—In Re Failure to Keep Rails and Roadbed in Safe Condition.

December 27th, 1915—The Board ordered the Monmouth County Electric Company—

1. To repair all joints in the track located in Monmouth Street between Broad Street and the crossing of the New York and Long Branch Railroad;
2. To replace all decayed ties on said Monmouth Street, between Broad Street and the crossing of the New York and Long Branch Railroad, with new ties;
3. To replace and repair broken or worn out pavement between its tracks in Broad Street, having particular regard to the three places where special work, consisting of frogs and switches, is installed;
4. To replace and repair all broken and worn out pavement between its tracks in Monmouth Street from Broad Street to the crossing of the New York and Long Branch Railroad;

5. To restore and replace all pavement in Broad and Monmouth Streets (disturbed by said company in the making of any and all repairs or improvements), in a good and workmanlike manner, with the same kind and quality as the existing pavement in said streets.

David C. Leonard vs. Monmouth County Electric Company—In Re Service.

December 27th, 1915—The Board's report, in the matter of the Borough's complaint, disposes of this complaint.

Informal Complaints.

The following complaints were handled informally, usually by reference to inspectors who were instructed to investigate the complaints with a view of obtaining, if practicable, satisfactory adjustment of the same. In all cases where informal treatment of complaints fails to bring such adjustment, the complaints are placed on the calendar for formal hearing, if the complainants so desire or if there appears to be some principle in dispute on which formal ruling should be made.

George O. Adams vs. Central R. R. and Pennsylvania R. R. Cos.

Complaint was made covering rates on brick from Raritan River points to Ocean City via Central Railroad, Atlantic City Railroad, and Pennsylvania Railroad. Complainant alleged that the tariff on brick from all points on the Raritan River Railroad to Ocean City, whether by the Pennsylvania Railroad or the Reading, is \$1.35 per ton, and the tariff from the same shipping points to Atlantic City over the same roads is \$1.00 per ton.

Investigation showed that a difference of 10 cents was charged on certain classes of brick from Raritan River Railroad points to Atlantic City and Ocean City, and the only rate in effect to Ocean City on common brick was \$1.42 while the rate on common brick is \$1.05 to Atlantic City.

The Board's Inspector took this up with the railroad with the result of a reduction of 27 cents in the rate to Ocean City, making the difference 10 cents to equalize with the rates on other classes of brick.

This adjustment was satisfactory to complainant.

Mark W. Adams vs. Ocean County Gas Co.

Complainant alleged that at the end of the season the gas company was notified to shut off supply of gas, that this was done, but later the gas company again turned on the gas for another party without notifying the owner of the property of the fact. The result was that when a tenant took possession of the premises the gas was still turned on. The tenant used gas and the bill was rendered to the complainant, who owned the property. This bill was paid by the complainant, who was reimbursed by the tenant, but complainant claims to have notified the gas company that he would

be responsible for no more bills, and that the company had better secure a deposit from the tenant.

The tenant failed to pay later bills and company held the owner responsible for same.

Investigation disclosed that there had been a misunderstanding in the office of the gas company, the company having understood that complainant would be responsible for all of tenant's bills.

The Inspector recommended that in view of the misunderstanding, complainant take the responsibility for half the amount of the unpaid bills while the company stand for the other half.

L. R. Alexander vs. Public Service Electric Co.

Complainant alleged that an electric light bill became due in his absence, and that company's collector was advised that bill would be paid on return of complainant. In the meantime company cut the wire connection on the outside of the premises. When it was found that the connection was cut, half the amount of the bill was promptly paid. During the evening a visitor finding the wires cut hooked the same together, in order to get light in the livery. Upon return of complainant and payment of balance of bill a representative of the company came to connect the wires and found same had already been connected. This was reported to the office and a bill was rendered with an extra charge of \$5, estimate for current taken after meter was cut off.

Investigation showed that the charge appeared to be arbitrary inasmuch as the meter was never disconnected, and the Inspector of the Board recommended that the \$5 be refunded to complainant.

The recommendation was accepted by the company.

William B. Allen vs. Ocean City Sewer Co.

Complaint was made alleging that owing to the nuisance of foul odor arising from the sewer disposal plant in Ocean City, complainant was unable to either rent or sell property which he owns in the vicinity of this disposal plant.

Investigation was made by the Board's Inspector in conjunction with an Inspector from the State Board of Health and Mr. Allen's son. It was agreed that the nuisance complained of did not come from the disposal plant, but appeared to come from the pumping plant.

The Inspector recommended that certain changes be made in the pumping apparatus which would result in avoidance of the foul odors complained of.

These recommendations were accepted by the company.

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**Ansonia Forest Products Co. vs. Delaware, Lackawanna and Western
R. R. Co.**

Complaint was made alleging that the rate of \$1.58 charged by the Delaware, Lackawanna and Western Railroad Company for shipments of blighted chestnut cord wood from Bernardsville to Newark, Pennsylvania Railroad delivery, was excessive.

The Inspector reported that at the point where the Delaware, Lackawanna and Western Railroad Company's cars are turned over to the Pennsylvania Railroad, the cars are switched and hauled to destination by the Pennsylvania Railroad, for which movement the portion of rate received by the Pennsylvania Railroad should be somewhat in excess of that of the Delaware, Lackawanna and Western Railroad.

The Inspector took this matter up with the railroad companies with the result that an agreement was reached between the Delaware, Lackawanna and Western Railroad Company and the Pennsylvania Railroad Company to make a joint rate of \$1.05 per net ton instead of \$1.58, the amount of the previous rate.

This adjustment was satisfactory to complainant.

C. C. Anthony vs. Elizabethtown Gas Light Co.

Complainant alleged that the Elizabethtown Gas Light Company was not allowing the proper lapse of time between readings of prepayment meters, also that company threatened to remove meter, claiming that ten cents was still due to make up the minimum charge for the month.

Investigation by the Board's Inspector showed that the company makes collections from prepayment meters every two months, and readings are usually made about the same time each month, making a total of six readings and six collections, the total minimum for the year being \$3. The Inspector reported that collections made from complainant's meter have in each case been for a period shorter than two months, so that it would appear that the company had really five months' minimum charges, while the meter was in service only four and one-half months.

The Inspector recommended that complainant be credited with one-half of the month's minimum charge.

The recommendation was accepted by the company.

Leslie R. Asay vs. Public Service Electric Co.

Complainant alleged refusal to supply service at his residence in Burlington unless he pays a deposit.

Investigation was made by the Board's Inspector, which showed that the estimated revenue from this extension would warrant the ordering of same, and the Inspector recommended that the extension be run free of charge to complainant.

The recommendation was accepted by the company.

Board of Commissioners of Asbury Park vs. Atlantic Coast Electric Light Co.

Complaint was made alleging that the street lighting service in Asbury Park was poor and that it was generally believed that the service contracted for was not given with regard to the street lighting.

The Board's Inspector reported that the general street lighting was good, but that the poor service was caused by the individual lamps.

The Inspector recommended that conditions be improved by better care being taken with regard to the cleaning and repairing of the individual lamps, keeping the same always in perfect working condition

The recommendations were accepted by the company.

F. L. Ashdale vs. New Jersey Water Co.

Complainant alleged that application was made to the New Jersey Water Company for an extension of service to supply a house which complainant was about to build. The extension was made to run past complainant's house and beyond for a distance of 100 feet. Complainant's house was not occupied until some time later, when he made application to the Water Company for connection with the extension. This was refused unless complainant paid for the extension or a charge of \$5.00 for use of water during the building of the house.

The Board's Inspector reported that according to the franchise granted by the Borough of Oaklyn, and according to the agreement of the Water Committee of the Borough, the company is required to extend its mains provided there is a return of 15 per cent. on the investment of the capital on any extension. It was also reported that the extension was made before the building was finished, but that complainant carted all the water used to finish his house. The company claimed that it did not request the complainant to pay for the extension of the main but asked for the payment of the tap and the service from the main to the curb (a charge of \$10.00), or else payment of the building charge of \$5.00.

The Inspector reported that as the capital invested on the extension amounted to \$100, it would seem that \$5.00 is a reasonable charge, as it apparently would have been consistent with its franchise agreement for the company to have required payment of \$30.00 for the two years this capital was invested without any returns.

F. L. Ashdale vs. Public Service Gas Co.

Complainant alleged that application to the Public Service Gas Company to extend service to supply complainant's house was refused.

The Board's Inspector reported that to supply complainant's house with gas it would be necessary to extend the existing mains for a distance of 252 feet, and only one house could be served from this extension. It was

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also stated that the company would agree to make this extension under its regular refund agreement plan, provided the complainant would pay a deposit of \$80.00, which deposit would be returned to him at the rate of \$50.00 per house connected to the extension. The opinion was expressed that the cost of the extension was too large to justify the Board in ordering the extension until other customers may be served from the same line, but it was recommended if the customers who may now be served from this extension would assure a revenue of \$28.00 per annum that the extension be made.

Christopher Ashworth vs. Sussex Telephone Co.

Complainant alleged that he was deprived of service at his hotel in Branchville for a period of about five or six weeks, for which time he made a deduction from the bill rendered him. The Sussex Telephone Company therefore discontinued service to Mr. Ashworth.

The Board's Inspector reported that on account of heavy storms all trunk lines were out of service from December 7th to December 20th, when trunk service was restored to Newton and to all points reached by the Bell lines and that where individual customers were deprived of service due to interruption of their individual lines that adjustments and rebates were made in each case. It was also reported that service was maintained continuously at the Branchville switchboard during this period in December, giving service to all of the business telephones, of which complainant's telephone was one.

The Inspector reported as his conclusion that Mr. Ashworth was not justified in making any deduction from the flat rate charged him for telephone service.

Charles R. Bacon vs. Public Service Railway Co.

Complaint was made alleging poor service on the night cars from Camden to Haddonfield, the traffic being subordinated to the carrying of newspapers.

Investigation by the Board's Inspector showed that while a shorter headway is not necessary, there was no doubt that the existing headway should be properly maintained. An extra car was put on schedule as a special newspaper car, which relieved the regular cars to great extent. The Inspector recommended that this extra car be permanently retained and that it leave the Pennsylvania Ferry after the arrival of the 3:30 boat from Philadelphia.

The recommendation was accepted by the company.

John Ballenger vs. Pitman Water Co.

Complaint was made alleging excessive bills, stating that after much correspondence with the Pitman Water Company complainant was notified that if bill was not paid within a certain number of days service would be discontinued.

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The meter was sent to a laboratory for testing, and the same found to be registering fast beyond allowable limits.

The Inspector recommended that a rebate be made to the customer in accordance with the amount the meter registered fast.

This recommendation was accepted by the company.

Paul H. Barnes vs. West Jersey and Seashore R. R. Co.

Complainant alleged a delay at Millville in making train connections between Millville and Cape May and on the Maurice River Branch.

The Inspector reported that the schedule of train service has been planned to accommodate passenger travel to the greatest possible extent, limiting delays of trains at junction points to the minimum; and to relieve one point by reducing the connecting time of trains would force a corresponding delay at another, or possibly several junction points.

The Inspector expressed doubt whether a reduction in the connecting time of trains at Millville could be afforded without interference with schedules which would occasion delays at other points and affect adversely a far greater number of passengers than may be now inconvenienced by the delays at Millville.

Oscar Barnett Foundry Co. vs. Lehigh Valley R. R. Co.

Complainant alleged that the Lehigh Valley Railroad Company refused to pay his claim for damaged castings broken in transit. The company's refusal was based on the ground that complainant failed to notify the railroad company of an intention to make claim in accordance with conditions on the bill of lading.

Investigation showed that this complaint could not be adjusted between the company and complainant, and a date was set for hearing, after which a report was made dismissing the complaint on the grounds found in the case of Nixon Piano Company against the Central Railroad Co. of N. J. (Vol. III N. J. P. U. C. Reports, p. 593.)

William D. Barrett et al. vs. West Jersey and Seashore R. R. Co.

Complainant alleged that the railroad company was moving its tracks in such a way as to block a driveway which is the property of the railroad company so that the public would be unable to drive up to cars to load and unload.

Investigation showed that the company has acquired the property in question, and any remedy which the complainant might have would be a matter which would be within the province of a civil court to determine.

Barrington Board of Fire Commissioners vs. New Jersey Water Service Co. and Centre Township Water Co.

Complaint was made alleging that the Town of Barrington was unable to get water service from either of the above companies.

It was reported by the Board's Inspector that the Centre Township Water Company had never received a franchise which was accepted legally, and that the New Jersey Water Service Co. was the only company which could make, and was financially able to make, the extensions for service in Barrington.

The Inspector recommended that extensions of the necessary mains throughout Barrington, the layout for which had been generally agreed upon between the company and the Fire Commissioners of Barrington, be made.

The recommendation was accepted.

William E. Bates vs. Erie R. R. Co.

Complaint was made regarding train service on Saturdays and evenings, asking that express trains stop at Waldwick in addition to those now making the stop.

It appeared that to make the stop at Waldwick would necessarily lengthen the schedule of the express service, and as the service at Waldwick was regarded by the Inspector of the Board as reasonably adequate, no recommendation was made in his report.

E. J. Bartlett vs. Public Service Gas Co.

Complainant alleged refusal to supply service at his residence in Moorestown.

Investigation by the Board's Inspector showed that the extension was too large to justify the Board in ordering it until other customers could be served from the same line. The Inspector recommended that if the customers who could be served from the proposed extension would assure a revenue of \$33 per year the extension be made.

The recommendation was accepted by the company.

O. H. Bauer vs. Central R. R. Co. of N. J.

Complainant alleged that conditions at the Matawan station, where passengers traveling from New York must transfer for shore points, were dangerous, also that there was not shelter for passengers in bad weather. Complaint was also made regarding the transfer of so much baggage, thereby making the train late in leaving Matawan.

The Board's Inspector reported that all the force that could work satisfactorily was being used in the transfer of baggage, but plans were sub-

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mitted for an intertrack fence to be erected, also a shelter shed in front of the station.

A. E. Beasley vs. Public Service Electric Co.

Complaint was made alleging that the Public Service Electric Company refused to supply current to complainant unless he ran a wire to the street.

The Board's Inspector reported a misunderstanding, with regard to the placing the service outlet, between the inspector of the company, the complainant and a neighbor.

The Inspector recommended that service be granted complainant and his neighbor by the company, provided they agreed to accept a contract for the same.

The recommendation was accepted by the parties in interest.

Beck and Beck vs. Point Pleasant Electric Light and Power Co.

Complaint was made regarding a service charge of \$1.00 by the Point Pleasant Electric Light and Power Co. for service used less than three months.

The Point Pleasant Electric Light and Power Company has filed a schedule of rates for a minimum charge of \$1.00 per month for installations which are not used throughout the year, and a minimum charge of \$2.00 per month where service is in use for a summer season. An extra charge of \$1.00 is made where service is required for less than three months, which covers the cost of installing and disconnecting the service, and installation and removal of the meter.

No recommendation was made.

Charles Becker vs. Egg Harbor City Water Co.

Complainant alleged that the Egg Harbor City Water Company wished to impose upon complainant a double minimum charge because of the fact that, apparently, there were two families living in the house.

Upon investigation by the Board's Inspector it was found that the company and complainant had adjusted the matter.

D. M. Bedikian vs. New York, Susquehanna and Western R. R. Co.

Complainant alleged that public travel was held up at the crossing of Midland Avenue and Passaic Junction on a spur of the Erie Railroad in Montclair.

The Board's Inspector reported that the crossing in question was blocked several times a day for over five minutes at a time.

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The Inspector recommended that no train be allowed to cross over this crossing unless it could clear same three minutes before a New York, Susquehanna and Western train that stops at the station is due.

This recommendation was accepted by the company.

Carlton Bell vs. General Water Supply Co.

Complainant alleged that application had been made to the General Water Supply Company to supply service in Westmont, N. J., and that the company had not acted upon the same.

Investigation showed that the company had agreed with complainant to have a service pipe run for a short distance to connect with the company's distribution system when service would be supplied.

This arrangement was satisfactory to complainant.

Borough of Belmar vs. New York and Long Branch R. R. Co.

Complaint was made regarding the continuous ringing of automatic alarm bell at Seventh Avenue, Belmar.

The Board's Inspector reported a large number of train movements over this crossing during the summer season, and the Inspector took up with the railroad company the matter of further protection of the crossing and avoidance of the annoyance complained of.

The Inspector recommended that the bell be cut out during the summer season, and that a watchman be at the crossing continuously during said period, and that the alarm bell be used during the winter season.

The recommendation was accepted by the company.

John Bendix vs. Public Service Gas Co.

Complaint was made alleging that the rebate which the gas company allowed complainant on account of fast meter was not equitable.

The Inspector recommended that the company make an allowance in accordance with the results of the meter test covering one-half the period during which the meter was in service.

This recommendation was accepted by the company.

Conway Bennett vs. Atlantic City R. R. Co.

Complaint was made alleging that the railroad company recently took one coach from the regular morning train running between Audubon and the Chestnut Street Ferry, Camden, thereby causing certain of the regular commuters to stand during the trip.

Investigation showed that the railroad company took this coach off on account of the loss of travel on their trains due to operation of jitneys.

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When it was discovered by the railroad company that passengers were standing the train was restored to its usual number of coaches.

August Beringer vs. Public Service Gas Co.

Complainant alleged that the Public Service Gas Company had been notified a number of times of a leak in the gas main in West Hoboken, and that it failed to have same remedied.

The Board's Inspector reported that the company had located the leak and corrected the same.

Berliner Handels-Gesellschaft vs. Western Union Telegraph Co.

Complainant alleged that a wireless message was sent by above from Berlin, Germany, to the Guaranty Trust Company in New York City, but that the Guaranty Trust Company did not receive the message.

Investigation showed that the message was traced as having been received at Eilvese, Germany, and sent from there to Tuckerton, New Jersey, U. S. A. The message was then sent from Tuckerton over a Western Union wire to that company's Atlantic City office, and from that office to its office in New York City, and was finally delivered to the Guaranty Trust Company in New York City by the New York office of the Western Union Telegraph Company. The message was signed for by a clerk in one of the mail rooms, authorized to receive all mail and telegrams.

A message was sent to complainant to the effect that delivery of their communication had been made the day following its receipt.

R. L. Bertram vs. Lakewood Water, Light and Power Co.

Complainant alleged that the Lakewood Water, Light and Power Company had charged him a minimum rate of \$1.00 per month without giving notice of such intention; complaint was also made that the company would not allow the usual prompt payment discount on bills of \$1.00 or less.

It appeared that the company through an error on the part of a new bookkeeper rendered bills for June and July on a flat rate basis, and in August and September the bills were rendered correctly in accordance with the rate schedule of \$1.00 monthly minimum charge.

It did not appear that the minimum charge should be reduced by a prompt payment discount.

L. Bieber vs. Lakewood Water, Light and Power Co.

Complaint was made alleging an inconsistency in the rate schedule of the Lakewood Water, Light and Power Company, complainant having received bills which showed that during one quarter a charge was made which was lower than the charge in a preceding quarter when a smaller quantity was used.

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This it was found was due to the form of schedule in use by the company, the schedule being based on the average amount of water used per day.

The Inspector recommended that the Lakewood Water Company submit a new form of rate schedule.

The recommendation was accepted, the company agreeing that until such new schedule went into effect no one would be required to pay more money than he would if he had used, at the lower rate per thousand gallons, a larger quantity of water.

Harry Bergblum vs. Public Service Gas Co.

Complaint was made alleging the discontinuance of service on account of nonpayment of excessive bills.

Investigation by the Board's Inspector showed that the total amount of gas used as indicated by meter readings was correct, and the results of test of the meter indicated that the meter registered the amount correctly. There was a possibility that the meter was under read on several occasions as the average monthly bill rendered was approximately \$2.00, which amount would not appear to be excessive in consideration of the appliances used by complainant.

Michael Bloch vs. New York Telephone Co.

Complaint was made alleging that a standard public telephone, which was stationed in the store of complainant at Union Hill, was apparently out of order, and that after notifying the company a number of times that the telephone was out of order the company finally reported that the telephone was discontinued.

The matter was taken up with the company and it was found that the company discontinued the telephone owing to the fact that the monthly receipts from same were inadequate.

The matter was not pressed by the complainant.

Charles A. Bloomfield vs. Middlesex Water Co.

Complaint was made alleging that excessive bills were rendered for amount of water used in Metuchen.

The Board's Inspector reported that the premises supplied were extensive and that while the fixtures were, at the time of the investigation, in good condition, it was learned that some of the fixtures had been leaking and had been fixed before investigation was made.

No recommendation was made.

Herbert T. Borden vs. Adams Express Co.

Complainant alleged that he was greatly inconvenienced by not having empty milk cans returned by Adams Express Co. after the milk has been shipped to Atlantic City.

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Investigation was made by the Board's Inspector with the result that the Adams Express Co. issued an order requiring all empty cans to be returned promptly.

Service was improved to the satisfaction of the complainant.

S. W. Bowser vs. Hackensack Water Co.

Complainant stated that he purchased a house in Grantwood and made application to the Hackensack Water Company for a meter and water service and that the company answered stating that the records showed a meter to be installed in the house and asking to whom the bill should be rendered. It was claimed that complainant advised the company that there was no meter installed in the house and that bill should be rendered to him.

Investigation by the Board's Inspector led to installation of a meter and service to complainant.

John T. Boyd vs. Erie R. R. Co.

Complaint was made protesting against the placing of advertisement placards in passenger cars of the Erie Railroad.

These signs were placed at the top and along the sides of the entire length of the cars, the arrangement of the signs being the same as that followed by the subway and elevated trains and the Hudson and Manhattan Railroad. Inasmuch as it did not appear that the signs interfered with the ingress or egress from the passenger cars, the Board could not require the company to remove the signs and the complainant was so advised.

D. W. Brainard vs. Public Service Railway Co.

Complaint was made that acceptance of transfer was refused on a South Orange car, the transfer being issued on Springfield Avenue car at terminus on Milburn Avenue.

The Inspector reported that there was evidently an error on the part of the conductor, inasmuch as the superintendents of the lines involved state that such transfers always have been accepted.

The officials of the Public Service Railway Company posted bulletins in the car barns calling attention of the platform men that transfers are interchangeable between the lines in question.

George H. Bradbury et al. vs. Public Service Gas Co.

Complaint was made alleging the refusal to supply gas to complainants in Camden.

Investigation by the Board's Inspector showed that the cost of the extension was too large to justify the Board in ordering same. The Inspector

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recommended that if the customers who could be served from the extension would assure a revenue of \$76 per annum, that the extension be made.

The recommendation was accepted by the company.

Frank Brainard vs. Philadelphia and Reading Railway Co.

Complainant alleged that the crossing over the main highway from Rahway to Woodbridge, near the latter place, on the line of the Philadelphia and Reading Railway should be further protected to avoid accidents.

The Board's Inspector took up with the railroad company the matter of a system of flashing lights on the crossing while trains are approaching, which device, in connection with warning signs and an alarm bell, in the Inspector's opinion would give ample protection to this crossing.

The company advised that this system would be adopted

James E. Brodhead vs. Flemington Electric Light, Heat and Power Co.

Complaint was made regarding the amount of bill for service, and complainant asked for a test of meter.

Investigation by the Board's Inspector showed that a new meter had been installed for Mr. Brodhead, and test showed the meter was registering correctly within the limits allowed by the Board. From the company's records it appeared complainant was overcharged in September to the amount of \$1.50 and, in addition, it was found that the meter was over-read to the amount of \$1.80.

The Inspector recommended that the company credit complainant with the \$3.30 overcharge, but in regard to the bill, which seemed excessive, there was no recommendation, as the old meter, which was removed, evidently had been running slow.

The company accepted the recommendation.

A. S. Bryant vs. Delaware, Lackawanna and Western R. R. Co.

Complaint was made alleging that the noises caused by the operation of trains and the using of the whistles in Landing, N. J., were excessive and unnecessary, causing a loss in business and menacing health.

The Inspector reported that the freight trains must use pushers in order to make the heavy grade at Hopatcong, and cannot operate without making more or less noise by the exhaust on the engine.

Instructions were given to sound no whistles unless absolutely necessary.

Wallace A. Bush vs. Roseland Water Co.

Complaint was made of failure to extend water service to Harrison Avenue, Roseland Borough.

The Inspector reported that the residents who want water service are

located on one of the principal streets and within a short distance of the center of the Borough and all are supplied with gas.

The Inspector recommended that the extension be made at the expense of the company to which the company objected, claiming the extension would result in a loss.

In view of the company's objection to the recommendation, complainant was instructed as to the procedure for a formal complaint upon which a hearing would be held if desired, but the matter was not pressed.

R. F. Baar and Mrs. H. K. Pagelow vs. Point Pleasant Water Works Co.

Complainants alleged that the Point Pleasant Water Works Company refused to extend its mains so as to supply two residences with service.

The Inspector reported that to supply the complainants the company must extend its mains approximately 500 feet. It was also reported that the company would agree to extend its mains if the applicants would guarantee the company a revenue of \$65 per annum for a period of three years. This agreement was accepted by the complainants and no further action was taken by the Board.

William A. Baker vs. Rahway Gas Light Co.

Complainant alleged that gas escaped from the main pipes, penetrating his house and impairing the health of his family, also killing the shade trees on his premises.

The Board's Inspector reported that the company was having trouble with an old main, laid before the present management took over the operation of the company. It was also reported that the company was repairing all the mains so that the gas could not escape, that in a short time all repairs would be made and the complaint remedied, the company agreeing to replace a shade tree which was killed.

Thomas Callahan vs. New Jersey Gas Co.

Complainant alleged that request was made to the New Jersey Gas Company to extend its mains to supply gas to residence of complainant in Swedesboro, that said company requested a deposit of \$90 and, in addition, a guaranteed consumption of 25,000 cubic feet of gas per year.

The Inspector reported that the cost of the extension would be too great to justify the Board in ordering it made.

Leffert G. Carroll vs. Public Service Gas Co.

Complaint was made regarding a bill for two months' service, which, it was alleged, was exorbitant, inasmuch as it was more than twice the amount of previous bills. Complainant also offered to compromise on the amount

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of the bill, but this was refused and a threat made to discontinue service if the bill was not paid.

The Inspector reported that the meter was registering fast. The Inspector recommended that the company make an allowance in accordance with the results of the meter test and covering a period of one-half the time during which the meter was in service.

A. S. Case vs. Lehigh Valley R. R. Co.

Complainant alleged that the Lehigh Valley Railroad Company overcharged on a shipment of five horses from Jersey City to Three Bridges.

Investigation showed the rate charged was in excess of the minimum rate charged for carload shipments, and as the charge for less than carload lots could not properly be in excess of the carload rate it was recommended that the difference be refunded to complainant.

Ira Casterline vs. New York, Susquehanna and Western R. R. Co.

Complaint was made regarding loss of a trunk shipped from Ogdensburg, N. J., to Paterson, over lines of the New York, Susquehanna and Western Railroad. It was alleged the railroad company refused to acknowledge claim, inasmuch as same was not presented in writing within the time noted in rules printed by the company on the bills of lading.

The company made a further search for the trunk and it developed that the trunk could not be located. A draft was then issued in favor of claimant, which satisfied the complainant.

David S. B. Chew vs. West Jersey and Seashore R. R. Co.

Complainant alleged that crossing at Chambers Avenue, Gloucester, should be further protected by gates, and that the warning bell rang at long periods unnecessarily.

The Inspector arranged with the railroad company that the automatic operation of the bell should be eliminated and protection of the crossing placed in charge of the watchman at Hudson and Paul Streets, at which point the watchman is continuously on duty. This arrangement obviates the continuous ringing of the bell and, in the Inspector's opinion, affords reasonable protection of the crossing on account of the close proximity of the two crossings.

Citizens of Clinton vs. American Express Co.

Complainant alleged that deliveries in Clinton have been discontinued, but that the rates have not been decreased.

It appeared that subsequent to the rate decisions the express company endeavored to lower the operating expenses, and in places where the cost of

service was considered too high and the business did not warrant it the company decided to eliminate delivery service. As the cost of delivery service in Clinton was considered too high in proportion to the revenue received, this service was discontinued.

The complaint was not pressed.

George W. Cole vs. Wildwood Water Works Co.

Complainant alleged that the Water Company was requested to turn off the water in two houses which complainant owns in Wildwood, but that the water company sent him a statement to the effect that in order to have the service discontinued a notification must be sent to the company thirty days prior to June 30th in any year.

Investigation showed the rules and regulations of the Wildwood Water Works Company require the collection of an annual minimum charge.

It was found that one of complainant's houses was vacant at the beginning of the contract year, but that the other house was occupied and regularly supplied until the last of August.

The Inspector recommended that the charge for the one house which was vacant July 1st be cancelled, but that the minimum charge for the year apply on the other house, where water was regularly supplied for a portion of the contract year.

The recommendation was accepted by the company.

Colonial Realty Development Co. vs. Public Service Gas Co.

Complaint was made regarding the Public Service Gas Company's refusal to extend its mains for service in Colonial Heights, Hillsdale, unless a deposit of \$10 was made.

The Board's Inspector reported that in order to supply the district of Colonial Heights, which has seven houses erected, to which gas would be supplied, the company would have to extend 1,104 feet of 6" pipe and 1,425 feet of 4" pipe, which would approximate a cost of \$2,000, while the revenue per year would amount to but \$157. The Inspector reported that in his opinion this extension was too large to justify the Board in ordering the extension until other customers may be served from the same line.

Township Committee of the Township of Commercial vs. Millville Gas Light Co.

Complainant alleged the quality of street lighting furnished by the Millville Gas Light Company was greatly inferior to that called for in the contract entered into between the company and the Township Committee.

Investigation showed that some of the lamps were in need of new mantles and that the mantles were not supplied with sufficient amount of gas to give proper illumination to the mantle.

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The Board's Inspector recommended that the company remove mantles which were faulty and replace them with mantles capable of producing the required candle power; also that the company keep the lamps in proper repair so as to keep a sufficient quantity of gas to give proper illumination.

The recommendations were accepted by the company.

Joseph Cooper vs. Public Service Electric Co.

Complainant alleged that a deposit of \$10 was asked by the company for an electric light pole, which amount would be refunded to complainant when another light is placed upon the pole.

Investigation showed that when the application was made the cost to furnish service would be greater than the estimated revenue from this extension, so that the company demanded a deposit of \$10 in accordance with its refund agreement plan. It was also shown that between the time of the application and the time of the authorization for the installation of the extension a short extension had been run for another customer, making the estimated cost of extension to serve Mr. Cooper somewhat less.

The company stated that the deposit of \$10 would be refunded to complainant.

George H. Cooper et al. vs. Public Service Railway Co.

Complaint was made regarding car due to leave Rahway at 6:05 arriving late and the taking of passengers who were waiting for same upon a tripper, which was sidetracked about half way between Rahway and Westfield Junction to let the regular car run in ahead of tripper, without giving the passengers in the tripper opportunity to get aboard the regular.

Investigation showed that the regular cars are often late on account of the bridge at Woodbridge Creek, and when it is found that the regular car to Westfield is going to be late the tripper is run out as a special. The Board's Inspector took this matter up with the Railway Company, and it was agreed to send the tripper out far enough ahead of the regular car that it may reach Westfield Junction before the arrival of the regular car, and if the tripper should be overtaken by the regular car the tripper should retain the right of way and should not be passed by the regular car.

The Arthur D. Crane Co. vs. Lehigh Valley R. R. Co.

Complainant alleged that the freight charged on shipment of tile from Perth Amboy to East Orange was excessive.

The Board's Inspector took up with the company the matter of a reduction in the rate.

The company agreed to reduce the rate, and a refund was made to complainant in accordance with the reduction.

J. Cunningham vs. Riverton and Palmyra Water Co.

Complainant alleged a leak was discovered in the service pipe connection through which complainant receives water from the mains of the water company. It was also alleged that complainant had the street opened and repairs made for which the company failed to make reimbursement.

The Board had already ruled, in the case of Dr. J. L. Lane *vs.* Tuckerton Water Company, that the maintenance of the mains and service connections within the street lines, that is, between the curb lines, must be borne by the company. Inspector recommended that the Riverton and Palmyra Water Company alter its practice to conform to the decision rendered by the Board in the case mentioned above.

The company took exception to the recommendation of the Inspector, and a date was fixed for hearing. At the hearing the company agreed to refund the amount of the cost to Mr. Cunningham for stopping the leak.

Edwin J. Davis vs. Laurel Springs Water Supply Co.

Complainant alleged the Water Company obtained a franchise in Magnolia and refused to connect the side streets, but that an extension was made for a distance of two blocks to supply three houses upon agreement by the said occupants to pay for a fire hydrant, it being understood by complainant that after the first year the township was to pay for the fire hydrant. It was also alleged that the company exacted payment of the house bills in advance, charging interest on same.

Investigation by the Board's Inspector showed that when the extension was made the three customers agreed to pay \$5.00 per year each for the fire hydrant. Since that time the Township of Magnolia and two other townships have become the Borough of Magnolia and have not taken over the fire hydrants. It was also found that bills are rendered about the first of the third month of each quarter and if not paid within fifteen days a penalty of five per cent. is added and if rent and penalty are not paid within the next fifteen days the water may be shut off.

No recommendation was made.

Mrs. Charles Denberg vs. Hammonton and Egg Harbor Gas Co.

Complainant alleged that a prepayment meter was installed at her residence in Hammonton, adjusted to register at the rate of \$2.00 per thousand cubic feet, while the company's regular rate was \$1.35 per thousand cubic feet, less 10 per cent. discount for prompt payment, this difference to be applied on a debt for gas consumed at another address by complainant's husband.

Investigation showed that there was a balance due for gas consumed at Hotel Royal by Mr. Denberg when same was vacated. Before moving into the premises now occupied by Mrs. Denberg there was a regular type meter installed, which was changed and the prepayment meter installed for Mrs. Denberg.

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The Inspector recommended that the practice of using rate wheels on meters other than the one corresponding with the actual rate charged be discontinued by the company.

The company accepted the recommendation.

Martin B. Devitt vs. Public Service Railway Co.

Complaint was made alleging the inadequate lighting of the cars on the Bayonne line in the morning.

Investigation was made by the Board's Inspector and it was found that the employees of the Railway Company had misunderstood the instructions in this matter, as the object of instructions regarding the use of lights was merely to guard against unnecessary consumption of current, and not to prohibit the use of light when it was necessary.

The Inspector recommended that instructions be issued at the various car barns to the effect that the men turn on the lights in the cars on dark and stormy mornings when it would appear necessary.

This recommendation was accepted by the company.

Elmer Dickerson vs. Eastern Pennsylvania Power Co.

Complainant alleged unnecessary delay in repairing supports carrying electric wires to his house in Mount Tabor.

Inspector reported that the company had repaired the damage referred to by complainant, it having been delayed on account of many other similar troubles caused by a sleet storm, the company first taking up the restoration of service where wires themselves were actually pulled down and broken.

Charles B. Dildine vs. Watchung Water Co.

Complainant alleged that the Watchung Water Company refused to install a water meter at complainant's residence.

Investigation showed that the Watchung Water Company supplied all customers with water for domestic purposes under a flat rate schedule, there having been no meter rate schedule adopted by the company where water is used for domestic purposes. Complainant takes exception to this report of the Board's Inspector alleging that some residences are being supplied through meters.

Complainant was advised to submit his complaint formally, upon which a date would be set for hearing and testimony taken in the matter.

Harman Dilks vs. Pitman Water Co.

Complainant alleged that the Pitman Water Company refused to set a meter for a building consisting of stores and apartments, and fixed an excessive flat rate. Complainant further alleged that at his own expense the com-

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pany installed a meter for him, whereupon the company insisted upon charging a minimum rate for each tenant.

Investigation by the Board's Inspector showed that the minimum rate charged by the company for one building was \$9.50 for 25,000 gallons and 30 cents extra for each 1,000 gallons consumed in excess of the 25,000. It was also found the building referred to in complaint could be considered as one building only, inasmuch as it would be impossible to divide the building so that it could be sold in separate parts.

The Inspector recommended that the minimum charge for complainant's building be \$9.50 per year, with additional charge of 30 cents for each 1,000 gallons in excess of 25,000 gallons.

This recommendation was accepted by the company and bills corrected accordingly.

A. L. DuBois vs. Bergen Aqueduct Co.

Complainant alleged the refusal by the Bergen Aqueduct Company to supply metered service in Ridgewood, the company stating that it does not install meters for any customers excepting those that have unusual conditions in which a flat rate schedule would not apply.

Investigation by the Board's Inspector showed that the company supplies its customers under the flat rate basis, in accordance with schedule filed with the Board, there being only a few hotels, stores and business places with meters.

No recommendation was made.

R. C. Dukes vs. Public Service Railway Co.

Complainant alleged that a broken rail located in front of the car barn on Newton Avenue, Camden, had been reported twice and the Public Service Railway Company failed to have same repaired.

The matter was investigated and taken up with the company. The rail was repaired to the satisfaction of complainant.

R. A. Duncan vs. Public Service Gas Co.

Complainant alleged poor service between the hours of 6 and 7:30 P. M. in Leonia.

After investigation by the Board's Inspector it was found that the pressure of the gas was low and the company has since receipt of Mr. Duncan's complaint added another governor with a view to improving pressure conditions at Leonia.

P. S. Dunne vs. New York Telephone Co.

Complainant alleged that contract was signed for a public telephone to be placed in the store and post office of complainant in Leonardo but that com-

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pany failed to install the telephone, although several promises were made.

Investigation by the Board's Inspector showed that it was necessary to extend the existing lines of the company over tracks of the Central Railroad Company of New Jersey and the work was delayed owing to obtaining a right of way.

Dykman-Norris Co. vs. Public Service Electric Co.

Complainant alleged an extortionate bonus was required to extend service to supply several new houses in Lakeview Heights, Almonesson, this bonus to be refunded at the rate of \$50 per year regardless of the number of new consumers supplied during the year.

Investigation by the Board's Inspector showed that this section was building up very rapidly. There were five extensions in all. After investigating the construction costs and the estimated revenues as per the electric company's estimates, the Inspector recommended that three of the extensions be made free of charge to complainant, but that the other two extensions be made on the refund agreement plan.

The complaint was later withdrawn.

Frank H. Elsworth vs. Philadelphia and Reading Railway Co.

Complainant alleged that highway crossing at Stoutsburg over the tracks of the Philadelphia and Reading Railway Company had considerable traffic and should be protected.

The matter of protecting this crossing was taken up with the company by the Board's Inspector, and the company agreed to place an electric alarm bell at the crossing.

Mrs. George Endres vs. Public Service Gas Co.

Complainant alleged that extension of service to her residence in West Collingswood was refused.

Investigation showed that the revenue from the extension would warrant the same being made if complainant would pay for the cost of the service pipe. The Inspector recommended that the extension be made if complainant would pay for the service pipe.

Mrs. Charles M. Ecker Erria vs. Public Service Gas Co.

Complaint was made alleging that application for service at residence in Milburn had been denied unless complainant would pay a deposit of \$100.

Investigation by the Board's Inspector showed that the estimated revenue would warrant the extension. The Inspector recommended that the extension be made if the complainant would guarantee \$66 per annum, the amount

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of estimated revenue, the guarantee to be distributed over all customers added to the line in an equitable manner.

W. W. Faitoute vs. Lehigh Valley R. R. Co.

Complainant alleged that the alarm bell at Lyons Farms, Liberty Avenue, on the Irvington Branch, rings for long periods when no train is coming.

Investigation showed that occasionally the bell keeps ringing after the train has passed the crossing, evidently owing to the train not passing out of the circuit zone. The Inspector took up with the company the matter of reducing this circuit, also having engineers of trains sound whistles at whistling post and again 400 feet from the crossing.

The Inspector recommended that the company change the existing signs at the crossing for those reading "Railroad Crossing 200 feet distant," or whatever number of feet is determined upon.

These recommendations were accepted by the company.

First Church of Christ Scientist vs. Public Service Electric Co.

Complaint was made alleging that the Public Service Electric Company refused to supply the church of Riverton with electric current.

Investigation by the Board's Inspector showed that in order to serve the church an extension must be made. It was also found that the company had authorized the extension but had been unable to obtain the necessary right of way from property owners to erect poles and run the necessary wires.

Helen E. Forbes vs. Morristown and Erie R. R. Co.

Complaint was made alleging an unreasonable amount of noise due to the letting off of steam from the engines of the Morristown and Erie Railroad at Morristown.

The Board's Inspector reported that the matter of having the fires on all trains which lie in at Morristown banked, so as to avoid the blowing off of steam as much as possible, was taken up with the company, and the company agreed to follow out the suggestion of the Inspector.

Mrs. Walter Freeman vs. Cape May Illuminating Co.

Complainant alleged that several times complaints were made to the company regarding the service rendered at her residence at Cape May. It was also alleged that while men are sent to remedy this matter no results are obtained.

Investigation by the Board's Inspector showed that the company later made repairs to the service pipe, which corrected the defect, thus making the service satisfactory. The Inspector reported on account of the unusual trouble in the

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service pipe, the customer was not responsible for the inadequate service, notwithstanding that the gas was used, and recommended that a refund or credit be made.

The recommendation was accepted by the company.

Charles S. Gall vs. Public Service Railway Co.

Complaint was made regarding the starting of certain cars on the Haledon Line, at the station in Paterson, before passengers from Erie trains have time to board same.

The Board's Inspector reported that it was difficult to formulate any set rule for the operation of cars in connection with arriving trains inasmuch as the cars are supposed to run on schedule time, but it was recommended that the company instruct its employees to warn the passengers of their intended departure by ringing the gong for a few seconds before they leave, which would give passengers an opportunity to catch the car.

The recommendation was accepted by the company.

Borough of Garfield vs. New York, Susquehanna and Western R. R. Co.

Complaint was made regarding condition of the crossing over the New York, Susquehanna and Western Railroad at Outwater Lane, Garfield.

The Board's Inspector took the matter up with the railroad company and necessary repairs were made.

Jacob Geayer vs. Coast Gas Co.

Complainant alleged that the Coast Gas Company refused to extend its mains in Spring Lake so as to supply him with service.

The Board's Inspector reported that in order to supply complainant with service it would be necessary to replace the present main with a larger main. The company stated it would supply the residence of complainant with gas early in the spring of 1916.

Austin B. Geist vs. Public Service Railway Co.

Complainant alleged that the fare charged between Camden and Barrington by the Public Service Railway Company is excessive.

The Board's Inspector reported that without taking into consideration transfer privilege in the City of Camden, it is possible to ride over six miles for a five-cent fare between Federal Street Ferry and Station Avenue, Haddon Heights. Complainant asks that this fare be extended to the Borough line, a distance of over a mile, making a total of nearly eight miles for five cents.

No recommendation was made.

Glen Rock Home and School Association vs. Erie R. R. Co.

Complainant alleged the density of traffic to be such that gates should be installed at the Erie main line crossing in Glen Rock.

Investigation by the Board's Inspector showed that the view at the crossing was good. The Inspector recommended that a loud-toned bell be placed at the crossing.

This recommendation was accepted by the company and a bell installed.

Sidney J. Goetter vs. Public Service Gas Co. and Public Service Electric Co.

Complainant alleged excessive bills for both gas and electricity in Plainfield.

The Board's Inspector reported that the gas meter was registering fast beyond allowable limits, but that the electric meter was registering within the limit allowed.

The Inspector recommended that the company should make an allowance in accordance with the results of the meter test covering the time the meter was in use.

This recommendation was accepted by the company.

Joseph Goldstein vs. Tintern Manor Water Co.

Complainant alleged an excessive charge for fire protection service in Long Branch.

The Board's Inspector reported a six-inch service has been installed to supply service for fire protection, and that a charge of \$50.00 is made for such service. The ordinary service to the building is furnished through a separate pipe at a flat rate of \$22.00 per annum. It was reported by the Inspector that the company was charging all customers the same for this protection, and that this charge is lower than most water companies are charging for this same service.

No recommendation was made.

Frank H. Green vs. Adams Express Co.

Complainant alleged the refusal to make delivery to all customers alike in Hillcrest, Trenton. This matter was taken up directly with the company, and a date was fixed for hearing. At the hearing a representative of Adams Express Company appeared before the Board and agreed to extend the delivery limit.

W. C. Griffiths vs. Public Service Gas Co.

Complainant alleged that application for the installation of a prepayment meter was refused.

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The Board's Inspector reported that a delay in setting a prepayment meter for complainant was due to an error in making out the shop order by the Hackensack office, the shop allowing other orders, which they presumed to be more urgent, to go through first.

C. I. Hale vs. Adams Express Co.

Complainant alleged the non-delivery of express packages at Passaic Wharf, Plank Road, Newark.

The Board's Inspector took this matter up with the Express Company, and was informed that arrangements would be made to extend delivery limits along the Plank Road to include the Passaic Wharf.

Albert Hall vs. Public Service Electric Co.

Complaint was made alleging that service was refused, upon taking possession of a building in Jersey City where a meter was already installed, unless a deposit of \$40.00 was made.

The company stated that if Mr. Hall would establish a proper credit, it would be glad to waive the demand for a deposit.

William Hanley vs. Public Service Railway Co.

Complaint was made regarding the maintenance of turnstiles at the Hoboken Terminal of the Public Service Railway, asking that same be removed.

The Board's Inspector reported that the turnstiles greatly facilitated the handling of the crowds, that after persons have paid their fares and have passed through the turnstile, they move into a large space and are not further hindered in boarding the cars, whereas, if it was necessary for each passenger to pay his fare upon entering the car, there would be considerable time lost, and would be great congestion owing to the number of cars operated.

Barth Hansen vs. Plainfield-Union Water Co.

Complainant alleged the refusal to extend service in Roselle.

The Board's Inspector reported that to make this extension would cost the company between \$750 and \$800, upon which there would be an annual return of but \$78 approximately. The company has offered to make this extension, provided that the houses which may be served will assure the company a revenue of \$100 per annum for a period of five years. If revenue from additional sources should equal the amount of the guarantee, the guarantee will become void. It was the opinion of the Inspector that the request of the company to assure them \$100 per annum for five years on an investment of \$800 was reasonable, but complainant and other residents would not make such guarantee.

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J. Smith Hart vs. New Jersey Northern Gas Co.

Complaint was made regarding the escape of gas during the night at the home of complainant in Pennington.

Investigation by the Board's Inspector showed that gas is transmitted from Flemington to Pennington under the high pressure distribution system; the pressure being reduced at the customer's meter by means of high pressure service regulators, each regulator being equipped with a mercury seal which acts as a safety valve. The mercury seals are connected from the regulator to the outside atmosphere and allow the gas to escape outside of the house in the event of the seal blowing off. It was reported by the Inspector that this connection was made just outside the cellar window of complainant's residence and when the seal was blown off by the high pressure it allowed the gas to escape and enter the cellar through the open cellar window.

The Inspector recommended that some improvements be made in this vent pipe, and that the connection be placed away from any window.

The recommendations were accepted by the company.

E. S. Haynes vs. Public Service Railway Co.

Complainant alleged that there was no heat in the trolleys running between Newark and Paterson.

The Board's Inspector reported that the electrical heating appliances on all the Paterson cars were in good condition.

The Inspector recommended that the company instruct conductors to keep rear doors of the cars closed except for the purpose of ingress and egress so that the heat be kept in the cars.

The recommendation was accepted by the company.

J. Walter Henry vs. Public Service Gas and Public Service Electric Cos.

Complainant alleged that Public Service Gas Company and Public Service Electric Company refused to extend service to his residence in Audubon, New Jersey.

The Board's Inspector reported that these extensions were too large to justify the Board in ordering same, but the Inspector recommended that the extensions be made upon assurance of a guarantee revenue from complainant.

The recommendation was accepted by both companies.

W. C. Hendrickson vs. Philadelphia and Reading Railway Co.

Complainant alleged excessive rates on baled hay from points on said road to Townley on the Lehigh Valley Railroad.

Investigation by the Board's Inspector showed that in quoting rates to complainant there was an error made, the fourth class rates having been

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quoted instead of the fifth class. New rates were quoted and the lower rate given.

Mrs. A. Herzog vs. Public Service Electric Co.

Complainant alleged an excessive bill for current used, for which payment was refused and the Public Service Electric Company threatened to cut off service.

Investigation by the Board's Inspector showed that the meter was registering correctly and upon examination of the fixtures it was found that there were no faulty fixtures or grounded circuits. There seemed to be no trouble with the exception that the switch, for the cellar lights, was apt to throw double, that is when the lights were turned on and the switch operated, the lights would go out and immediately light again. It was the opinion of the Inspector that the lights in the cellar may have been left burning unknowingly which caused the excessive charge.

Sophia Hess vs. Monmouth Lighting Co.

Complaint was made alleging that the lights go out, leaving the town of Englishtown in darkness.

Investigation by the Board's inspector showed that there was a breakdown in the engine and the smaller engine not being large enough to carry the full load the Englishtown circuits were cut off to lighten the load until repairs could be made.

Mayor and Council of Hightstown vs. Electric Light and Power Co. of Hightstown.

Complainant alleged poor service and inadequate and poorly equipped plant.

The Board's Inspector reported that the power had been cut off several times due to storms.

It was the opinion of the Inspector that the company now being under new management and ownership it would only be a short time before twenty-four-hour service would be supplied and more uniform voltage maintained.

Charles B. Hinchman vs. Public Service Electric Co.

Complainant alleged the refusal to extend service in Palmyra without a deposit of \$30.

Investigation by the Board's Inspector showed that the company had revised its estimate of cost for this extension, and the extension would be run without cost to complainant.

Howard Hoffman vs. Atlantic Coast Electric Light Co.

Complaint was made alleging the refusal to supply current at Belmar for motor, which is not of the slip-ring type.

The Board's Inspector showed that the complainant operated a shop for the building and repairing of boats. The company based its refusal to supply current on the starting characteristics of the motor which it claimed would affect the lights. Inasmuch as the greater portion of work in this shop would be done in the winter, and as Belmar is a summer resort, it was the opinion of the Inspector that there was ample capacity in both the plant and the mains to supply this motor.

The Inspector recommended that the company furnish service for the motor provided a sufficient amount of resistance is included in the circuit when starting as would limit the starting current to not exceeding 175 per cent. of the full rated load of the motor. The company agreed to furnish current if complainant would install such other electrical apparatus as to reduce a starting current so as to come within 175 per cent. of the full load.

Charles F. Holcombe vs. Pennsylvania R. R. Co.

Complaint was made regarding the change in the schedule of trains on the Belvidere Division leaving Lambertville.

Investigation by the Board's Inspector showed that this change was made in the summer to accommodate campers and others along the railroad who wish to reach Trenton and Philadelphia in time for business. It was stated by the railroad company that several letters were received expressing appreciation of this change while complainant is the first to complain against it.

The Inspector recommended that the schedule be allowed to stand during the summer months.

Richard Hopkins vs. New York and Long Branch R. R. Co.

Complaint was made regarding the protection of crossing at Bay Head at night.

Investigation by the Board's Inspector showed that the flagman is on duty during the time passenger train movements are made, and all cars placed on sidings are placed and taken off the siding during the hours the flagman is on duty. As the flagman is on duty during the time train movements are made over the crossing, it was the opinion of the Inspector that there was no necessity for further protection.

G. F. Holmes vs. Tintern Manor Water Co.

Complainant alleged that the Water Company refused to supply residences in Little Silver with water.

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The Board's Inspector reported that in order to grant service to complainant the present mains of the company must be extended approximately five thousand feet. If complainant and others would guarantee \$500 per annum the extension would be made.

Mrs. G. F. Holmes vs. Consolidated Gas Co. of New Jersey.

Complainant alleged that the Gas Company refused to supply her residence in Little Silver with gas.

The Board's Inspector reported the cost of the extension as too large for the amount of revenue estimated to be received.

The Inspector recommended that if the customers who could be served from this extension assure a revenue of \$308 per annum that same should be made.

Hopewell Chocolate Co., Inc., vs. Public Service Electric Co.

Complainant alleged an excessive minimum rate charged for the service rendered, on account of the installation of a small generator to run motor and lights when service is interrupted.

The Board's Inspector reported that this appeared to be a special case inasmuch as the private outfit was never used or intended to be used except when the service of the company was entirely interrupted, and in the opinion of the Inspector the minimum charge should not be based on "break-down" service, but the regularly monthly minimum charge of \$1.

This was accepted by the company, and the regular monthly minimum charge of \$1 made.

E. A. Horner vs. Tuckerton Water Co.

Complainant alleged that the company in making certain repairs to their main had clogged his service pipe, cutting off supply of water, and that the company refused to remedy the same.

The Board's Inspector reported that upon investigation the service pipe had been cleaned and the complainant was receiving satisfactory service.

Clarence J. Housman vs. Consolidated Gas Co. of New Jersey.

Complainant alleged that the company demanded payment of costs for lighting arrangements for lawn party before they were completed.

The Board's Inspector reported that all services are run with the agreement that they be paid for upon installation. It, therefore, appeared to the Inspector that no discrimination was made against complainant.

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George B. Houston vs. Point Pleasant Water Works Co.

Complainant alleged that company refused to install a water meter at his residence.

The schedule of rates filed with the Board does not provide for the installation of meters to ordinary customers. It appeared that an employee of the company had installed a few meters at summer residences without the knowledge of the company. The company advised that these would be taken out and all charges made on a flat-rate basis.

E. W. Hughes vs. Public Service Gas Co.

Complainant alleged the refusal of the Gas Company to extend service in Plainfield unless a deposit of \$800 was made.

The Board's Inspector reported that further investigation on the part of the company showed that there were additional customers who could be served by this extension, and the extension was run at the company's expense, and no deposit required of complainant.

E. W. Humphreys vs. Woodstown Ice and Cold Storage Co.

Complainant alleged that the company expected to change its electric service from 133 cycle to 60 cycle, which would necessitate the changing of motor equipment for which the company makes no provision as to the cost.

The Board's Inspector reported that the change to be made in this instance would benefit both the complainant and the company, and the Inspector recommended that the company pay half the expense of changing the compensarc to suit the changed conditions of service.

D. C. Imboden vs. Public Service Railway Co.

Complainant alleged that bank on which street cars run is not too stable, very high and steep extending along the railway line from the Weehawken Ferry up the hillside.

The Board's Inspector reported that the line is double track, built upon a bank consisting of broken rock, which binds well. The cars are protected from going over the bank by means of guard rails, which would cause the car to continue in a line parallel with the track, and in such a position as would not allow the wheels to leave the ties. It was also found that only a limited number of cars are allowed to ascend the grade at one time, which is another safeguard, inasmuch as there is no danger of overloading the feeder and trolley wire.

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Imperial Machine Co. vs. New York Telephone Co.

Complainant alleged that the New York Telephone Company refused to install service in Jersey City for complainant unless payment was made for three months in advance.

The Board's Inspector reported there was a misunderstanding between complainant and respondent. It is the practice of the New York Telephone Company to request three months' payment in advance from all new subscribers, but where a subscriber is known to the company and has established a good standing on the company's books there is no such request made. It appeared that the officials in Jersey City were not informed of the fact that complainant was already a subscriber in good standing on the books of the company, and, therefore, the request for three months' payment in advance.

Charles A. Janke vs. Public Service Railway Co.

Complaint was made regarding the coal gas which is thrown off from the heaters in the cars in Camden, particularly on the Pensauken Line.

Investigation by the Board's Inspector showed that coke is used as a fuel in these cars, and while there is little or no smoke in coke, there are unpleasant fumes from products of combustion. These fumes would be taken out of the cars through the proper opening if the dampers were manipulated correctly. Inasmuch as it appeared that a number of conductors have not been thoroughly instructed as to the proper method of operating these stoves, the Inspector recommended that immediate steps be taken to drill the men in the operation of the dampers.

The company accepted the recommendation.

R. C. Jenkinson vs. Lehigh Valley Railroad Co.

Complainant alleged the blocking of traffic for drilling trains at Elizabeth Avenue, Lyons Farms.

The Board's Inspector reported that at the time complained of there was a special train drilling at the crossing for a moving picture, and, according to the statement taken from the conductor, the highway was not blocked by the drilling of the train, but owing to the number of machines coming along and stopping to watch the taking of the picture. It appeared that the movement was a special one, and the delay was not caused by a regular scheduled freight train. Such delay will not occur again, unless caused by an exceptional condition.

City of Jersey City vs. Public Service Railway Co.

Complaint was made regarding the stopping of cars at the northwest corner of Grove Street and Newark Avenue, Jersey City.

That Board's Inspector reported that a safety stop was made on the east

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side of Grove Street and the elimination of a stop on the west side of Grove Street would facilitate speed. It appeared that a fire house is located in this vicinity, and in case of fire this corner is passed by the engines. If a car was stopped on the west side of Grove Street it would immediately impose a serious obstacle to the passage of a fire engine.

It was recommended that the company place a trolley stop sign of the latest approved type at the northeast corner of Grove and Newark Streets to acquaint the number of persons who attempt to board the car on the northwest corner with the present operation.

The recommendation was accepted by the company.

Henry Johnson vs. Point Pleasant Water Works Co.

Complaint was made regarding the agreement of the company to install a meter and later refusal to place the same when other residences in Point Pleasant were supplied with meters.

The Board's Inspector reported that complainant tendered a check to the company to cover cost of meter and connections, also payment of one year's minimum charge in advance. This was returned by the company, advising complainant that there had been an error inasmuch as no meters were installed in private houses. Investigation showed that without the knowledge of officials of the company an employee had installed meters in a number of summer residences, but these meters were not installed in accordance with the rules and regulations of the company, and the company proposes to remove all of these meters and supply these customers under the flat rate schedule.

M. J. Johnson vs. New York, Susquehanna and Western R. R. Co.

Complaint was made alleging the unnecessary ringing of engine bells between Broadway and Park Avenue, Paterson, causing annoyance at night to those living along the railroad.

The Inspector of the Board took this matter up with the Railroad Company and instructions have been issued that there be no unnecessary ringing of the engine bells.

Albert E. Jones vs. Lehigh Valley R. R. Co.

Complainant alleged the refusal to acknowledge, by the railroad company, claim for loss on a shipment of apples from Johnsonburg to Irvington.

The Board's Inspector took the matter up with the Railroad Company and complainant's claim was adjusted.

David Kaufman & Sons Co. vs. Public Service Electric Co.

Complaint was made regarding minimum charge for power supplied.

The Board had adopted a ruling regarding the matter of minimum charges for power exacted by electric companies wherein it was agreed "that in spe-

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cial cases where peculiar local conditions exist, the Board's position would be modified to suit special cases, upon reasonable grounds for such modification being shown."

The Board's Inspector reported that in his opinion this could not be considered any special case, inasmuch as the power machines are used only at certain times and when men who operate them are not busy in the other plant.

David Kaufman & Sons Co. vs. Central R. R. Co. of New Jersey.

Complainant alleged excessive charges for shipments to and from siding in Elizabethport.

The Board's Inspector reported that the haul complained of was a distance of about 1,000 feet for which the charge of 40 cents per ton would appear excessive.

The Inspector took the matter up with the railroad company, and it was agreed to establish a rate of 26 cents per gross ton on scrap iron.

Louis Kaufman vs. New York Telephone Co.

Complainant alleged that the service at his residence in Elizabeth had been cut off after payment of all bills.

This was taken up with the New York Telephone Company, and the company reported that there had been an error through which the outgoing service of complainant was cut off. Upon discovery of the error service was restored and an apology offered complainant.

Robert J. Kay vs. Public Service Electric Co.

Complainant alleged that the Public Service Electric Company refused to extend service to his residence in East Orange.

The Board's Inspector reported the cost of extension as too great to justify the Board in ordering the same, but the Inspector recommended that the extension be made if the complainant would assure a revenue of \$61 per annum, this guarantee to be distributed in an equitable manner over all customers who might be added to the line.

Robert C. Kennedy vs. New York Telephone Co.

Complainant alleged that the Telephone Company had threatened to cut off his service unless he allowed them to place poles upon his property.

The Board's Inspector reported that on the opposite side of the road from complainant's residence there were poles supporting high tension electric lines which made it dangerous for telephone wires to be carried on the same poles; this was the reason for the removal of the telephone wires to

the poles which the company wished to erect on premises of complainant. Inasmuch as the company agreed to continue service, it was the opinion of the Inspector that the principal point in the complaint, that of rendering service, had been taken care of by the company.

Joseph Keppler vs. Adams Express Co.

Complainant alleged an excessive charge on shipment of eggs from Augusta to Nolan's Point, Lake Hopatcong.

The Board's Inspector took this matter up with the company and the overcharge was refunded to the complainant, inasmuch as it was a mistake on the part of the company.

Mrs. William Kerns vs. Wildwood Water Works Co.

Complainant alleged that a charge was made for resetting her meter.

The Board's Inspector reported that the City of Wildwood had changed the grade of the street, thus making it necessary to raise the meter box and service connections in front of the property. In accordance with rules of the company, the cost of the service from the curb line into the house is borne by the owner of the property, therefore the charge made to complainant was for the work done on this service and meter in connection with changing the grade.

No recommendation was made.

Borough Council of Keyport vs. Central R. R. Co. of New Jersey.

Complaint was made regarding protection of Broad Street crossing in Keyport.

Investigation by the Board's Inspector showed that the Railroad Company was willing to place a flagman at the crossing during the summer season. The Borough of Keyport objected to this arrangement, asking that gates and a flagman be placed there permanently. Upon the objection of the Borough, a date was fixed for hearing, but at the time the hearing was called the Railroad Company agreed to place the gates and a flagman at the crossing permanently.

Mrs. Harry Kille vs. New Jersey Gas Co.

Complainant alleged that the New Jersey Gas Company refused to set a meter at her residence.

The Board's Inspector reported that the company originally installed a service line to a shop which was located some distance back from the curb line and connected with the high-pressure system. A connection was made by complainant to this high-pressure service without notifying the company, which is against the rules of the company, besides being dangerous.

Henry Koch vs. Public Service Gas Co.

Complainant alleged that his supply of gas was shut off for the amount of bill owing when a deposit of \$5.00 was standing with the company.

The Board's Inspector reported that investigation showed that all bills were paid up to June 19th, 1915. It appeared that complainant changed his residence on June 30th, 1915, thus leaving a balance due for the period between June 19th and 30th. This amount was left unpaid until August, when notice was sent to complainant, advising of the nonpayment of the bill; later a notice was sent advising him that same had been paid from the amount of deposit, and that it must be restored to its original amount or the service would be discontinued. This amount was not forwarded, and service was discontinued, upon which complainant paid the bill and service was again restored.

Investigation shows that notices were sent out in compliance with the rules filed with the Board and approved by the Board.

Koeneke Brothers vs. Wildwood Water Works Co.

Complaint was made regarding the charges made for connections from the mains into certain vacant lots.

The Board's Inspector reported that the City of Wildwood has agreed to take over the Water Company, and the charges made by the company for connections to these vacant lots represent the actual cost to the company. The rules under which the municipality will conduct the Water Department are not subject to the jurisdiction of the Board.

Simon Kohout vs. West Jersey and Seashore R. R. Co.

Complainant alleged that conductor refused to accept return ticket used on Monday when the ticket expired on Sunday.

The Board's Inspector took this matter up with the Railroad Company, and it was agreed that a refund would be made.

Adolph Kulzer vs. Middlesex and Monmouth Electric Light, Heat and Power Co.

Complaint was made alleging that the company promised to extend service to complainant's house before same was built, but after completion of the house the company refused to make the extension.

Investigation by the Board's Inspector showed that the extension would cost too much to warrant the ordering of this extension, unless the complainant and the other prospective customers contribute toward the cost of the construction of the same.

Mrs. A. J. Koze vs. West Orange Water Co.

Complainant alleged an excessive bill rendered for water consumed.

Investigation made by the Board's Inspector showed that meter readings were correct, but it was found the excess use of water was due to leaky plumbing fixtures.

Harry H. Kroh vs. Point Pleasant Electric Light and Power Co.

Complainant alleged poor service and that often the lights in Brielle were out entirely.

The Board's Inspector reported that the information given the superintendent was unreliable and that the records were not kept in condition to get proper information. Since the present company has operated the plant service has been poor on account of rebuilding many of the lines.

The Inspector recommended that the company's officials should attend to the supply of proper and adequate service, and that in case of breakdowns or inability to supply service, true records should be kept of the conditions as they existed.

The recommendations were accepted by the company.

A. S. Lambertson vs. Union Transportation Co.

Complainant alleged the refusal to supply ventilator cars or boards to ventilate ordinary cars free of expense to shippers of potatoes.

The Board's Inspector took the matter up with the transportation company and reported that the company had no ventilator cars, but hires same when available, otherwise box cars are used. The Inspector further reported that the company and complainant had agreed, upon the company furnishing sufficient boards, to board up each door 30 inches high or 60 inches for each car.

Samuel Laturco vs. Public Service Electric Co.

Complainant alleged that his meter had been taken out and service refused him for his premises.

The Board's Inspector reported that the premises consisted of two stores, four flats and a pool room, and that the wiring is not in accordance with the rules, the meter not being placed in the cellar.

The Inspector reported further that the wires should be changed and the meters placed in the cellar before it could be recommended that customers in the building be supplied.

Borough of Laurel Springs vs. Atlantic City R. R. Co.

Complainant alleged the obstruction of view on Elm Street crossing, Laurel Springs, by the freight house.

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The Board's Inspector reported that the crossing was adequately protected with signs, gates, bell and watchman, and that to move the freight station 100 feet, as suggested by complainant, would not improve the view of the crossing sufficiently to warrant changing its location.

F. H. Lee vs. Hackensack Water Co.

Complainant alleged demand for payment of bill already paid and a threat to discontinue service to complainant at Hillsdale.

The Board's Inspector reported that upon investigation it was found that the company had made an error and had corrected same with complainant.

Frank Lee vs. Delaware and Atlantic Telegraph and Telephone Co. and Coleman House, Asbury Park.

Complainant alleged certain overcharges for telephone service made against him by the local operator in the Coleman House, Asbury Park.

This matter was taken up with the telephone company by the Board's Inspector, and investigation showed that charges made were in excess of schedule charges. The excess amount paid by complainant was returned to him.

Carolyn Rex Leech vs. City Gas Light Co.

Complainant alleged two readings of meter and double bill rendered for one month.

The Board's Inspector reported that the record of the company regarding complainant's residence in Ocean City was correct, and upon test of meters same were registering within allowable limits.

E. B. Leiby vs. Hackensack Water Co.

Complainant alleged that the Hackensack Water Company rendered a bill after five quarters had elapsed, when statement should have been rendered quarterly, for service in Bergenfield.

The Board's Inspector reported that complainant had been paying a guarantee in advance yearly, but that the revenue from the extension amounts to the sum of the guarantee. Mr. Leiby's guarantee fee was cancelled so that bills will be rendered quarterly, and his account treated like that of a regular customer.

William Leirness vs. Public Service Railway Co.

Complaint was made that the Hoboken Terminal structure leaks, allowing water to drip on pedestrians.

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Investigation was made by the Board's Inspector, which showed that the city authorities had held up the completion of the work for certain concessions on the part of the railway company. These various concessions have been made and the work will be carried to completion.

Lembeck & Betz vs. Raritan River R. R. Co.

Complainant alleged that the Railroad Company charged him for shipment of ice which was placed around beer to keep same in good condition to destination.

The Board's Inspector reported that the Railroad Company had issued a ruling in its official classification regarding the packing of ice with freight, which provided when ice is packed in excess of 500 pounds in the car at destination, and taken by consignee, freight charges shall be corrected by delivering agent to basis of actual weight. It would appear that excess charges for ice removed at destination by consignee were properly assessed.

David C. Leonard vs. Jersey Central Traction Co.

Complaint was made regarding the bad condition of the station of the Jersey Central Traction Company at Leonardo. The matter was taken up with the company directly, and the company answered advising that the repairs would be made in the following ten days or before, if the weather was favorable.

Dr. George M. Levitas vs. Wells, Fargo & Co.

Complaint was made regarding the delay in delivery of medical culture tubes forwarded to the State Laboratory at Trenton, which were sent from the schools at Westwood.

The matter was taken up directly with the company, and investigations made, which showed that the shipments were transferred to the Adams Express Company, which caused delay. Instructions were issued by the company for the transfer to be made by special messenger.

W. A. Linn vs. Lehigh and Hudson River Railway Co.

Complainant alleged insufficient protection of crossing north of the depot at McAfee known as Vernon Road.

The Board's Inspector took this matter up with the railway company, and reported that a stationary boiler which obstructed the view had been removed, and that a bell would also be installed to further protect the crossing.

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Maria Emmy Lindenstruth vs. Acquackanonk Water Co.

Complainant alleged excessive bills, which she refused to pay, sending checks for amount which she had previously paid. These were refused, and the water turned off at her residence in Passaic.

Investigation by the Board's Inspector showed that the meter readings were correct and bills rendered in accordance therewith, but upon testing the house fixtures it was found that there were leaks. It was the opinion of the Inspector that the increase in the charges was owing to the leaky fixtures.

T. S. Lloyd vs. Wildwood Gas Co.

Complainant alleged that he had a contract with the Gas Company to supply his residence at Wildwood on a 50-cent minimum basis, but that a letter had been received by him advising of a ruling of this board for a 75-cent minimum.

Investigation by the Board's Inspector showed that all old contracts were abrogated by the new minimum charge, and that the prepayment meters are merely automatic collectors for gas used. If a customer puts 75 cents in the meter and used but 60 cents' worth of gas in one month, the balance of 15 cents is credited to his account for the following month, and a charge of 15 cents collected from customer to make up the minimum for the month.

Long Branch Board of Trade vs. Pennsylvania R. R. Co.

Complainant alleged the discontinuance of a \$2 rate between Camden and Beach Haven and return during the summer months.

The Railroad Company, after hearing, agreed to revise its tariffs so that the rate of \$2 return from Camden to Beach Haven would be restored.

Mrs. L. P. Lord vs. Public Service Gas Co.

Complaint was made of a charge for gas in excess of the amount collected from prepayment meter.

The Board's Inspector reported that test of the meter showed that it registered correctly, but that the shutoff mechanism had failed to operate during the period in dispute, thus allowing more gas to be used than the cash box of the meter indicated.

George F. Mack vs. Public Service Electric Co.

Complaint was made of failure to extend service to residence of complainant in East Orange.

The Board's Inspector reported that the cost of the extension was in his judgment too great to warrant the Board in ordering the same, but recom-

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mended that the company make the extension upon the agreement of complainant to guarantee a certain revenue per annum. The company objected, and agreed to make the extension upon the refund agreement plan, the complainant making a deposit.

Dr. T. J. MacKay, Jr., vs. Public Service Electric Co.

Complaint was made of failure to extend service to office of complainant at Camden.

The Board's Inspector reported that upon further investigation by the company it was agreed to extend service without cost to complainant.

F. C. Mahnken vs. Plainfield-Union Water Co.

Complaint was made of failure to extend service to complainant's residence in Fanwood.

The Board's Inspector reported that in his opinion the cost of the extension would be too great to warrant the Board in ordering same. The company agreed to make the extension upon agreement of complainant to guarantee a certain revenue each year for five years.

C. A. Malloy vs. Delaware, Lackawanna and Western R. R. Co.

Complaint was made regarding the irregularity of trains at East Orange, causing patrons to miss boat connections.

The Board's Inspector reported that the elevation of tracks in South Orange made it necessary to depend on one track for both express and local trains, which caused delays at times, but the record of the company indicated that the company was doing its best under the circumstances.

Borough of Manasquan vs. Pennsylvania R. R. Co.

Complaint was made to the Railroad Company regarding the continuous ringing of the bell at Osborn Avenue, Manasquan.

The matter was taken up by the Railroad Company and the Board's Inspector, and it was agreed that an automatic flagman at this crossing would be a reasonable means of protection.

Charles F. Manning vs. Philadelphia and Reading Railway Co.

Complaint was made regarding fires caused along the Port Reading Branch of the Philadelphia and Reading Railway by sparks flying from the engines.

The Board's Inspector reported that the nettings in the engines were of

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standard size and appeared to be in good condition. It was recommended by the Inspector that inspection of these nettings be made at the end of each trip in road engines and weekly inspections of yard engines.

These recommendations were accepted by the company.

H. L. Marsden vs. Middlesex and Monmouth Electric Light, Heat and Power Co.

Complaint was made that an electric wire strung from pole to pole across Atlantic Street, Keyport, made the conditions at this point dangerous.

Investigation by the Board's Inspector showed the condition complained of as represented, and upon taking the matter up with the company it was agreed that repairs would be made immediately.

George W. McAllister vs. Hackensack Water Co. and Public Service Gas Co.

Complaint was made regarding the refusal of both companies to extend service to complainant's residence in North Bergen.

The Board's Inspector reported that in his judgment the cost of extensions would be too great to warrant the Board in ordering same, but it was agreed by the companies to make the extensions if complainant would guarantee certain amounts of revenues.

Mercer County Automobile Club vs. Pennsylvania R. R. Co.

Complaint was made regarding obstruction to view at the crossing of the railroad and canal at Scudder's Falls.

The Board's Inspector took the matter up with the Railroad Company, and the company agreed to relocate a building one hundred feet north of the present location, and install Banner Wigwag signals at both approaches.

B. G. Mickel vs. Woodstown Ice and Cold Storage Co.

Complaint was made regarding the changing of electric service from 133-cycle to 60-cycle, allowing complainant nothing for his motor at his premises in Daretown.

The Board's Inspector reported that the change in this service would be equally beneficial to both parties and the Inspector recommended that the expense be borne equally by complainant and respondent.

Middlesex Press vs. New York Telephone Co.

Complainant alleged an excessive rate charged for short-term service at Elizabeth.

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The Board's Inspector reported that after investigation it was found there had been an error on the part of the company, and it agreed to render complainant a corrected bill.

William Mitchell Millar vs. Public Service Electric Co.

Complainant alleged refusal to supply gas on account of unpaid bill, which had been outlawed.

Investigation by the Board's Inspector showed that a number of years ago complainant refused to pay bills which he claimed were excessive. Upon application for gas, the company refused service unless the old balance was paid. The Inspector recommended that service be supplied.

A. J. Miller vs. Raritan River R. R. Co.

Complainant alleged an excessive rate on brick from the district of Sayreville and South River to South Amboy.

Investigation by the Board's Inspector showed that the rate to Perth Amboy is lower than the rate to South Amboy, owing to the water competition rate which applies to Perth Amboy. It also showed that Pennsylvania Railroad delivery is made to plant of complainant, which necessitates the transfer of the cars at Raritan Junction to the Pennsylvania Railroad, which haul increases the rate, as two companies are involved in the movement.

The Inspector took the matter up with the railroad companies and recommended that the rate be reduced from fifty-three cents to forty-seven cents. The recommendation was accepted.

Marshall Miller vs. Delaware and Atlantic Telegraph and Telephone Co.

Complainant alleged that his telephone was removed upon his refusal to sign contract for telephone at higher rate, at Phillipsburg.

The Board's Inspector reported that complainant was one of a few customers who had nonstandard rate contracts for a four-party message rate telephone. Upon filing of the new schedules of rates in 1911, the only regular message rate available for business establishments was based on the individual direct line. The old four-party line basis is now an obsolete form, which the company is discontinuing, putting all customers on the standard rates, in accordance with rate schedules filed with the Board.

John Morton vs. Pennsylvania R. R. Co.

Complaint was made regarding stopping of trains at the Toms River Station.

The matter was taken up with the railroad company by the Board's Inspector, and it was agreed to have the station platform extended one hundred

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and fifty feet, so that passengers might board trains while same are taking on water, thus eliminating another stop at the station.

C. V. Muldoon vs. Public Service Electric Co.

Complainant alleged the Electric Company made an error in rendering bills for current used at his business in Jersey City.

The Board's Inspector reported that according to all records the meter readings were correct, and after testing the meter it was found to be registering correctly.

Mrs. Madeline Myers vs. Pennsgrove Water Supply Co.

Complainant alleged the refusal of the Water Company to extend service to her residence in Pennsgrove.

The Board's Inspector reported that there had been a misunderstanding between complainant and respondent, the company having understood that water was not needed until some time later.

The company has arranged for the extension.

National Transfer and Warehouse Co. vs. Pennsylvania R. R. Co. and McGann Warehouse Co.

Complainant alleged the refusal of an itemized bill for storage, after shipments were placed in warehouse in Newark by the railroad company.

The Board's Inspector took the matter up with parties in interest, and the complainant advised that same had been satisfactorily adjusted.

Newark Live Poultry Co. vs. Pennsylvania R. R. Co.

Complaint was made regarding the driveway at Broad Street Yard, Newark, where live poultry is unloaded from cars.

The Board's Inspector reported the condition as being bad, and recommended that the driveway be kept in a passable condition until spring, when the yard should be paved.

The company accepted the recommendation.

New Jersey Reformatory vs. Rahway Gas Light Co.

Complaint was made regarding the escaping of gas from the mains in the streets of Rahway.

Investigation made by the Board's Inspector showed that the company was overhauling and repairing all the mains, and would continue with the work until all the mains in the city had been repaired.

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Mrs. M. Nichols vs. New Jersey Gas Co.

Complaint was made regarding extension of service to her residence in Lindenwold.

The Board's Inspector reported that in his opinion the cost of the extension would be too great for the Board to order the same, but it was recommended that if the customers to be served would guarantee a certain revenue the extension should be made.

E. R. North vs. Public Service Railway Co.

Complaint was made regarding service conditions during inclement weather on the Bloomfield Line.

Inasmuch as complainant did not give the number of the car complained of, satisfactory investigation could not be made, but the Board's Inspector recommended that a special notice be posted on all bulletin boards, calling attention of conductors to their responsibility with respect to ventilation, heat and comfort of passengers in his car.

The recommendation was accepted by the company.

North Brunswick Tie and Fender Co. vs. Pennsylvania R. R. Co.

Complaint was made regarding rate on tugboat fenders from Monmouth Junction, Plainsboro, Dayton and Jamesburg to Jersey City.

Investigation by the Board's Inspector showed that the rate on tugboat fenders was increased under the first decision of the Interstate Commerce Commission, and was not increased in accordance with the decision of the Interstate Commerce Commission of December 16th allowing a 5 per cent. increase.

Considering rate on logs, which is higher for a shorter haul, and rate on lumber from other points, the Inspector reported that the rate did not appear to be unreasonable.

North Jersey Realty Co. vs. Public Service Electric Co.

Complainant alleged the refusal to extend service to its property in East Orange.

The Board's Inspector reported that the estimated revenue from the extension would cover the cost, and the Inspector recommended that the extension be made, if complainant would assure an annual gross revenue of a certain amount. The company objected to the recommendation, and a day was set for hearing, at which hearing no one appeared on behalf of complainant, and the case was dismissed.

Nutley Manor Land Co. vs. Public Service Gas Co.

Complaint was made regarding the refusal by the Gas Company to extend service to its property in Nutley Manor.

The Board's Inspector reported that in order to supply the complainant's houses with gas it would be necessary to extend mains on several of the streets. It was also reported that the estimated revenue from these houses would not warrant the cost of the extension until other houses could be served from same.

Ocean Fish Company vs. Pennsylvania R. R. Co.

Complainant alleged the freight rate on carload lots of poles shipped from Quinton, New Jersey, to Anglesea, was excessive.

The Board's Inspector took the matter up with the railroad company and a lower rate was established and a refund made to complainant.

Ocean Township vs. Monmouth County Water Co.

Complainant alleged the Monmouth County Water Company refused to allow the township to attach cranes to the fire hydrants to supply water for sprinkling purposes in the territory known as Loch Arbor.

The Board's Inspector investigated the matter, and reported that the hydrants were installed in Ocean Township for fire purposes only, and that the company's franchise provided that water to be used for sprinkling purposes should be paid for at the rate of 12½ cents per thousand gallons, the amount of water to be used to be measured by meters. The Inspector recommended that cranes be attached to the existing fire hydrants or to special service pipes run for the express purpose, the cost of erecting the cranes only to be borne by complainant, and if the company would not be willing to have cranes attached, then special service connections should be run for the cranes and meters installed in connection with them.

T. J. O'Neil vs. Coast Gas Co.

Complainant alleged that he received an excessive bill, and upon asking for investigation was advised unless bill was paid service would be cut off.

Upon investigation by the Board's Inspector it was found an error had been made, and the matter had been adjusted between complainant and the company.

Edwin K. Oswald vs. Public Service Railway Co.

Complainant alleged that the Public Service Railway Company discriminated against the Town of Westfield in the matter of fares between Westfield and Plainfield.

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The Board's Inspector reported that the existing fare zone was already .1043 miles for 5 cents, and if extended at all it should be extended to the extreme limits of the Town of Westfield in order to avoid discrimination, which would make the possible ride for 5 cents too long.

Otis Elevator Co. vs. Pennsylvania R. R. Co.

Complainant alleged excessive charges by the Railroad Company for moving cars on factory sidings at Harrison.

Investigation was made by the Board's Inspector, which showed a rate issued on November 24th, 1914, and that the charges in question, although made prior to the issuance of the rate order, were practically switching movements, as recognized by the railroad company in the issuance of the lower rate. It was recommended by the Inspector that the charges for the cars in question be assessed on the basis set forth in the rate order.

Pagliughi Brothers vs. West Jersey and Seashore R. R. Co.

Complainant alleged an excessive rate on pears shipped from South Vineland to Jersey City.

The Board's Inspector took the matter up with the railroad officials, and recommended that the rate be reduced and a refund made to complainant.

The recommendation was accepted by the company.

Borough of Park Ridge vs. Erie R. R. Co.

Complaint was made regarding a curb line between the rail and platform at the Park Ridge Station.

After investigation, the Board's Inspector recommended that the platform be filled up and made level with the top of the rail.

The recommendation was accepted by the company.

Passaic Board of Health vs. Erie R. R. Co.

Complaint was made regarding toilet facilities, and unsanitary condition of stations in Passaic.

The Board's Inspector reported that the stations at Harrison Street and Passaic Park were clean and afforded toilet facilities, but that there was poor light at the Main Street station, and no toilet facilities at Prospect Street station. The Inspector recommended that there should be better light at Main Street, and that sanitary toilets be installed at Prospect Street station. The company objected to the recommendation of the Board's Inspector with regard to Prospect Street station, stating that the cost of toilet facilities would be too great. A date was fixed for hearing, and at the hearing the company agreed to accept the recommendation, and advised that installation of toilets would be made.

Board of Aldermen of City of Paterson vs. Public Service Railway Co.

Complaint was made regarding the service on the Haledon line in Paterson on Beech and Clay Streets.

The Board's Inspector investigated the conditions and made traffic counts. The Inspector recommended that a type of car carrying not less than forty passengers be used for special mill trips in the P. M. periods; that continuation trip tickets be given from all turnback cars and that Hunter signs be changed to show designation "Twenty-first and Market Streets" for eastbound cars when going to terminus of line. The company accepted the recommendations.

Pathé Freres vs. Hudson and Manhattan R. R. Co.

Complaint was made regarding the refusal of the Railroad Company to allow the carrying of motion picture films on its trains.

The Board's Inspector reported that the motion picture films are classed as dangerous articles by the Interstate Commerce Commission, and owing to a number of serious accidents which have resulted from motion picture films being carried on trains, the American Railway Association, at a conference held, adopted an amendment which prohibited the carriage of films, regardless of the packing, in any part of any car used for the transportation of passengers.

The Inspector reported that inasmuch as provisions have been made for transporting films by express or baggage under proper restrictions, the safety of the traveling public and protection of property justifies the ruling of the Railroad Company.

George Peek vs. Public Service Gas Co.

Complainant alleged that the company refused to extend its mains along Rochelle Park unless an excessive deposit was made.

The Board's Inspector reported that the estimated revenue from the houses to be served would not warrant the construction of the extension until other houses could be served from this extension, and it would appear that the company was justified in demanding a deposit, which it agreed would be returned at the rate of \$50 for every additional house added to the extension.

Mitchell B. Perkins, Jr., vs. Pennsylvania R. R. Co.

Complainant alleged the refusal of freight on July 5th at the Beverly station.

Investigation by the Board's Inspector showed that the shipments made were consigned to New York, which was an interstate shipment, over which this Board has no control.

Edwin C. Pickering vs. Public Service Gas Co.

Complainant alleged the refusal to extend service in Barrington.

The Board's Inspector reported that the extension was not too great to justify the Board in ordering it made.

The Inspector recommended that the extension be made if the customers to be served from this extension would assure a revenue of \$90 per annum. The company objected to the recommendation, and the case was brought to hearing. At the hearing the company agreed to extend the main and the case was discontinued.

James C. Porter vs. Erie Railroad Co.

Complaint was made regarding the condition of the crossing at Clay Street, Paterson.

The Board's Inspector took the matter up with the Railroad Company, and it was agreed to have the crossing filled in.

F. Porzer, Jr., vs. Public Service Gas Co.

Complaint was made regarding failure to render bills when due.

Investigation made by the Board's Inspector showed that according to records the bills have been rendered monthly with the exception of December, January and February, when readings were not taken owing to inability to enter the house and illness of the regular reader, the substitute reader being unable to get the right residence.

The company stated that it would take steps to see that complainant receives his bill on the first of each month.

Elwood C. Potter vs. Millville Electric Light Co.

Complainant alleged the refusal to connect service to property wired by him in Millville, which had been approved by the underwriters.

Investigation by the Board's Inspector showed that the company alleged the complainant connected up customers to the company's lines without taking the matter up with the company, and because of these irregular practices the company refused to connect any premises wired by complainant. These practices were denied by complainant, and the Inspector recommended that the premises to which the company had refused service be connected immediately, and in any future case, wherever an underwriter's certificate has been issued, the company connect up to complainant's work.

H. S. Powell vs. Millville Gas Light Co.

Complainant alleged that notice given company to the effect that meter was registering incorrectly was ignored.

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The Board's Inspector took the matter up with the company, and complainant advised that the matter was later adjusted by the company.

William F. B. Pratt vs. Public Service Railway Co.

Complaint was made regarding the collection of second fares on Newark-Passaic lines, smoking of cigarettes, and the turning back of cars on the Governor Street line.

The Board's Inspector reported that instructions had been issued that signs stating plainly the rate of fare and limit for each fare collected should be placed in the cars. Certain non-observances of this rule would be disciplined if brought to the attention of the company. It was also reported that smoking is allowed on certain rear seats of the cars; and that when there is an unusual break in the headway of cars, which is often caused by a holdup at the railroad crossing, the car which falls so far behind in its schedule that its follower comes up with it, is turned back and its passengers transferred, allowing said car to make the return route, and thus get the cars back to their proper schedule.

The Inspector recommended that the attention of conductors be called to the rule providing that no fares be collected before reaching the designated fare points.

C. W. Price, Jr., vs. Public Service Gas Co.

Complainant alleged refusal to install a prepayment meter at his residence in Burlington.

The Board's Inspector reported that where more than one family has access to the meter, the company refused to set prepayment meters. The company advised that they had explained this matter to complainant, and that he had agreed to allow the company to install a meter of regular type in his residence.

Protos Bottling & Supply Co. vs. West Jersey Electric Co.

Complaint was made alleging demand of an excessive deposit for the amount of current used.

The matter was taken up directly with the company, which agreed to reduce the deposit for complainant.

John Rapp et al. vs. Public Service Gas Co.

Complaint was made regarding refusal to extend service in Hilton.

The Board's Inspector reported that the cost of the extension was not too great to justify the Board in ordering it, if six customers would be served from the same line, or if the customers who may now be served will assure a revenue of \$157 per annum.

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The Inspector recommended that the extension be made if the customers to be served from the extension would assure a revenue of \$157 per annum. The recommendation was accepted by the company.

Peter Rathgeber vs. Public Service Electric Co.

Complaint was made regarding the refusal to extend service in East Orange unless a large desposit was made by complainant.

The Board's Inspector reported that the company had made a further canvass of the houses which could be served from the proposed extension, and the company agreed to run the extension without requiring a deposit for same.

Mrs. R. Reichard vs. Bergen Aqueduct Co.

Complaint was made regarding bill rendered for water rent which was not formerly charged on bill.

Investigation by the Board's Inspector showed that upon a general inspection of premises the company found in a number of cases that customers were using fixtures for which no charge was being made, and on all bills rendered for water rent in advance for the following year a charge was made for the extra fixtures for one year back.

Fred C. Reid et al. vs. Public Service Gas Co.

Complainant alleged refusal to extend service to his residence in Old Bridge.

The Board's Inspector reported that in his opinion the extension was too long to justify the Board in ordering the same, but it was recommended that extension be made if the customers to be served from this extension will assure a revenue of \$40 per annum.

The company objected to this recommendation, and a date was fixed to hear the case. Before the final hearing the company advised the Board that the extension had been made.

**Residents Along Line of Trenton and Mercer County Traction Corporation
vs. Trenton and Mercer County Traction Corporation.**

Complaint was made regarding the change in headway of cars operated between Trenton and Lawrenceville.

The Board's Inspector reported that while the headway of cars to Lawrenceville would be forty minutes instead of twenty minutes, there would be cars operated on a ten-minute headway over the portion of the line which is most thickly settled between Trenton and Princeton. The Inspector reported the new schedule to be better for all concerned than the old one.

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Charles Reynolds vs. Delaware, Lackawanna and Western R. R. Co.

Complaint was made regarding the lifting of excess mileage on trip from Dover to Paterson; also that when advised of the error conductor was discourteous.

The Board's Inspector took the matter up with the railroad officials, and they advised the Board that the complaint was warranted; that they had reprimanded the conductor and presented apologies to complainant.

Mrs. Thos. D. Rhodes vs. Perth Amboy Gas Light Co.

Complaint was made regarding a dispute over a bill, and the removal of the meter from complainant's residence in Perth Amboy.

The Board's Inspector reported that when the meter was removed for nonpayment of bill the same was returned to the manufacturer without being tested, this style of meter not proving satisfactory to the company. It was also found that the company had made an error in rendering bills to complainant.

The Inspector recommended that the company make an adjustment with complainant on the bills rendered for the period in dispute on the basis of an average of the bills charged during a similar period in the previous year. The recommendation was accepted by the company.

R. I. Richardson vs. Plainfield-Union Water Co.

Complainant alleged excessive bills for water consumed at his residence in Westfield.

Investigation by the Board's Inspector showed that the amount of water used was as indicated by meter readings.

Lloyd C. Riddle vs. Point Pleasant Electric Light and Power Co.

Complaint was made regarding a notice received from the company, advising that service would be discontinued unless a disputed bill was paid, for service rendered at complainant's residence in Manasquan.

The Board's Inspector reported that a bill was owing for service rendered, and that in going over the figures with complainant he agreed that the company's figures were probably correct, and he also agreed to meet the bill.

R. F. Rieder vs. Erie Railroad Co.

Complaint was made regarding lifting mileage to New York when passenger intended to terminate trip at Jersey City.

Investigation by the Board's Inspector showed that in accordance with tariffs filed, it is the practice of the Erie Railroad Company to lift one mile

in excess of the Jersey City mileage on eastbound trips, on the assumption that passengers using mileage books to Jersey City would in every case go to New York by ferry, although the intention of the passenger was to terminate the trip at Jersey City. The company agreed to withdraw this rule, providing passengers would state their destination as Jersey City when mileage to Jersey City only would be lifted.

George P. Robinson vs. Public Service Electric Co.

Complainant alleged refusal to supply service to his property in Audubon unless a deposit was made for the cost of erecting poles.

The Board's Inspector reported that the company agreed to supply service to complainant under its refund plan. After application was made by complainant, additional houses were added to the line, and the company agreed to supply service without requesting a deposit from complainant.

Samuel H. Robinson vs. Clayton Electric Co.

Complaint was made regarding refusal to supply service at the residence of complainant in Clayton.

The Board's Inspector reported that the revenue estimated to be received would cover the cost of the extension, and it was recommended that the extension be made free of all charges to complainant. The company accepted the recommendation.

W. Locke Rockwell vs. Public Service Railway Co.

Complaint was made regarding the service on the Bloomfield Line.

The Board's Inspector reported that during the period in question there was a block on this line. A traffic census was taken, which indicated that the delay on this line is not usual.

Joseph B. Roberts vs. Bergen Aqueduct Co.

Complaint was made regarding refusal to allow a rebate for time during which the water at complainant's residence in Ridgewood was not used.

The Board's Inspector reported that the company was not notified of the absence of complainant and his family until one week before their return. It was recommended by the Inspector that the company allow a rebate of one month. The recommendation was accepted by the company.

A. D. Rogers vs. Public Service Gas Co.

Complaint was made regarding an alleged excessive bill for three months' service during which time the meter was not read.

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The Board's Inspector reported that the employees of the company were unable to gain access to the premises to read the gas meter during the period complained of. A leak was discovered by the company, and it was recommended by the Inspector that complainant accept the company's offer to settle the bill on a basis of 2,000 cu. ft. per month, the average of gas consumed during the other months.

S. R. Rogers vs. Central R. R. Co. of New Jersey.

Complaint was made regarding the removal of the stove in Lanoke Station. The Board's Inspector took this matter up with the company and reported that the stove has been replaced.

Miss E. Rothholz vs. Adams Express Company.

Complaint was made regarding an excessive charge on a trunk shipped to East Orange from Hoboken.

The Board's Inspector reported that the trunk had been transferred by the New Jersey Transfer and Baggage Express Company to the Adams Express Company, when an error in tagging the trunk caused its shipment to Portland, Conn.

The Inspector reported that the company making the error had reimbursed complainant to the amount of the overcharge.

Rev. Clarence W. Rouse vs. Newton Gas and Electric Co.

Complaint was made regarding the interruption of service during the evening while meetings were being held in the church.

The Board's Inspector reported that the interruption in service was due to the suction pipe on a drip pot rusting through and admitting surface water into the drip pot and shutting off the gas supply to the town.

It was recommended by the Inspector that in the future the company notify all customers when the service would be resumed in case of discontinuance of service for reasons beyond the control of the company, so that all appliances are shut off before the gas is again turned into the mains. The recommendation was accepted by the company.

J. R. Rue vs. Public Service Railway Co.

Complaint was made regarding the elimination of the stop at Sluice Road in both directions.

The Board's Inspector reported that Sluice Road appeared to be the proper place for the stop inasmuch as there were more houses at this section. The company signified its willingness to stop its cars at this road, if allowed to place ashes on complainant's property in order to make a proper landing for

its passengers. The Inspector reported that the matter is entirely in the hands of complainant.

N. D. Runyon vs. Pennsylvania R. R. Co.

Complaint was made regarding the whistling of locomotives at the crossing in Stelton.

Investigation made by the Board's Inspector showed that this crossing was protected by gates continuously, and it was recommended by the Inspector that the bell be rung on locomotives approaching this crossing as prescribed by law for crossings in cities, and the sounding of the whistles be discontinued.

This recommendation was objected to by the company on the grounds that Stelton could not be classed as a city.

N. D. Runyon vs. Pennsylvania R. R. Co.

Complaint was made regarding a shelter shed at the station at Stelton.

The Board's Inspector took this matter up with the Railroad Company, and the shelter shed at the station has been enclosed.

Russell Schwartz Co. vs. Adams Express Co.

Complaint was made regarding claim for damage to materials during shipment.

The Board's Inspector took the matter up with the company, and reported that the claim in connection with the complaint was under voucher to be paid within a few days.

Board of Trade of Saddle River Township vs. New York, Susquehanna and Western R. R. Co.

Complaint was made regarding the protection of the crossing at Midland Avenue, Passaic Junction.

Investigation made by the Board's Inspector showed that there were tracks of the New York, Susquehanna and Western Railroad main line and tracks of the Bergen County Railroad at this crossing. It was recommended that standard crossing signs be placed at the north side and standard signs and a standard alarm bell be placed at the south side of tracks. The recommendation was accepted by the company.

Board of Education of Salem vs. Electric Co. of New Jersey.

Complaint was made regarding the poor lighting service and the accuracy of the meters in Salem.

Investigation by the Board's Inspector showed that the lighting voltage was irregular, which was due to the unbalanced condition of the two-phase system then in use, but which was gradually being changed.

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Investigation of the meters showed that some had been tampered with and were registering less than 60% of the actual consumption. The old type meter was gradually being replaced, and the company will test any meter free of charge upon application.

Henry A. Salisbury vs. Adams Express Co.

Complaint was made regarding return of empty milk cans from Atlantic City to Swedesboro.

The Board's Inspector took the matter up with the Express Company and instructions were issued to return empty cans promptly.

James C. Savage vs. Public Service Railway Co.

Complaint was made regarding the issuing of transfers on the Kearny line from Newark.

The Board's Inspector reported that complainant desired the privilege of transfer from northbound lines on Broad Street to Harrison, Hackensack and Kearny lines, at the intersection of Broad and Bridge Streets. The Harrison and Hackensack lines leave Broad Street at this point, and this is the proper point of transference, whereas the Kearny line traverses three additional blocks on Broad Street and then turns east. Whenever possible the transfer system is so arranged that the point of transfer shall be the point of divergence of any two lines.

The Inspector regarded that as reasonable, as it would prevent parallel riding. If transfers were good at any point along a line where two or more lines of cars operated, it would be possible for a passenger to board one car and after riding a certain distance and obtaining a transfer, he could leave this car, and after transacting business could board any other car which ran over the same route as the original car, and thereby get to his destination.

Edwin J. Schoettle vs. Island Heights Water, Light and Power Co.

Complaint was made alleging an excessive water rate when the house was occupied only during the summer months; also alleging refusal to install a meter.

The Board's Inspector reported that the company did not own meters to install at residences but supplied all water on a flat-rate basis. The Inspector reported further that inasmuch as Island Heights is a summer resort the company was obliged to make all charges on a yearly basis, in order to keep up the plant and equipment, which must be operated all the year round to supply fire protection and the small number of consumers who reside there throughout the year. Under these conditions the hydrant rates would not compensate the company for the cost of operating through the year.

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It was the opinion of the Inspector that the charges to the complainant were justified.

William Schulze vs. Bergen Aqueduct Co.

Complaint was made alleging the Bergen Aqueduct Company made an extra charge for shower bath attachment at complainant's residence in Ridgewood when the bathtub had but one tap.

The Board's Inspector reported that upon a general inspection made of all premises in Ridgewood the Company found a number of its customers were using showers in connection with bathtub installations, and accordingly made charges for the same. It was the opinion of the Inspector that the shower attachment to a bathtub ordinarily provides a substitute for the tub itself, and the installation of a shower would not involve the use of additional water.

The Inspector recommended that in private houses no extra charge be made for a shower in an ordinary bathtub.

The recommendation was accepted by the Company.

Morris Schindler vs. Public Service Electric Co.

Complainant alleged that he made a deposit with the Public Service Electric Company, but was not connected with service at his place of business in Bayonne.

Investigation by the Board's Inspector showed that upon inspection by the company the wiring was satisfactory, but the rules of the company had been violated with respect to the fixtures. After these violations were taken care of the company experienced a little trouble in getting its poles placed, which delayed the connection. The company advised, however, that connection would be made within a few days.

A. O. Schoonmaker vs. Public Service Electric Co.

Complaint was made alleging the refusal to extend service to complainant's residence in Montclair.

Investigation by the Board's Inspector showed that the company had already extended a line in the rear of complainant's property, but in order to connect same an underground extension must be run through the property adjoining in order to reach complainant's house. The company was unable to obtain this right of way.

It was reported that the company would be willing to extend service to complainant at any time this right of way could be obtained.

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E. Schoonmaker vs. Public Service Electric Co.

Complaint was made alleging that application for service at complainant's residence in New Milford was refused.

The Board's Inspector reported that the company had authorized the extension necessary to connect complainant's house, and service would be furnished Mr. Schoonmaker as soon as this extension could be installed.

L. V. Schundner vs. Central R. R. Co. of New Jersey.

Complaint was made alleging the failure of train to stop at station in Bayonne as scheduled.

Investigation by the Board's Inspector showed that on account of a Patten Line Boat being tied up at the Highlands the passengers from said line boarded train, which caused same to be overcrowded, and through misunderstanding the station in Bayonne was passed without a stop.

The company advised the Board that it was its intention that this instance would not be repeated.

Charles C. Selden vs. Public Service Railway Co.

Complaint was made alleging that for a week cars on the Arlington Line in Plainfield did not run to the Woodland Avenue Terminal of the line, but stopped approximately 75 feet away.

The Board's Inspector reported that there appeared to have been a misunderstanding in the matter, the Railway Company officials being under the impression they were complying with a request made by the authorities of Plainfield.

The matter was straightened out and the cars again run to the end of the line.

Mrs. John Sheehan vs. Public Service Gas Co.

Complainant alleged refusal of service after meter was set and a deposit paid, on account of bill in dispute for service through a prepayment meter at former residence in Jersey City.

Investigation by the Board's Inspector showed that the reading of the meter was correct, and tests made of the meter showed that it registered within the allowable limits, so that it would appear that the shortage was due to the failure of the meter to shut off the supply of gas when the amount paid for had been consumed. Inasmuch as no attempt was made to collect the amount of shortage due from complainant in excess of the amount collected from the coin box until after complainant had moved and made formal application for service, and paid a deposit for same, at another address, it was the opinion of the Inspector that service should have been given complainant.

The company advised the Board that service would be continued, but that an effort would be made to collect the old shortage.

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William D. Sherrerd vs. Public Service Gas Co.

Complaint was made regarding the extension of service to complainant's residence in Haddonfield.

Investigation by the Board's Inspector showed that the estimate given by the company as to the cost of the extension of the main would not permit the company to make same unless a deposit was made. Upon second investigation, however, a revised estimate was made so as to enable the company to extend the main without cost to the complainant.

H. Showler vs. Consolidated Gas Co.

Complaint was made regarding the deposit demanded by the company in order to extend service to complainant's residence in West End.

The Board's Inspector took the matter up with the company, and it appeared there was a misunderstanding, inasmuch as the company had no record of the application of complainant.

Investigation indicated that the revenue estimated from this extension would warrant the same, and it was therefore recommended that service be extended complainant without a deposit being made.

The recommendation was accepted by the company.

Sisters of the Sacred Heart vs. Public Service Railway Co.

Complaint was made regarding method employed by the company in supplying identification cards for school tickets.

Investigation by the Board's Inspector showed that formerly the Sisters sent in the names of the children entitled to purchase school tickets at the beginning of the school term, making the cards good for the school year. It appeared that this practice was discontinued and one of the Sisters was compelled to go to the main office of the Railway Company in Newark and have the cards renewed each month.

The Inspector took the matter up with the company, which stated there must have been a misunderstanding on the part of complainant. It was arranged to have a communication sent by the Sisters to the company prior to the beginning of each month, on which cards would be furnished without the necessity of anyone going from Hoboken to get the cards in person.

Arthur E. Smith vs. Public Service Gas Co.

Complaint was made regarding the discontinuance of service upon refusal by complainant to pay excessive bill for service rendered at his residence in Little Ferry.

The Board's Inspector reported that on test of meter it was found that same was registering fast beyond allowable limits, and it was recommended

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by Inspector that a rebate be made in accordance with the results of the test.

The recommendation was accepted by the company.

Alfred M. Smith vs. Woodstown Ice and Cold Storage Co.

Complaint was made regarding the contemplated change from 133-cycle power to 60-cycle power in Daretown.

Investigation by the Board's Inspector showed that complainant bought a new motor for pumping purposes, which would be of no use to him if the power was changed, and the company would not share any of the loss owing to the fact that the motor was not furnished through their company.

Inasmuch as the change apparently would benefit both company and customer, it was recommended that the expense of the change be shared equally between complainant and respondent.

William C. Smyth vs. Consolidated Gas Co.

Complaint was made regarding the delay in returning deposit made for service during summer season in Asbury Park.

Investigation by the Board's Inspector showed that the company had returned this deposit with interest, the delay being caused by the fact that Mr. Smyth failed to produce his deposit slip when he gave notice to discontinue service. Cases of this kind, where deposit slips are missing, are referred to the main office of the company in Long Branch, which further delayed the return of the deposit.

South Side Association vs. Public Service Railway Co.

Complaint was made regarding service and equipment on the lower end of the Valley Road Line of the Public Service Railway in the Town of Montclair.

Investigation by the Board's Inspector showed that it was the intention of the company to put cars of another type on the line in question which would remedy most of the trouble complained of.

H. K. Spear vs. Public Service Gas Co.

Complaint was made alleging the refusal to extend service by the company to residence of complainant in Audubon.

The Board's Inspector reported that the cost of the extension was too large to justify the Board in ordering the extension until other customers may be served from the same, and it was recommended by the Inspector that if the customers who can now be served from this extension will assure a revenue of \$42.00 per annum the extension be made. As other customers

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are added to the line, this guarantee to be distributed over all customers in an equitable manner.

The recommendation was accepted by the company.

William T. Spencer vs. Public Service Electric Co.

Complaint was made regarding the refusal of the Electric Company to extend service to residence of complainant in Glen Ridge.

Investigation by the Board's Inspector showed that the company was unable to get right of way over certain property in order to give complainant service. It was suggested by the Inspector that the company and complainant get together and agree upon terms upon which the company might afford service. If such an agreement can be reached, the complainant may be able to assist the company in obtaining the right of way.

William C. Stainsby vs. New York and Greenwood Lake R. R. Co.

Complaint was made regarding the abandonment of Greenwood Lake Glens Station.

The matter was taken up with the Railroad Company by the Board's Inspector, and he was advised by the company that it was not its intention to abandon the station, but that the name would be known as "Glens" after the new station "Awosting" was established 2,600 feet east of the Greenwood Lake Glens Station.

Standard Water Systems Co. vs. New York Telephone Co. and New Jersey Telephone Co.

Complaint was made alleging unnecessary delay in connection between complainant's office in New York City and factory in Hampton, New Jersey.

Investigation by the Board's Inspector showed that the connection was made through the lines of the New York Telephone Company between New York and Washington, and if these direct lines are congested the operators have been instructed to route calls to Washington via Easton, Pennsylvania. The necessity for calling by way of Easton was so seldom that the operators did not readily remember that there was an alternate route. The Inspector found that during a period of two months sixteen calls were passed by complainant from New York. Three of these calls were delayed for an unreasonable length of time, two of these three were delayed owing to congestion of the direct lines to Washington and the operator failing to connect by way of Easton. The other was due to trouble with the pneumatic tubes.

The Telephone Company has given assurance that every effort will be made to complete calls between New York and Hampton within a reasonable time period.

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Steiner & Son vs. Tintern Manor Water Co.

Complaint was made regarding the rate charged for fire protection service in Long Branch.

Investigation by the Board's Inspector showed that in order to furnish adequate fire protection service for the mills at Long Branch owned by complainant a 6" service connection had been installed, for which an annual charge of \$50.00 was made, the ordinary service to the building being furnished through a separate pipe on a flat charge.

Upon comparing the rates of other companies and municipalities in the State, it was the opinion of the Board's Inspector that the charge is in no sense unreasonable.

A. P. Stewart vs. Adams Express Co.

Complaint was made alleging the discontinuance of delivery to Mountainside from Westfield.

Investigation by the Board's Inspector showed that Mountainside was one mile distant from Westfield, and upon taking a statement of the business carried to Mountainside for a period covering two months, it was the opinion of the Inspector that the business did not warrant the cost of keeping the equipment for delivery to this section.

Charles T. Stran vs. Hackensack Water Co.

Complaint was made regarding requirement of a deposit of \$10.00 for installation of new meter after old one had burst at residence of complainant in Westwood.

The rules of the company provide that the company will furnish new meters to replace those frozen only upon receipt of \$10.00 to cover the cost of repairs. When the cost of repairs was found the balance was returned to the customer. Upon examination of meter, however, it was found that the meter had not been frozen but was broken, and the company returned the deposit to complainant.

Gottlob Straub vs. Public Service Gas Co.

Complaint was made alleging the refusal of the Gas Company to supply complainant's residence in South Amboy with service.

The Board's Inspector reported the company as willing to supply service to complainant, but that the city had refused to allow the company to open the street in order to run the service pipe from the main.

F. P. Stryker vs. New York and Long Branch R. R. Co.

Complaint was made regarding the speed of trains through the Borough of Red Bank making the conditions at crossings dangerous.

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Investigation by the Board's Inspector showed that all crossings were protected except Oakland Street crossing, where gates were operated during the day only.

The Inspector took the matter up with the Railroad Company, and the company agreed to have the crossing guarded by gates continuously.

Edward L. Sturgess vs. Clayton-Glassboro Water Co.

Complaint was made alleging poor service by the Clayton-Glassboro Water Company in Glassboro.

Investigation by the Board's Inspector showed that the wells of the company became clogged with sand, making the conditions so serious that connections finally had to be made at Clayton with the pumping system of the Moore Bros. Glass Company in order to get water.

The Inspector reported further that the company has driven new wells, the service made ample, and that the condition complained of should not again occur for a number of years.

Citizens of Township of Montgomery by Charles L. Sullivan vs. Public Service Gas Co.

Complaint was made alleging refusal to turn on gas for a tenant of complainant.

Upon investigation it was found that when the company received complainant's request to turn on the gas the address given was one which could not be found in Mount Holly. It was later discovered that the stenographer who wrote the letter for complainant had made a mistake in writing the number of the house.

The gas was turned on in the house as requested by complainant.

Surety Egg Box Co. vs. Wells, Fargo & Co.

Complaint was made alleging an overcharge on shipment of egg boxes from Allendale to Lake Hopatcong.

Investigation showed that the shipment in question was transferred to the Adams Express Company and again retransferred to the American Express Company for ultimate delivery at Nolan's Point. The overcharge complained of was due to a mistake on the part of the American Express Company, and a refund was made by said company.

W. F. Suydam vs. New York Telephone Co.

Complaint was made alleging the refusal to supply service at complainant's residence in Montclair.

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Investigation showed that the delay had been due to difficulty in obtaining the right of way for wires necessary to serve the complainant, but that this right of way was finally obtained and service supplied.

Swedish M. E. Church vs. Public Service Electric Co.

Complaint was made alleging the refusal of the company to give service at the church, in East Orange.

The Board's Inspector reported that at the time of the application for service the cost of the extension was too great to warrant the same, but the company afterward canvassed the territory and agreed to extend the service to the church and others on the line without cost to them.

William Taafe vs. Hackensack Water Co.

Complaint was made alleging an excessive bill for water consumed at complainant's residence in Weehawken.

The Board's Inspector reported that the meter readings appeared to be correct, and the bills correctly rendered in accordance with these readings. Upon investigating the premises, it was found that one of the toilets in the building was wasting water, which probably was the cause for the alleged excessive bill.

E. Tack vs. Public Service Gas Co.

Complaint was made alleging that there was a pocket in the gas main which fills with water, thus cutting off the supply of gas from all points east of the bridge crossing the brook on St. Nicholas Avenue, Weehawken.

Investigation by the Board's Inspector showed that the pumping connection on the main in question had been damaged, but that same has been repaired. Upon inspection it was found that the piping in complainant's house was not in good condition, and it was found that the meter cock on complainant's service line was turned about half way off, thereby reducing the pressure of the gas. It was the opinion of the Inspector that upon making these adjustments there would be no further cause for complaint.

Claude N. Terry vs. Central R. R. Co. of New Jersey.

Complaint was made alleging an excessive rate on shipment of berries from Dividing Creek to Newark.

The Board's Inspector reported that when berries are shipped in refrigerator cars the minimum weight is 12,000 pounds, but if the shipment is made in a box car and not in a refrigerator car the rate would apply on the actual weight shipped. Inasmuch as the shipment in question went forward in a refrigerator car, it would appear that the billing was correct

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and the amount representing the difference in the charge for actual weight of shipment and refrigerator car minimum cannot be refunded.

A. C. Thomae vs. American Express Co.

Complaint was made regarding the change in delivery limits at Bound Brook.

The Board's Inspector took the matter up with the officials of the company and reported that arrangements had been made to extend collection and delivery service to include the residence of complainant.

Joseph Thomas vs. Pennsylvania R. R. Co.

Complaint was made alleging the poor condition of drinking water, also no train service from Seaside Park, going north, on Sundays.

Investigation made by the Board's Inspector showed that the water was bad on cars operated between Toms River and Sea Girt. The company arranged to have these cars supplied with fresh water and ice before starting out on their trips.

The Inspector expressed the opinion that the amount of the traffic would not justify running the trains wanted on Sundays.

A. E. Tolkamp vs. Public Service Electric Co.

Complaint was made alleging an excessive bill for current consumed at complainant's residence in Ridgewood.

Investigation by the Board's Inspector showed that the records of the meter readings were correct, and after testing the meter same was found to be registering correctly within the allowable limits. The house wiring was gone over, but no defects were found.

The Inspector reported that no recommendations could be made for any rebate, as current must have passed through the meter, and perhaps was consumed through some temporarily defective wiring.

Trenton Avenue Improvement Association vs. Public Service Railway Co.

Complaint was made alleging that the trolleys on the Hoboken to Paterson line, if late, cut off part of the route leaving passengers standing to wait for other cars.

Investigation was made by the Board's Inspector and it was recommended that all cars be operated over the prescribed route unless a car is so late as to lose a complete headway, causing two cars to reach Main Street at the same time, when the first car should be sent back. The company accepted the recommendation, but the Board received the second complaint advising that the recommendation had not been complied with.

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Upon further investigation the Board's Inspector found that the conductor, in the absence of an inspector, turned his car back when he found that same was late. This crew, however, was reprimanded, and no further trouble was anticipated.

M. S. Trimmer vs. Erie Railroad Co.

Complaint was made regarding a demurrage and reconsignment charge when the original company was notified of reconsignment in time to save the extra charges.

Investigation by the Board's Inspector showed that while a carload of cordwood consigned to Rutherford was en route the destination of said car was changed to Carlstadt. The Board's Inspector took the matter up with the Railroad Company and arrangements were made to cancel and refund the demurrage charge, also the detour charge.

John Tunney vs. New Jersey Gas Co.

Complaint was made regarding excessive bill for service rendered at complainant's residence in Clementon.

Investigation by the Board's Inspector showed that the meter readings were correct, and upon test of the meter same was found to be registering within allowable limits, so that no recommendation could be made for any rebate.

Charles F. Tuttle vs. Philadelphia and Reading Railway Co.

Complaint was made regarding delay in delivery of milk shipments from Pennington.

Investigation by the Board's Inspector showed that milk was transferred from the Philadelphia and Reading Railway cars to the Central Railroad Company's cars at Bound Brook Junction, where there seemed to be a delay in making the transfer. The Inspector took the matter up with the company, and arrangements were made whereby the car into which the Pennington milk is loaded would be operated through to Jersey City and avoid transfer of these milk shipments at Bound Brook station.

George R. Uehlein vs. Adams Express Co.

Complaint was made alleging delay in transfer of express shipments received from Washington via Phillipsburg for points on the Central Railroad.

Investigation by the Board's Inspector showed that the delays complained of were due to failure of the employees of the company at Phillipsburg to make prompt transfer. The attention of the local manager was called to this matter, and instructions were issued to handle the shipments more promptly.

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George R. Uehlein vs. American Express Co.

Complaint was made regarding the discontinuance of messenger service on the Central Railroad train No. 8 to Somerville from Washington.

The Board's Inspector took the matter up with the officials of the Express Company with the result that the local manager was authorized to appoint two baggage men as express messengers so as to permit covering Central Railroad Company of New Jersey train No. 8, which connects with the Delaware, Lackawanna and Western train at Hampton.

Hendrick Van Cleef vs. Jersey Central Traction Co.

Complaint was made alleging the dangerous condition of a bridge crossing the track of the Jersey Central Traction Company about one and one-half miles east of Keyport.

Investigation by the Board's Inspector showed that it was not the physical condition of the bridge itself that was complained of, but rather the existing grade both on the bridge and upon the road to which the bridge leads. The matter did not appear to be within the Board's control.

A. A. Vander Veer vs. Public Service Electric Co.

Complaint was made alleging the refusal of the Electric Company to extend service to complainant's residence in Plainfield unless a deposit was made.

The Board's Inspector recommended that the extension be made, if the customer to be served would use the service for lighting and general purposes for a period of at least five years.

The recommendation was accepted by the company.

George N. Vanatta vs. Pennsylvania Railroad Co.

Complaint was made regarding a trestle owned by complainant, but which the company uses for switching purposes.

Investigation by the Board's Inspector showed that upon inspection of the trestle the same was declared unsafe, and the company ordered it put out of service until the necessary repairs were made. If complainant would repair the trestle, the company would not refuse to place cars thereon consigned to complainant.

Victory Silk Co. vs. Delaware, Lackawanna and Western R. R. Co.

Complaint was made alleging refusal of claim for damages to machinery during shipment from Newton to Paterson.

Investigation by the Board's Inspector showed that the case involved the question of whether the damage occurred while shipment was in the pos-

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session of the Railroad Company or during its transportation from the depot to the consignee, or whether the company accepted shipment improperly crated.

It was the opinion of the Board's Inspector that the proper course for complainant would be an action in a civil court for alleged damage.

George A. Viehmann vs. Public Service Electric Co.

Complaint was made alleging the refusal by the Electric Company to supply current at his property in Highland Park.

Investigation by the Board's Inspector showed that the company had extended its lines so as to supply complainant's houses, the complainant having accepted the proposition of the company to pay a deposit to be returned when five other houses could be served from this extension.

Vietmeyer Brothers vs. Public Service Electric Co.

Complaint was made alleging excessive bills on account of fuses blowing out, due to lightning, in Jersey City.

Investigation by the Board's Inspector showed that complainant installed additional apparatus which increased the minimum charge. Upon complaint of excessive bill the meter was re-read and tested and found to be correct.

It was the opinion of the Inspector that one of the circuits became slightly grounded, causing the fuse to blow, and when a copper wire was used in its place same caused the bills to increase without showing sign of trouble in the wiring. Then when lightning entered the premises this wire did not take care of the trouble and a fire was started, or the fire might have been caused by the non-proof backing of the fuse blocks or other poor wiring conditions. It was found that after repairs were made the fuse held for a while, but later blew again. It would, therefore, seem that there was still a temporary or "swinging" ground existing.

In reference to bills rendered, the Inspector reported no recommendation could be made, as the company was only required to maintain the wiring up to and including the meter, and both are apparently in good condition.

Gustav Vorrath vs. Public Service Gas Co.

Complaint was made alleging refusal of prepayment meter.

The Board's Inspector reported that the premises wherein the complainant wished to place prepayment meters were not suited for these meters, inasmuch as the meters would have to be placed in the hallway on the ground floor, and would be located so that it would be a very simple matter to strangers to gain access to them. It was therefore not recommended that the meters be placed in the house in Weehawken.

In the premises in Jersey City, however, the meters are located in the apartments, so that they are protected, and therefore the company should comply with complainant's request for prepayment meters.

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Aloysius Waad vs. Public Service Electric Co.

Complaint was made alleging the refusal of the company to extend service to complainant's residence in Audubon unless a deposit was made to cover the cost of erection of a pole.

The Board's Inspector reported that the company made a further estimate of the cost of this extension and had advised that the extension would be run without cost to applicant.

Earl M. Waddington vs. Electric Light, Power and Water Co. of Sea Isle City.

Complaint was made alleging that wires and poles supporting them at complainant's residence were in bad condition, making it dangerous to persons passing.

The Board's Inspector took the matter up with the company, which advised that the trouble had been remedied.

Benjamin Wall vs. Erie R. R. Co.

Complaint was made regarding train No. 54 being late several mornings in succession on its trip between Allendale and Warren Point.

Investigation by the Board's Inspector showed that this train was late several mornings, and the matter was taken up by the Inspector with the Superintendent of the railroad. It was agreed to take some action, and the company submitted a statement for a period taken later which showed the train to have been practically on time each morning.

Nicholas Warmoltz vs. New York Telephone Co.

Complaint was made alleging the refusal by the company to extend telephone service to complainant's hotel on the Greenwood Lake Turnpike.

The Board's Inspector reported that the matter was taken up with the company and every effort made to secure rights of way to run the extension. The owner of the property along the nearest route expressed his willingness to have poles set on his property provided the company would run a line to Hewitt, where the freight station and post office for this section were located, it being impossible to get in communication with this town except by traveling a distance of about four miles.

The company canvassed the town of Hewitt and then took the matter up with the Railroad Company as to the installation of service at the station, but the Railroad Company refused to install service at its station, and the complainant was the only prospective subscriber. The company, however, was willing to extend service to complainant's hotel if he was able to secure the right of way.

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**Warren Point Social and Improvement Association vs. Public Service
Railway Co.**

Complaint was made alleging dangerous condition at undergrade crossing at the Erie Railroad and Broadway, Warren Point.

Investigation by the Board's Inspector showed that the only way of lighting the crossing under the bridge was by a cluster of three lights at the west portal of the bridge.

The Town Council intended to have installed 200 lights at Warren Point, and it would appear doubtful whether the Public Service Railway Company had any obligation to install lights at this point. It would seem that the municipality should make arrangements for the proper lighting of the roadway at the location of the bridge.

Mrs. M. L. Washer vs. Newton Gas and Electric Co.

Complaint was made regarding delay in supplying service.

The Board's Inspector reported that the revenue to be derived from this extension would warrant the company in making same, and it was recommended that the extension be run immediately without cost to the complainant.

The recommendation was accepted by the company.

T. M. Watson, Jr., vs. Erie R. R. Co.

Complaint was made regarding failure to publish rates for shipment of milk and cream from Hewitt to Montclair and Arlington.

The Board's Inspector took the matter up with the company, and the company advised that the rates in question would be published.

Mrs. A. C. Westing vs. New York Telephone Co.

Complaint was made regarding the delay in transferring telephone from one address to another.

Investigation by the Board's Inspector showed that the delay was caused by the necessity of placing some temporary construction, due to the fact that the existing cable system was already crowded to its full capacity. The service was installed within a few days.

Wheeler Condenser and Engineering Co. vs. Middlesex Water Co.

Complaint was made regarding new contract covering the charge for water supply.

Investigation by the Board's Inspector showed that the company had agreed to allow complainant to sign another form of contract, which was for the ordinary rate, and the matter was satisfactorily adjusted.

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Charles White vs. New York Telephone Co.

Complaint was made alleging inadequate telephone service.

Investigation by the Board's Inspector showed that complainant was served from what is known as a "farmer line," upon which line there were fifteen stations.

No general rule could be laid down in connection with the number of subscribers to be served from such a line, but in view of the fact that the company was constructing a new line which would reduce the number on the line which served complainant, service would be very much improved.

Joseph A. Whitehouse vs. Public Service Gas Co.

Complaint was made regarding dispute over payment of a bill and shut-off notices, and the final shutting off of the gas after bill had been paid.

Investigation by the Board's Inspector showed that complainant usually paid his bills every two months, or about the period that the company issued its shut-off notices for unpaid bills. Upon receipt of the first shut-off notice complainant offered to pay the amount due providing the company would accept his check drawn to the amount of \$1.00 instead of 99 cents, the amount of the bill. The company's agent refused to accept this check, stating that an order would issue to read the meter again, and another bill would be rendered which would by that time amount to more than \$1.00. Instructions were also to have been given to stop the execution of the shut-off notice. Through some inadvertence, however, this shut-off notice was not held up, and the service was discontinued after the bill was paid.

The Inspector recommended that service be restored immediately. The company accepted the recommendation, and the manner of the payment of future bills was satisfactorily adjusted between the company and the complainant.

Mrs. Bertha Whitney vs. Public Service Gas Co.

Complaint was made alleging the refusal by the company to supply service to five houses in Delawanna.

Investigation by the Board's Inspector showed that the houses in question were located on or near William Street and Linden Street. At this point William Street was not graded and there was a very steep depression in the grade of William Street at Linden Street so that it would be impossible for the company to extend its mains, as it would be necessary to relay them when these streets were graded. The Inspector reported that if the Township Committee would establish a grade and bring the streets up to the established grade the company would extend the mains so as to supply the houses of complainant.

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**Commissioners of the City of Wildwood vs. West Jersey and Seashore
R. R. Co.**

Complaint was made alleging that trains stand on tracks in the center of Wildwood emitting black smoke.

The Board's Inspector reported that the handling of the engines at night was all that could be expected, but improvement could be made during the day by using more care in firing, as there were three engines noted which did not show worse than number one grade of smoke. This, in the opinion of the Inspector, could be accomplished with all engines.

It was recommended by the Inspector that the Railroad Company direct its men to use more care in the firing of engines.

The Williamson Company, Inc., vs. Public Service Electric Co.

Complaint was made alleging that rebate for fast meter was not large enough.

Investigation by the Board's Inspector showed that the records of meter readings of the company were correct, and that tests have been made of the meter. It was found upon the last test of the meter that same was registering fast upon the different loads. According to the rules of the Board, when a meter is found to be 4 per cent. fast at any load, a weighted average should be taken, which the company did for complainant, and allowed a rebate on a basis of this average for a period covering half the time which the meter was in use between the last two tests of the meter.

This was in accordance with the rules of the Board.

S. Williams et al. vs. Public Service Gas Co.

Complaint was made alleging the refusal of the Gas Company to extend service to his residence in Pensauken.

The Board's Inspector reported that the cost of the extension would be too large to justify the Board in ordering the same.

It was recommended by the Board's Inspector that if the customers who could be served from this extension would assure a revenue of \$153 per annum that the extension be made.

Mrs. Lydia Wilson vs. Public Service Gas Co.

Complaint was made alleging the refusal by the Gas Company to install a prepayment meter at her residence in Camden.

Investigation by the Board's Inspector showed that the company had explained to complainant that the conditions existing in the house were such that it was not advisable to install a prepayment meter, and complainant agreed to withdraw the complaint and have a meter of the regular type installed.

L. V. P. Wilson vs. Plainfield-Union Water Co.

Complaint was made alleging that a bill was rendered for a full quarter when half the quarter water was served through a meter and had been paid for.

Investigation by the Board's Inspector showed that complainant had been supplied with water under a flat-rate basis, and upon the 15th of the month service under these conditions was terminated and complainant paid the pro rata amount for the actual period of time during which he had service. Complainant then installed a meter, and the supply for the latter part of the month and since had been through a meter.

It was the opinion of the Inspector that the minimum charge should be based on one-half the monthly minimum, and from thence the rate would be the regular minimum rate.

W. G. Wilson vs. Elizabethtown Gas Light Co.

Complaint was made alleging refusal to accept settlement of current account, less discount, because of a balance that was due from the preceding month.

Investigation by the Board's Inspector showed that complainant sent a check for the amount of his current bill, less the discount for prompt payment, but which was received by the company after the prompt payment period had elapsed. The company refused to credit this check as payment in full, but applied same on account, leaving a balance due. Upon receipt of check the following month, which was sent within the prompt payment period, the company returned same refusing to credit it until the balance due from the month previous was paid.

The balance appeared to be due the company inasmuch as the prompt payment period had expired when the check was received.

C. M. Withington vs. New York Telephone Co.

Complaint was made regarding the difference in rates charged in Cranford and East Orange.

Investigation by the Board's Inspector showed that the number of subscribers in Cranford was 618, while in the Orange district there were 8,246.

A company must provide facilities so that any subscriber to its services in a community can communicate with other subscribers. When the company has but a few hundred subscribers to provide for, this communication is comparatively simple. When the number runs into the thousands the matter of communication between subscribers is much more complex and expensive. This is reflected in a higher charge to the subscriber.

It did not appear, prima facie, unreasonable in consideration of the difference between the number of subscribers in Cranford and East Orange, that a higher rate should prevail in the latter town.

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Women's Fortnightly Club vs. Pennsylvania R. R. Co.

Complaint was made regarding the lighting of the Farmingdale Station with oil lamps.

The Board's Inspector reported that inasmuch as the Railroad Company had made a number of improvements at this station including a shelter shed, it did not appear that the company should be asked to replace the oil lamps with electric lights.

Wood & Skilton vs. Pennsylvania R. R. Co.

Complaint was made alleging an excessive rate on lumber shipments between Millville and Vineland.

The Board's Inspector took the matter up with the company, and it was agreed that the rate of 75c. should be reduced to 65c. to compare with the rate of 65c. charged for other hauls of like distance, and that a refund would be made to complainant.

John Wooley Fish Co. vs. Adams Express Co.

Complaint was made regarding the delivery of fish from Asbury Park to Newark.

This matter was taken up with the Express Company by the Board's Inspector who was advised that the matter would be adjusted with the complainant.

M. A. Wray et al. vs. Public Service Railway Co.

Complaint was made alleging the overcrowding of cars on the Singac Line and petitioning for a double track.

The Board's Inspector reported that travel on this line was heavy during the summer months, but that records showed the line did not pay the cost of operation as a whole, therefore it would not warrant ordering double tracking. It would appear that extremely heavy loads are carried during certain portions of the year and that relief should be afforded. The Inspector recommended that turnouts be lengthened to such a distance as to admit the operation of triple headers to take care of the portion of the year when the cars are overcrowded.

The recommendation was accepted by the company.

Frank L. Wright vs. Delaware, Lackawanna and Western R. R. Co.

Complaint was made regarding excessive demurrage charges.

Investigation by the Board's Inspector showed the bill for demurrage charges was computed on a basis of 48 hours free time, when 72 hours free time should have been allowed, and arrangements were made with the company to refund the overcharge to complainant.

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Walter T. Zugalla vs. Central R. R. Co. of New Jersey.

Complaint was made regarding the ringing of the automatic bell at the Freneau Road Crossing at Freneau.

The Board's Inspector took the matter up with the Railroad Company, and it was agreed to reduce the circuit west of the crossing to 1,700 feet, so that trains working beyond this point would not cause the bell to ring.

Applications for Approval of Mortgages and Issues of Stocks and Bonds.

The following is a list of applications for approvals of issues of stocks, bonds, etc., with the action of the Board thereon from January 1st, 1915, to December 31st, 1915.

POINT PLEASANT TRACTION CO.—SALE OF \$75,000 STOCK OF POINT PLEASANT ELECTRIC LIGHT AND POWER CO.

Application was made by the Point Pleasant Traction Company for approval of the sale of certain shares of capital stock of the Point Pleasant Electric Light and Power Company of the par value of \$75,000.

Approved January 5th, 1915, after hearing.

JERSEY ELECTRIC CO.—\$30,000 CAPITAL STOCK.

Application was made by the Jersey Electric Company for approval of an issue of capital stock to the amount of \$30,000.

Approved January 12th, 1915, after hearing.

BERGEN AQUEDUCT CO.—\$3,000 BONDS.

Application was made by the Bergen Aqueduct Company for approval of proposed issue of bonds to the amount of \$64,000. The Board, on May 5th, 1914, approved the purpose of the issue of bonds to the amount of \$20,000, certificates of approval to such amount to issue from time to time, as such bonds are needed, and upon receipt from the Chief Inspector of the Board's Utilities Division of certificates to the effect that the work has been done. The Chief Inspector, reporting that the company had made construction expenditures to the total of \$2,927.68, the Board approved the issue of bonds to the amount of \$3,000.

Approved January 19th, 1915, after hearing.

PROPRIETORS OF MORRIS AQUEDUCT—\$500,000 MORTGAGE.

Application was made by the proprietors of the Morris Aqueduct for approval of its mortgage in the sum of \$500,000, dated February 1st, 1915, to the Morristown Trust Company, Trustee.

Approved January 26th, 1915, after hearing.

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PROPRIETORS OF MORRIS AQUEDUCT—\$179,000 BONDS.

Application was made by the proprietors of the Morris Aqueduct for approval of proposed issue of its bonds to the amount of \$179,000.

Approved January 26th, 1915, after hearing.

CONSOLIDATED GAS CO. OF NEW JERSEY—\$190,000 BONDS.

Application was made by the Consolidated Gas Company of New Jersey for approval of proposed issue of its first refunding mortgage six per cent. bonds to the amount of \$190,000.

Approved January 26th, 1915, after hearing.

PUBLIC SERVICE RAILWAY CO.—EXTENSION OF TIME OF PAYMENT OF BONDS.

Application was made by the Public Service Railway Company for approval of extension for a period of thirty years, from February 1st, 1915, of time of payment of bonds of North Hudson County Railway Weehawken Extension Mortgage.

Approved January 26th, 1915, after hearing.

JERSEY CENTRAL TRACTION CO.—\$1,754,000 BONDS.

Application was made by the Jersey Central Traction Company for approval of issue of bonds to the amount of \$1,754,000, under its third mortgage, dated March 2d, 1914.

Approved February 2d, 1915, after hearing, subject to certain conditions contained in the certificate.

STANDARD GAS CO.—APPLICATION FOR APPROVAL OF ISSUE OF \$22,193 BONDS.

REPORT.

Harry Stille and *H. E. Woodman*, for the company.

The Standard Gas Company was formed by consolidation of the Standard Gas Company of Keyport and Matawan with the Atlantic Highlands Gas Company, this consolidation having been approved by the Board April 22d, 1913.

Under the terms of the consolidation a new mortgage was created in the aggregate sum of \$1,000,000, and an issue of bonds thereunder was approved to the extent of \$630,000, to be used for the purpose of refunding outstanding bonds of the subsidiary companies to liquidate existing debts, and to provide for additions and extensions then necessary.

Application now before the Board is the first submitted since the time

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of the consolidation. This application bears date November 19th, 1914, and is for the approval of the issue of bonds at 80 in the par value of \$22,193, the proceeds of these bonds to be used in paying for extensions and additions, in addition to those authorized at the time of the consolidation forming the company. In the last application of the company it was stated that the extensions and additions referred to amounted to \$17,754.78. This was very carefully checked over, and it was found that there should be certain deductions which had not been made because of the retirement of the old water gas set and other items connected with it.

The amount at which the old water gas set had been valued in the appraisal made of the company's property at the time of consolidation was \$6,500, and it therefore appears that the net additions to capital value amount only to \$11,254.78.

In the application submitted by the company, it appears that the prices charged to the company by the Union Railway Supply Company included an allowance of 10 per cent. for contractor's profit, administrative expenses of the home office, rental of the home office, etc. In addition to this, the charge has been included of \$5,000 under the head of Engineering and Superintendence, this \$5,000, however, representing portions of the salaries of the Local Superintendent and of the President. A strict interpretation of capital charges may include portions of the time of the Superintendent and President respectively, but the Board does not consider it a wise policy on the part of a going concern to charge definitely to construction, and thereby capitalize, portions of the salaries of the regular employees of the company whose principal duty is the maintenance and operation of the plant and system, unless the respective salaries are carefully divided between construction and operation, and carried on the books in this way. The testimony does not disclose that this has been done. The company contended that the full amount of bonds asked for in the application would be required to enable them to properly finance the outstanding obligations, and claimed that if the amount of bonds asked for was not justified by the charges made to capital account during the period referred to, the Board should give consideration to the issuance of a sufficient amount of bonds to produce funds which could be used for working capital. In any case, the company contended that the full amount asked for was requisite.

Examination of the report on the valuation of the property of the company made to the Board under date of March 26th, 1913, at the time of the consolidation, shows, on page 4, that an allowance for working capital amounting to \$31,904 was included. Working capital has, of course, to be increased from time to time, as the business of the company increases, and it might be reasonable to allow the increase of capitalization to an extent sufficient to provide \$5,000 of working capital. Before approval is given to this, however, it should be noted that of the bonds issued under the approval of the Board of April 22d, 1913, bonds to the amount of \$98,000 are outstanding as collateral for notes to the amount of \$65,492. The latter amount is less than 70 per cent. of \$98,000, and in the opinion of the Board the use of these bonds as collateral under these conditions is a contravention of the act of 1906 which requires that bonds may not be issued at less than 80.

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The Board has heretofore expressed its unwillingness to approve the issuance of bonds for use as collateral, unless the Board has full knowledge of the same and approves such use in each specific instance.

The application now before the Board states that the bonds are to be used as collateral, or for the purpose of obtaining funds to liquidate outstanding indebtedness.

The need of the company for additional working capital appears to be due to the conditions under which the bonds referred to above have been handled. Under the terms of the Act of 1906, the bonds to the amount of \$98,000 should have brought to the company an amount not less than \$78,400. It appears that this lot of bonds is pledged as collateral for \$65,492 of notes. This amount is less by \$12,908 than the least amount which the Law of 1906 recognizes as the proper proceeds for the bonds in question.

In view of the conditions under which bonds of a former issue to the amount of \$98,000 have been disposed of, although temporarily, the Board will withhold its approval of the present application until the condition referred to above, which, in the judgment of the Board, constitutes a violation of the law, has been corrected.

Dated February 9th, 1915.

HILLCREST WATER CO.—\$15,000 CAPITAL STOCK.

Application was made by the Hillcrest Water Company for approval of proposed issue of its capital stock to the amount of \$50,000. The Board, in lieu of the amount asked for in the petition, approved the issue of capital stock to the amount of \$15,000.

Approved February 16th, 1915, after hearing.

PHILLIPSBURG HORSE CAR RAILROAD CO.—\$296,300 CAPITAL STOCK.

In this matter the following report was made by the Board:

REPORT.

It appears that the Phillipsburg Horse Car Railroad Company was incorporated under special acts of the Legislature, passed in 1867 and 1868; that a horse car line was constructed along Main Street in Phillipsburg in connection with which stock in the par value of thirty thousand dollars (\$30,000) was issued.

Phillipsburg is directly across the river from Easton, Pennsylvania, and, from an industrial standpoint, forms part of the same general community.

The capital stock of the Phillipsburg Horse Car Railroad Company is owned by the Easton Transit Company, and the properties in the two States have been operated for many years under the same general management.

From time to time extensions have been made to the lines of the Phillipsburg Company, and in 1894 the system was electrified. At the time of con-

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struction the gauge of the track was five feet two inches, and in accordance with recommendations of the Board the gauge was changed to standard, and the property has been completely rebuilt within the past year.

Since the original issue of capital stock in the amount of thirty thousand dollars no stock has been issued, nor have any bonds been issued by the Phillipsburg Company. The funds needed for the electrification for the various extensions, and for the complete rehabilitation which took place in the past year, have been furnished from time to time by the Easton Transit Company. These advances have been carried on the books of the Easton Transit Company as debts of the Phillipsburg Horse Car Railroad Company. In addition, it is contended that interest on these debts should be paid by the Phillipsburg Company.

The company's application is for the issue of stock amounting to four hundred thousand dollars (\$400,000). This, added to the original issue, would make a total capitalization of four hundred and thirty thousand dollars (\$430,000).

The application submitted by the company contains the necessary financial data to show that the various debts of the Phillipsburg Company amount in total to the four hundred and thirty thousand dollars (\$430,000), including the stock already outstanding. It is contended by the company that unpaid interest would increase the amount given above in very considerable measure, but no claim is made for this back interest other than is already carried on the books of the Easton Transit Company.

The cost of the electrification, including interest on loans up to the present time, amounted to one hundred and sixty-four thousand, one hundred and fifty-eight dollars and eighty cents, ...	\$164,158 80
The estimated cost of reconstruction, which has just been completed, less allowance for salvage was,	151,000 00
For extensions, improvements, betterments and reconstruction, not included in the foregoing items, earnings have been expended to the extent of,	84,841 20

The total of these items is,	\$400,000 00
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It is upon this basis that the company's application is made up.

In view of the fact that moneys expended had been, to some extent at least, for replacement purposes, a complete appraisal was made of the property as it exists since the last reconstruction. The total amount found in this appraisal is as follows:

101. Engineering and superintendence,	\$5,262 21
102. Right of way,	18,048 27
103. Other lands used in electric railway operations,	2,000 00
104. Grading,	11,800 00
105. Ballast,	1,508 00
106. Ties,	17,132 38
107. Rails, rail fastenings and joints,	45,433 95
108. Special work,	11,382 00

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110. Paving,	\$50,486 00
111. Track laying and surfacing,	19,784 00
112. Roadway tools,	399 40
117. Interlocking and other signal apparatus,	1,074 00
118. Telegraph and telephone lines,	1,018 14
119. Poles and fixtures,	3,874 45
122. Distribution system,	9,220 80
127. Shops and carhouses,	15,181 85
135. Cars,	42,648 00
137. Electrical equipment of cars,	23,500 00
138. Other rail equipment,	3,864 92
139. Miscellaneous equipment,	400 00
141-143. Interest and taxes during construction,	10,630 27
145. Organization,	4,000 00
146. Franchises (legal and other expenses only),	10,000 00
Total,	\$307,648 73
Add 10 per cent. of structural cost for omissions, contingencies and contractor's profit,	18,729 50
Grand total,	\$326,378 23

In the opinion of the Board, having in mind the conditions laid down in the Act of 1906 regulating the issue of securities by public utility companies, a fair capitalization for this company is \$326,300. It will be noted that this falls short of the company's application by the amount of \$103,700.

In the opinion of the Board, approval could be given to the capitalization including stock to the amount of \$326,300, and to the issue of some sort of serial or temporary notes to the amount of \$103,700, which are to be automatically taken up from earnings. The issuance of the stock and of the temporary notes referred to will enable the Phillipsburg Horse Car Railroad Company to pay its debts to the Easton Transit Company, and will at the same time provide a capitalization which bears the proper relation to the property owned by the company.

In the application submitted by the company, willingness is expressed to abide by the Board's decision with regard to the amount of stock to be issued, in the following words:

"Section 7. Your petitioner is desirous of increasing the amount of its capital stock from \$30,000 to \$430,000, or such part thereof as may be approved by your Honorable Board."

The Board therefore approves the issue by the company of stock in the par value of \$296,300, and a certificate for this amount will issue.

The Board will, upon the proper application for the same, give consideration to the issue by the company of some sort of serial or temporary notes for the payment of the balance of the indebtedness amounting to \$103,700.

Dated February 16th, 1915.

APPROVALS OF MORTGAGES, STOCKS AND BONDS. 121

A certificate was issued bearing date February 16th, 1915, approving the proposed issue of capital stock to the amount of \$296,300, referred to in the foregoing.

OCEAN CITY WATER CO.—\$65,000 BONDS.

Application was made by the Ocean City Water Company for approval of proposed issue of its bonds to the amount of \$65,000.

Approved February 26th, 1915, after hearing.

WARREN WOOD WORKING CO.—\$30,000 BONDS.

Application was made by the Warren Wood Working Company for approval of the validation of an issue of bonds to the amount of \$30,000.

Approved March 16th, 1915, after hearing.

PLAINFIELD-UNION WATER CO.—\$100,000 BONDS.

Application was made to the Board by the Plainfield-Union Water Company for approval of a proposed issue of its bonds to the amount of \$100,000.

Approved April 6th, 1915, after hearing.

OCEAN COUNTY GAS CO.—APPLICATION FOR APPROVAL OF ISSUE OF \$40,000 BONDS.

In this matter the following report was made:

REPORT.

Harry Stille and *H. E. Woodman*, for the company.

The application was submitted by the company under date of October 23d, 1914, and is the first one submitted by it in connection with the financing of its development and construction.

The company was incorporated January 11th, 1910, and in the spring and summer of 1910 constructed a gas generating plant in Toms River. During the summer the mains were extended through Toms River and Island Heights, and during the next two years high pressure mains were laid down the Shore Road from Toms River to the northern border of Tuckerton, where connection was made with the mains of the Tuckerton Gas Light Company, and gas under high pressure was furnished to that company for distribution in Tuckerton.

All the construction up to the time covered by the present application was financed through issues of securities made without obtaining the prior approval of the Board, as they were made in pursuance of contracts authorized by the company on March 5th, 1910, and June 2d, 1910, which was prior to

the existence of the Public Utility Commission. The construction work under these contracts, however, was not completed until some time in the year 1912.

Notwithstanding the fact that the construction work and the financing for it was arranged for before the existence of the Public Utility Commission, it has all been done since the adoption of the Act of 1906, which provides that the issuance of stock by public utility companies must be for cash at par, and the issuance of bonds at not less than 80.

As the expenditures made by the company had been so recent, and as the Board was of opinion that they should bear the proper relation to the Law of 1906, referred to, the entire property was checked up to ascertain its reasonable cost. This was necessary because the original construction work had been done under contracts which involved turning over to the contractor securities and not the proceeds obtained from the sale of the same.

The authorized capital stock is forty thousand dollars (\$40,000) and a mortgage was created under date of March 5th, 1910, in the amount of two hundred thousand dollars (\$200,000).

The original contract, known as "No. 1," provided for the "purchase of the necessary real estate, construction of the building, the installation of all apparatus for the manufacture of water gas including purifier, boilers, engine, compressor, etc; also steel holder and the necessary mains, pipes, supply pipes, conductors and conduits, together with the service pipes, governors and meters capable of supplying 500 consumers." The contract also provided for the operation of the plant for a period of thirty days by the contractor. This contract called for the payment of \$100,000, which was met by the issue of \$20,000 in stock and \$80,000 in bonds, issued to the contractor.

Contract "No. 2" provided for the "complete high pressure gas system for the Ocean County Gas Company to supply Pine Beach, Ocean Gate and vicinity, including the installation of all apparatus and the necessary mains, pipes, supply pipes, conductors and conduits, together with the service pipes, governors and meters capable of supplying 100 consumers." This contract called for the payment of \$20,000, which was provided for through the issuance of bonds.

Contract "No. 3" provided for the construction of "a complete high pressure gas system for the Ocean County Gas Company to supply all the towns along the line between Toms River and including Barnegat, N. J., with the installation of all apparatus and the necessary mains, pipes, supply pipes, conductors and conduits, together with the service pipes, governors and meters capable of supplying 300 consumers." This contract called for the payment of \$60,000, which was paid through the issuance of bonds.

There have been issued, therefore, up to the present time, for construction work, stock \$20,000, and bonds \$160,000.

An agreement was made by which the Ocean County Gas Company issued the balance of its stock, amounting to \$20,000, in payment for stock of the Tuckerton Gas Light Company, amounting to \$12,650, this representing 50.6 per cent. of the outstanding stock of that company. All of the authorized stock is now issued and outstanding, and of the bonds available \$40,000 are

APPROVALS OF MORTGAGES, STOCKS AND BONDS. 123

still unissued, and the application of the company at this time is for the approval of the issue of the \$40,000 referred to.

The property has been very carefully inventoried by the engineers of the Board. This inventory includes construction work, additions and extensions made subsequent to the completion of the work under the three contracts referred to above.

The application asks approval for the issuance of the remaining \$40,000 first mortgage 5 per cent. bonds to use as collateral, or to sell and take up certain notes and bills payable, and it is assumed that these notes and bills payable are outstanding in connection with construction accounts. It is probable, however, and the annual report for the year 1913 shows, that interest and deficits during the development period were charged up to capital account under the head of interest during construction and other similar items.

Attached to the application is a statement of the company indicating that the total charges to capital account up to September 30th, 1914, amounted to \$236,326.80. The estimate made by the Board's engineers gives a cost of reproduction of the physical property, with allowances for organization and cost of obtaining franchises, of \$136,240.

Analysis of the company's statement of fixed capital account shows a number of items which cannot be accepted without examination.

Organization is estimated at \$10,000; franchise, \$5,000; other intangible gas capital, \$10,000; law expenditures during construction, \$4,000; interest during construction \$12,668.44.

Of these items, we allow for organization, \$3,350; cost of obtaining franchise, \$4,000; this item including law expenditures during construction. Other intangible gas capital we reject altogether. Interest during construction is found under the head of overhead charges, and for overhead charges in connection with the development, the company has included an amount equal to \$38,272. The allowance for these items made by the Board's engineers is \$17,835.

An allowance for working capital will have to be made, and \$10,000 appears to be reasonably sufficient for this purpose. A general contractor's profit amounting to 10 per cent. on the expenditures for physical property amounting to \$140,000 will also be allowed. This gives a total for the purposes of capitalization as follows:

Previously allowed,	\$136,240
Working capital,	10,000
Contractor's profit,	14,000
	<hr/>
Total,	\$160,240

The Board is unable to find as of September 30th, 1914, a reasonable investment in excess of \$160,000. The company's figure of \$236,325 includes interest after the construction period, but during the development period.

Omitting consideration of the stock issued for the purchase of the Tuckerton Gas Light Company stock, and considering only the securities issued

for new construction, there are now outstanding stock in the par value of \$20,000, and bonds in the par value of \$160,000. In order to meet the requirements of the Law of 1906, the stock must be considered as issued at par—\$20,000. The bonds, also, it is stated, were issued at par. The stock and bonds which have been issued for construction should have resulted to the company in property having a value of \$180,000.

The Board has heretofore expressed the opinion that the property now in existence, including reasonable allowances for organization, working capital and cost of obtaining franchises, amounts to about \$160,000.

The above leads to the conclusion that the total amount which the company is justified in charging to capital account as of September 30th, 1914, is \$160,000, and is less than securities issued therefor by about \$20,000. The Board will, therefore, deny approval for the issue of the balance of the \$40,000 for which approval is asked.

The Board incidentally calls attention to the fact that no approval has ever been asked by the company, nor granted by the Board, for the issuance of the \$20,000 of stock, which is alleged to have been issued in payment for the stock of the Tuckerton Gas Light Company. The company should immediately take steps to correct the condition so created.

Dated April 6th, 1915.

**NEW YORK AND NEW JERSEY WATER CO.—TRANSFER OF 3,410
SHARES OF STOCK TO SUBURBAN INVESTMENT CO.**

Application was made by the New York and New Jersey Water Company for approval of the transfer upon its books of 3,410 shares of stock from the Suburban Water Company to the Suburban Investment Company, owing to an amendment of the charter of Suburban Water Company, changing its corporate name to Suburban Investment Company.

Approved April 13th, 1915, after hearing.

**NEW JERSEY SUBURBAN WATER CO.—TRANSFER OF 992 SHARES
OF STOCK TO SUBURBAN INVESTMENT CO.**

Application was made by the New Jersey Suburban Water Company for approval of the transfer upon its books of 992 shares of stock from the Suburban Water Company to the Suburban Investment Company, owing to an amendment of the charter of Suburban Water Company, changing its corporate name to Suburban Investment Company.

Approved April 13th, 1915, after hearing.

**PUBLIC SERVICE NEWARK TERMINAL RAILWAY CO.—\$8,300,000
CAPITAL STOCK—\$5,000,000 BONDS.**

Application was made by the Public Service Newark Terminal Railway Company for approval of proposed issue of its capital stock to the amount of \$8,300,000 and proposed issue of its bonds to the amount of \$5,000,000. The Board approved the proposed issue of bonds upon condition that \$1,250,000

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of capital stock shall be first subscribed and paid for in cash, the Board in its certificate stating that it is satisfied "the issuance of capital stock in the sum of \$1,250,000 will be in accordance with law, and the purpose of said issue, namely, the building and construction of the Newark Terminal with a spur and other approaches thereto being approved by said Board, the Board hereby approves (subject to Conference Order Number Seven) the said issue of stock." The Board further stated in its certificate that nothing therein shall be taken as authorizing or approving the use of the proceeds of such bonds and capital stock, or any part thereof, for the acquirement of claims, held by Public Service Corporation against the Public Service Railway Company.

Approved April 16th, 1915, after hearing.

PUBLIC SERVICE TERMINAL RAILWAY CO.—MORTGAGE \$5,000,000.

Application was made by the Public Service Newark Terminal Railway Company for approval of its mortgage in the sum of \$5,000,000 to the Fidelity Trust Company as trustee.

Approved April 16th, 1915, after hearing.

SEASHORE GAS CO.—\$10,800 STOCK.

Application was made by the Seashore Gas Company for approval of proposed issue of \$10,800 capital stock.

Approved May 7th, 1915, after hearing.

TOMS RIVER AND ISLAND HEIGHTS ELECTRIC LIGHT AND POWER CO.—\$4,800 STOCK.

Application was made by the Toms River and Island Heights Electric Light and Power Company for validation of an issue of stock to the amount of \$4,800, the proceeds of which were used for improvements to property. The Board being satisfied that in all other respects the issue of stock was made in accordance with law, approved the same.

Approved May 18, 1915, after hearing.

GLEN GARDNER WATER CO.—\$4,000 STOCK.

Application was made by the Glen Gardner Water Company for approval of issue of \$4,000 capital stock.

Approved May 18th, 1915, after hearing.

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TRENTON, LAKEWOOD AND SEACOAST RAILWAY CO.—APPLICATION FOR APPROVAL OF ISSUE OF \$200,000 STOCK AND \$320,000 BONDS.

In this matter the following report was made:

REPORT.

Adrian Riker, for petitioner.

Petitioner applies for approval of issue of stock to the amount of \$200,000 and bonds to the amount of \$320,000. In these amounts are included \$73,000 of stock and \$73,000 of bonds issued without the Board's approval.

As to the \$73,000 stock and \$73,000 bonds alleged to have been heretofore issued, because of the lack of proofs this Board is unable to finally pass upon these issues and will therefore reserve judgment until expenditures are vouched and the other items are properly justified.

The balance of the stock and bonds is applied for to acquire the balance of the right of way and to construct a railway between Lakewood and Point Pleasant.

The Board concludes that it will grant approval for the issue of stock and bonds in amounts sufficient to acquire lands not included in the expenditures and contracts for rights of way heretofore capitalized and to construct and equip the line.

In the judgment of the Board, the following allowances are reasonable on these accounts:

Rights of way,	\$12,000
Construction and equipment, including engineering, legal and other expenses during construction,	225,000
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	\$237,000

In these estimates, fencing and undergrade crossing at Central Railroad in Lakewood are not included.

The Board will approve the issue of bonds to the amount of \$190,000, which, at 80 per cent. of par, will produce \$152,000, upon condition that stock to the amount of \$85,000 is subscribed for and paid for at par.

All other questions are reserved for the submission of additional proof as the petitioners may determine.

Dated May 26th, 1915.

WOOLWICH WATER CO.—\$1,000 BONDS.

Application was made by the Woolwich Water Company for the approval of proposed issue of its bonds to the amount of \$1,000.

Approved May 28th, 1915, after hearing.

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CONSOLIDATED GAS CO. OF NEW JERSEY—\$700,000 BONDS.

Application was made by the Consolidated Gas Company of New Jersey for approval of proposed issue of its bonds to the amount of \$700,000.

Approved May 28th, 1915, after hearing.

CONSOLIDATED GAS CO. OF NEW JERSEY—\$5,000,000 MORTGAGE.

Application was made by the Consolidated Gas Company of New Jersey for approval of its mortgage in the sum of \$5,000,000, to the Bankers' Trust Company of New York and Frank N. B. Close, of Cranford, as Trustees, dated April 1st, 1915.

Approved May 28th, 1915, after hearing.

RIVERSIDE TRACTION CO.—\$70,000 BONDS.

Application was made by the Riverside Traction Company for the approval of proposed issue of its first mortgage bonds to the amount of \$70,000.

Approved June 10th, 1915, after hearing.

TRENTON, HAMILTON AND EWING TRACTION CO.—\$110,000 BONDS.

Application was made by the Trenton, Hamilton and Ewing Traction Company for approval of proposed issue of bonds to the amount of \$110,000. The Board approved the proposed issue of the bonds at a price not less than 90 per cent. of the par value thereof.

Approved June 10th, 1915, after hearing.

ATLANTIC CITY ELECTRIC CO.—\$70,200 STOCK—\$218,000 BONDS.

Application was made by the Atlantic City Electric Company for approval of proposed issues of preferred stock to the amount of \$70,200, and bonds to the amount of \$218,000, the proceeds to be used for the purpose of paying the indebtedness of said company incurred in the purchase of the property franchises and assets of the Ocean City Electric Light Company.

Approved June 15th, 1915, after hearing.

**SOMERSET, UNION AND MIDDLESEX LIGHTING CO.—\$40,000 BONDS
OF PLAINFIELD GAS AND ELECTRIC LIGHT CO.**

Application was made by the Somerset, Union and Middlesex Lighting Company, successor to the Plainfield Gas and Electric Light Company, for approval of proposed issue of 5 per cent. general mortgage bonds of the Plainfield Gas and Electric Light Company of the par value of \$40,000.

Approved June 29th, 1915, after hearing.

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LEHIGH VALLEY RAILROAD CO. OF NEW JERSEY—\$240,000 BONDS.

Application was made by the Lehigh Valley Railroad Company of New Jersey for approval of a proposed issue of its debenture bonds in the amount of \$240,000 to the Lehigh Valley Railroad Company.

Approved July 6th, 1915, after hearing.

MORRIS AND ESSEX R. R. CO. AND DELAWARE, LACKAWANNA AND WESTERN R. R. CO—\$2,250,000 BONDS.

Application was made by the Morris and Essex Railroad Company and the Delaware, Lackawanna and Western Railroad Company, lessee, for approval of issue, sale and delivery of bonds of the Morris and Essex Railroad Company in the amount of \$2,250,000 to the Delaware, Lackawanna and Western Railroad Company, for a like number of said Morris and Essex Railroad Company's first consolidated mortgage bonds, surrendered to the United States Trust Company, of New York, Trustee, and cancelled and destroyed as set forth in said petition.

Approved July 6th, 1915, after hearing.

PENNSYLVANIA R. R. CO.—\$49,000,000 BONDS.

Application was made by the Pennsylvania Railroad Company for approval of proposed issue of its 4½ per cent. consolidated mortgage bonds to the amount of \$49,000,000.

Approved July 6th, 1915, after hearing.

RARITAN RIVER R. R. CO.—\$200,000 STOCK.

In this matter the following report was made:

REPORT.

W. D. Edwards, for the company.

The Board is asked to authorize:

1. An issue of \$100,000 of capital stock to provide for necessary improvements and betterments, the estimated cost of which will be \$188,000.
2. An issue of \$110,000 as a stock dividend.

As to the first request, the Board's Chief Inspector and Auditor have verified the correctness of the items constituting the proposed improvements. The Board is satisfied that these improvements will cost in the neighborhood of the figure claimed, namely, \$188,000, and authorizes the issue of \$100,000 of stock for cash for the purpose of making such improvements. The balance of the \$188,000 is to be advanced by the stockholders of the company.

The request for the authorization of the issue of \$110,000 as a stock dividend is based to some extent upon claims which this Board cannot allow. The capitalization of the company at the present time is:

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Stock,	\$440,000
Bonds,	400,000
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	\$840,000
Proposed increase,	110,000
	<hr/>
	\$950,000

In the year 1911 the State Board of Assessors, through its Chief Engineer, Charles Hansell, calculated the value of the property of this company taxable by that Board as \$840,213. That amount, however, was reduced, upon the appeal of the Railroad Company, to \$753,648, at which figure the property of this company, real and personal, was and is taxed by the State.

The petitioner now claims that, notwithstanding its success on its appeal in obtaining a reduction in the valuation of its property from the estimate of the State Board of Assessors from \$840,213 to \$753,648, which reduction was obtained upon the testimony of the petitioner, the value of the property was not in excess of the latter figure, the Board of Public Utility Commissioners should ignore this valuation and should assume the real valuation to be the original figure, namely, \$840,213. The reason urged in support of this proposition is that there are two standards of valuation, one to be used as a basis for taxation purposes and the other for the issuance of securities. This Board cannot countenance any such distinction in the valuation of physical property of a utility. By the Constitution of the State all property is taxable at its full value, and we cannot assume, particularly in view of the petitioner's proof on the appeal from the assessment of the State Board of Assessors, that the value of its property was more than \$753,648 on December 31st, 1911.

While this Board is not bound by the valuation of the property of a utility by an official body for taxing purposes, it will, in a case like the present, where no other valuation has been made either by the utility or this Board, assume that the true value of the property of such utility is that fixed by the tax board.

We are therefore assuming that the valuation as of December 31st, 1911, is \$753,648.

We find that since that time the following amounts have been added in betterments:

(Carried),	\$753,648
1912,	\$46,508
1913,	29,345
1914,	27,676
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	103,529
Value of land donated to the company in 1912, 1913, 1914, not included in the above,	710
Value of water front on Raritan Bay opposite terminus of road, 780 feet at \$50 per foot, and other property locally assessed (not included in the State Board of Assessors' valuation),	54,302
Additions and betterments from January 1st, 1915, to July 1st, 1915,	20,050
	<hr/>

9 UTIL

\$932,239

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It appears that the State Board of Assessors in 1914 assessed the franchise of this company at the sum of \$25,000. In its report on the investigation of the reasonableness of the rates of the Public Service Gas Company, 1 N. J. P. U. C. Reports, pp. 433, 482, this Board said:

"It is well known that it is the public policy of the State of New Jersey at present not to allow the capitalization of franchises for an amount in excess of actual cost involved in obtaining such franchises."

That case was appealed and the Board's determination was sustained by the Court of Errors and Appeals. There is no proof before us that the cost of obtaining the franchise, including legal and other necessary disbursements in connection therewith, was \$25,000. We think that a fairly liberal allowance, in the absence of proof of the sum actually expended, for this item is \$8,000. Adding this sum to the above we obtain a total value of this company's property of \$940,239.

An affidavit of an engineer stating that there were "hidden values" of \$109,000 not taken into consideration by the State Board of Assessors in its valuation of the property was produced at the hearing. This Board will not, however, for the reason stated above, assume that the valuation placed upon its physical property by this petitioner itself upon the tax appeal from the assessment of 1911 is incorrect. Nor will the Board take into consideration the item of \$40,000 estimated to have been spent in necessary and legal expenses not otherwise included from 1886 to 1892. The proof as to this expenditure is not convincing. The Board is not inclined to look with favor upon applications for approval of stock dividends, and when it does sanction the issuance of stock for such a purpose it must be satisfied by positive proof that value justifying the increase of stock proposed has been added to the property of the utility requesting such issue.

Taking, then, the amount of the capitalization at the present time in stock and bonds as \$840,000, we have property, according to the calculation which we have made above, worth to-day \$940,239; that is to say, \$100,239 more than the present capitalization. Against this excess in value we are asked to sanction a stock dividend issue of \$110,000.

On the proofs before us we must decline to do so. We will approve an issue of \$100,000 of stock, which is the amount represented by the increase in the value of the property above the present capitalization.

Dated July 12th, 1915.

RARITAN RIVER R. R. CO.—\$200,000 STOCK.

Application was made by the Raritan River Railroad Company for approval of proposed issue of its capital stock to the amount of \$210,000, the proceeds of \$100,000 to be issued for improvements, etc., \$100,000 representing capital additions not heretofore capitalized. The Board, in lieu of the amount asked for in said petition, approved the issue of stock to the amount of \$200,000.

Approved July 12th, 1915, after hearing.

**OCEAN COUNTY GAS CO.—APPLICATION FOR APPROVAL OF ISSUE
OF \$20,000 STOCK AND TRANSFER OF \$12,680 OF STOCK
OF TUCKERTON GAS CO.**

In this matter the following report was made by the Board:

REPORT.

Harry Stille and H. E. Woodman, for the company.

Application is made for approval of the issue of stock of Ocean County Gas Company to the par value of \$20,000 in payment of stock of Tuckerton Gas Company of the par value of \$12,680, approval of the transfer of which to Ocean County Gas Company is also asked in this proceeding.

In March, 1911, Union Railway Supply Company, which controls Ocean County Gas Company, entered into a contract, alleged to be for the benefit of said Gas Company (p. 4, record, May 25th, 1915), for the purchase of 2,536 shares of stock, of the par value of \$12,680, and bonds of the par value of \$12,600 of Tuckerton Gas Company, in consideration of the payment of \$13,600 in cash.

November 30th, 1912, the Union Railway Supply Company turned over to Ocean County Gas Company the stock of Tuckerton Gas Company to the par value of \$12,680 in exchange for \$20,000 of stock of Ocean County Gas Company. The Supply Company retained the bonds, although it had purchased both the stock and bonds at a price very much less than the \$20,000 for which Ocean County Company issued stock in payment of Tuckerton Company stock only. Admittedly the Supply Company was acting "in the interest of the Ocean County Gas Company."

The physical property of Tuckerton Company, at the time of the stock transaction, was testified to be worth "at least \$28,000 or \$30,000 to rebuild." There was outstanding at that time, against this property, bonds in the amount of \$25,000 and stock in the amount of \$25,000. No dividend was ever earned or paid by the Tuckerton Company on its stock.

There was a disposition to claim that the \$20,000 of stock of the Ocean County Gas Company was actually issued June 2d, 1910, before the approval of this Board was required. The proofs show conclusively, however, that there was no *bona fide* issue of this stock until after the effort to transfer the Tuckerton Company stock on November 30th, 1912. The giving a check for \$20,000 which was not used or intended to be used, except upon transfer of the Tuckerton stock, was a mere pretense and subterfuge. The approval of this Board to the issue of the stock of the Ocean Company, and of the transfer of the stock of the Tuckerton Company, is requisite.

The statute requires that all stock shall be issued at par for cash or property. In this case it does not appear that a bare majority of the stock of a company, whose property is valued at not more than \$30,000, and is subject to a mortgage of \$25,000, is worth \$20,000. On the contrary, from the testimony submitted, it seems reasonably certain that this issue is in contravention of several statutory provisions covering the capitalization of corporations.

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It is difficult to perceive how the officers and directors of this company can justify the purchase for the Ocean County Gas Company of stock and bonds to an amount upwards of \$26,000 for \$13,600 in cash, and then approve the issue, to the agent who negotiated the purchase, of \$20,000 of stock in exchange for \$12,680 of stock only of a company whose stock was of doubtful value.

The entire transaction is one that does not commend itself to a fair mind. The Ocean County Company should have immediately taken steps to secure the bonds purchased in its behalf by the Supply Company, if the transaction was to have the color of sincerity.

In the present situation this Board is required to withhold approval of the issue of stock of the Ocean County Gas Company, as well as to the transfer of stock of the Tuckerton Company.

The Board points out, however, that it is the duty of the Ocean County Gas Company to immediately straighten out this transaction, to the end that, if the control of or ownership of the property of the Tuckerton Company is to be acquired, it shall be upon a just and proper basis. The Board will expect this to be done.

The petition will be dismissed.

Dated July 12th, 1915.

NEW JERSEY NORTHERN GAS CO.—\$17,512.35 BONDS.

Application was made by the New Jersey Northern Gas Company for approval of proposed issues of bonds to the amount of \$27,800 and \$5,000. The Board decided to approve, in lieu of the amount asked for in said petition, an issue of bonds to the amount of \$17,512.35.

Approved July 12th, 1915, after hearing.

**PUBLIC SERVICE RAILWAY CO.—NORTH HUDSON COUNTY BONDS
—\$100,000.**

Application was made by the Public Service Railway Company for approval of proposed issue of North Hudson County bonds to the amount of \$100,000. The Board approved the issue of the bonds at not less than 95 per cent. of the par value thereof.

Approved July 27th, 1915, after hearing.

PENNSYLVANIA R. R. CO.—\$65,000,000 BONDS.

Application was made by the Pennsylvania Railroad Company for approval of proposed issue of its general mortgage bonds to the amount of \$65,000,000.

Approved July 27th, 1915, after hearing.

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PENNSYLVANIA R. R. CO.—MORTGAGE.

Application was made by the Pennsylvania Railroad Company for approval of its general mortgage dated June 1st, 1915, to the Girard Trust Company and William M. Ely, Trustees.

Approved July 27th, 1915, after hearing.

OCEAN COUNTY GAS CO.—\$4,050 BONDS.

Application was made by the Ocean County Gas Company for approval of proposed issue of bonds to the amount of \$4,050.

Approved August 17th, 1915, after hearing.

TRENTON, LAKEWOOD AND SEACOAST RAILWAY CO.—\$85,000 STOCK—\$190,000 BONDS.

Application was made by the Trenton, Lakewood and Seacoast Railway Company for approval of proposed issues of capital stock to the amount of \$200,000 and bonds to the amount of \$320,000. The Board, in lieu of the amount asked for in said petition, approved the proposed issue of capital stock to the amount of \$85,000 and bonds to the amount of \$190,000.

Approved August 17th, 1915, after hearing.

**DELAWARE AND ATLANTIC TELEGRAPH AND TELEPHONE CO.—
TRANSFER OF CAPITAL STOCK TO NEW YORK TELE-
PHONE CO.**

Application was made by the Delaware and Atlantic Telegraph and Telephone Company for approval of the transfer on its books of 47,285 shares of its capital stock from the Bell Telephone Company of Pennsylvania to the New York Telephone Company.

Approved August 17th, 1915, after hearing.

EGG HARBOR CITY WATER CO.—\$600 CAPITAL STOCK.

Application was made by the Egg Harbor City Water Company for approval of an issue of its capital stock to the amount of \$5,000. The Board, on December 1st, 1914, approved the proposed issue to the extent of \$600, with the understanding that it would approve the balance upon the statement by its Chief Inspector of Utilities Division, to the effect that expenditures covering such balance have actually been made. The Board received such a statement that expenditures have been made by the company up to and including July 31st, 1915, for which stock to the further amount of \$600 might properly be issued. The Board, therefore, approved a further issue of \$600 capital stock.

Approved August 17th, 1915, after hearing.

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**CAMDEN AND BURLINGTON COUNTY RAILWAY CO.—\$254,400
CAPITAL STOCK.**

Application was made by the Camden and Burlington County Railway Company, Vincentown Branch of the Burlington County Railroad Company, and the Mount Holly, Lumberton and Medford Railroad Company, forming Camden and Burlington County Railway Company, for the approval of proposed issues of capital stock by the new company to the amount of \$254,400.

Approved September 21st, 1915, after hearing.

LAMBERTVILLE PUBLIC SERVICE CO.—\$5,000 STOCK.

Application was made by the Lambertville Public Service Company for the approval of proposed issue of its capital stock to the amount of \$5,000.

Approved September 28th, 1915, after hearing.

HUDSON AND MANHATTAN R. R. CO.—\$615,500 BONDS.

In this matter the following order was issued by the Board, authorizing the issuance of the bonds referred to above:

ORDER.

Section 1. Application having been made to the Board of Public Utility Commissioners of the State of New Jersey, by Hudson and Manhattan Railroad Company by its petition dated July 21st, 1915, for the consent of the Commission to the issuance by said company of \$615,500 face value of first lien and refunding mortgage bonds under its first lien and refunding mortgage to Central Trust Company of New York as trustee, dated February 1st, 1913, and a hearing having been duly had upon said application before the Commission, and it being now the opinion of the Commission:

1. That the money to be procured by the issue of \$615,500 face value of first lien and refunding mortgage bonds of the Hudson and Manhattan Railroad Company, payable at a period of more than twelve (12) months after the date thereof, is necessary to and reasonably required by said company for the reimbursement of moneys actually expended from income or from other moneys in the treasury of said company not secured by or obtained from an issue of stocks, bonds, notes or other evidences of indebtedness for the construction, completion, extension or improvement of its facilities or for the discharge of its obligations, and particularly for the purposes which are hereinafter stated in this order; and

2. That, except as to the following specified amounts of said first lien and refunding mortgage bonds authorized to be issued hereunder for the purposes following, to wit, \$123,100 or so much thereof as may be necessary to pay the expenses of sale of the bonds hereby authorized and to make up discount said purposes are not in whole or in part reasonably chargeable to operating expenses or to income.

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Section 2. It is ORDERED that the Board of Public Utility Commissioners does hereby approve the issue by the said Hudson and Manhattan Railroad Company of \$615,500 face value of the principal of first lien and refunding mortgage bonds of said company, dated as of February 1st, 1913, or as of the date of issue, due February 1st, 1957, redeemable at 105 per cent. of the face value thereof, besides accrued interest, on any interest day, and bearing interest at 5 per cent. per annum, payable semi-annually, under and in pursuance of the terms of the said first lien and refunding mortgage dated February 1st, 1913, to Central Trust Company of New York as trustee.

Section 3. It is ORDERED that said issue of bonds is authorized upon the conditions following, and not otherwise, to wit:

First. That the said bonds shall be sold by the said Hudson and Manhattan Railroad Company so as to net the said company not less than eighty per cent. (80%) of the par or face value of the principal thereof, besides interest accrued thereon, and that the proceeds thereof shall be applied only to the following purposes, that is to say:

1. Toward reimbursement of moneys expended from income or other moneys in the treasury of the said corporation not secured by or obtained from the issue of stocks, bonds, notes or other evidence of indebtedness of said corporation and applied to construction, completion, extension or improvement of the facilities of the said company during the period specified below not less than \$212,000, said expenditures being in amounts and for periods reported heretofore as follows:

Balance of capital expenditures carried forward from Case 1845,	
an amount not to exceed,	\$42,148 17
Expenditures for June, 1914,	18,976 46
“ “ July, 1914,	16,818 77
“ “ Aug., 1914,	10,938 99
“ “ Sept., 1914,	12,435 69
“ “ Oct., 1914,	24,231 59
“ “ Nov., 1914,	15,487 08
“ “ Dec., 1914,	15,675 09
“ “ Jan., 1915,	8,317 57
“ “ Feb., 1915,	7,487 74
“ “ Mar., 1915,	8,356 45
“ “ April, 1915,	14,607 37
“ “ May, 1915, \$16,725.28, less amount of \$5.50, ..	16,719 78
Total,	\$212,200 75

2. Toward reimbursement of moneys expended from income or other moneys in the treasury of said corporation not secured by or obtained from the issue of stocks, bonds, notes or other evidence of indebtedness of said corporation and used to pay obligations described below not less than,

(a) Payments due April 30th, 1914, and April 30th, 1915, on account of mortgage to the Mutual Life Insurance Company on real estate at 54-56 Dey Street, 20,000

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(b) Payments due Sept. 16th, 1914, on account of mortgage to Farmers' Loan and Trust Co. on real estate at 48-50 Cortlandt Street and 171-173-175 Greenwich Street, ...	\$30,000
(c) Payments under agreement for the conditional sale of rolling stock dated March 1st, 1909, due March 1st, 1914, Sept. 1st, 1914, and March 1st, 1915, \$46,000 each or in all,	138,000
(d) Payments under agreement for the conditional sale of rolling stock dated Oct. 1st, 1910, dated Apr. 1st, 1914, Oct. 1st, 1914, and April 1st, 1915, \$25,000 each or in all,	75,000
(e) Payments under agreement for the conditional sale of rolling stock dated Aug. 1st, 1911, due Aug. 1st, 1914, and Feb. 1st, 1915, \$21,000 each or in all,	42,000
Total,	\$305,000

3. For expenses of sale of bonds hereby authorized and to make up the discount or deficiency, if any, in the amount realized from the sale to net not less than eighty per cent. (80%) of par of the bonds sold for the purposes specified in subdivisions 1 and 2, and to be applied for the purposes therein stated not exceeding the sum of, \$123,100

Second. That the amount of discount and expenses sustained in the sale of the bonds hereby authorized shall be amortized out of the income of the company by the establishment and maintenance of an amortization fund, and that the said Hudson and Manhattan Railroad Company shall pay in cash into said fund out of the income of said company, in each calendar year, beginning with the year 1915, an amount of money which shall not be less than 1 per cent. (1%) of the amount of said discount and expense, not exceeding \$123,100 plus four and one-half per cent. (4½%) upon all prior payments into said fund until said fund shall equal the amount of said discount and expense. Said funds shall be used only for the purchase and retirement of first lien and refunding mortgage bonds of said company or for the acquisition of property for capital or investment purposes, and may be administered in conjunction with the similar amortization funds established by the company pursuant to the orders of the commission heretofore made, authorizing the issue of bonds under said mortgage.

Third. That the said company shall keep separate, true and accurate accounts showing the receipt and application in detail of the proceeds of the sale or disposal of the bonds hereby authorized to be issued, and on or before the tenth day of each month the company shall make verified reports to the Commission stating the sale or sales of said bonds during the previous month, the terms and conditions of sale, the moneys realized therefrom, and the use and application of said moneys and said accounts, vouchers and records shall be open to audit, and may be audited from time to time by accountants and examiners designated for such purpose by the Commission.

Fourth. That the authority hereby given to issue such bonds shall apply only to the bonds issued by the said company on or before the 30th day of June, 1916.

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Section 4. It is hereby ORDERED that this order take effect on the day of the date hereof and, except as provided in the fourth subdivision of Section 3, limiting the duration of the authority to issue such bonds herein granted, continue in force until otherwise ordered by the Commission, and that within ten days after service upon it of a copy of this order said company notify the Commission whether the terms of this order are accepted and will be obeyed.

Dated October 11th, 1915.

CRANBURY WATER CO.—\$20,000 MORTGAGE.

Application was made by the Cranbury Water Company for approval of a mortgage in the sum of \$20,000 to Harry N. Scott, William Russell Silvers and Samuel B. Bennett, Trustees.

Approved October 18th, 1915, after hearing.

CRANBURY WATER CO.—\$3,500 BONDS.

Application was made by the Cranbury Water Company for approval of an issue of its first and refunding mortgage bonds to the amount of \$20,000. The Board, in lieu of the amount asked for in the petition, approved the issue of bonds in the amount of \$3,500.

Approved October 18th, 1915, after hearing.

ATLANTIC COUNTY WATER CO. OF NEW JERSEY—\$500,000 MORTGAGE.

Application was made by the Atlantic County Water Company of New Jersey for approval of a mortgage in the sum of \$500,000 to Farmers Trust Company, of Carlisle, Pennsylvania, dated October 21st, 1915.

Approved October 20th, 1915, after hearing.

ATLANTIC COUNTY WATER CO.—\$259,000 BONDS—\$79,500 CAPITAL STOCK—\$20,000 NOTES.

Application was made by the Atlantic County Water Company of New Jersey for approval of an issue of \$259,000 bonds, \$100,000 capital stock and \$20,000 serial promissory notes. The Board, in lieu of the amount asked for in said petition, approved an issue of bonds to the amount of \$259,000, stock to the amount of \$79,500 and \$20,000 serial promissory notes.

Approved October 20th, 1915, after hearing.

PUBLIC SERVICE GAS CO.—\$850,000 CAPITAL STOCK.

Application was made by the Public Service Gas Company for approval of proposed issue of its capital stock to the amount of \$850,000. The Board approved the application upon condition that the purchase of Prince-

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ton Light, Heat and Power Company bonds for deposit in sinking fund shall be made from earnings and not classified as a capital expenditure.

Approved October 26th, 1915, after hearing.

PUBLIC SERVICE R. R. CO.—\$180,000 STOCK.

Application was made by the Public Service Railroad Company for approval of an issue of its capital stock to the amount of \$180,000.

Approved October 26th, 1915, after hearing.

COMMONWEALTH WATER AND LIGHT CO.—SALE OF MORTGAGE.

Application was made by the Commonwealth Water and Light Company for approval of a sale to the Lakewood Water, Light and Power Company of a mortgage for \$250,000 given by said company under date of January 29th, 1908, together with 1,052 shares of capital stock of said company in consideration of the delivery of \$350,000 par value six per cent. bonds of the Lakewood Water, Light and Power Company, to be issued under its first mortgage.

Approved October 27th, 1915, after hearing.

LAKEWOOD AND COAST ELECTRIC CO.—\$500,000 MORTGAGE.

Application was made by the Lakewood and Coast Electric Company for approval of a mortgage in the sum of \$500,000 to the Lakewood and Coast Water and Electric Company, dated August 25th, 1915.

Approved October 27th, 1915, after hearing.

COMMONWEALTH ELECTRIC CO.—\$500,000 MORTGAGE.

Application was made by the Commonwealth Electric Company for approval of mortgage in the sum of \$500,000 to the Commonwealth Water and Light Company, dated October 11th, 1915.

Approved October 27th, 1915, after hearing.

LAKEWOOD WATER CO.—\$500,000 MORTGAGE.

Application was made by the Lakewood Water Company for approval of mortgage in the sum of \$500,000 to the Lakewood and Coast Water and Electric Company, dated August 25th, 1915.

Approved October 27th, 1915, after hearing.

COMMONWEALTH WATER CO.—\$3,000,000 MORTGAGE.

Application was made by the Commonwealth Water Company for approval of its mortgage in the sum of \$3,000,000 to the Commonwealth Water and Light Company, dated October 11th, 1915.

Approved October 27th, 1915, after hearing.

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**LAKEWOOD AND COAST ELECTRIC CO.—\$175,000 CAPITAL STOCK—
\$175,000 BONDS.**

Application was made by the Lakewood and Coast Electric Company for approval of proposed issues of stock and bonds each to the amount of \$175,000, the issue of capital stock to be subject to the mortgage of the Lakewood and Coast Electric Light and Water Company, the proceeds to be used in payment for electric properties, etc., transferred by the Lakewood Water, Light and Power Company.

Approved October 27th, 1915, after hearing.

**COMMONWEALTH WATER CO.—\$750,000 CAPITAL STOCK—\$750,000
BONDS.**

Application was made by the Commonwealth Water Company for approval of issues of capital stock and bonds each to the amount of \$750,000, the issue of capital stock to be subject to the mortgage of the Commonwealth Water and Light Company, the proceeds to be used in payment for water properties and franchises, etc., transferred by the Commonwealth Water and Light Company.

Approved October 27th, 1915, after hearing.

LAKEWOOD WATER CO.—\$175,000 CAPITAL STOCK—\$175,000 BONDS.

Application was made by the Lakewood Water Company for approval of proposed issues of its capital stock and bonds each to the amount of \$175,000 bonds in payment of indebtedness by said company to the Lakewood Water, Light and Power Company, as of January 1st, 1915, and in full settlement of transfers and exchanges of property, the issue of capital stock to be subject to the mortgage of the Lakewood and Coast Water and Electric Company.

Approved October 27th, 1915, after hearing.

**COMMONWEALTH ELECTRIC CO.—\$165,000 CAPITAL STOCK—\$165,-
000 BONDS.**

Application was made by the Commonwealth Electric Company for approval of proposed issues of capital stock and bonds each to the amount of \$165,000, as consideration for the sale and conveyance by the Commonwealth Water and Light Company of its electric properties of every kind and nature and \$5,000 cash as a working capital.

Approved October 27th, 1915, after hearing.

**GLEN ROCK WATER WORKS, INCORPORATED—\$4,000 CAPITAL
STOCK.**

Application was made by the Glen Rock Water Works, Inc., and Bergen Aqueduct Company, for approval of proposed issue by the first-named company, of capital stock to the amount of \$31,000 to the Bergen Aqueduct

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Company for property purchased, etc. The Board approved the purpose of the proposed issue to the amount of \$31,000, and approved the issue of capital stock to the amount of \$4,000, reserving approval of the issue of the balance of the stock to pay for the property purchased until said property is released from the existing lien of the mortgage created by the Bergen Aqueduct Company.

Approved October 29th, 1915, after hearing.

MORRIS AND ESSEX RAILROAD CO.—\$19,770,000 BONDS.

Application was made by the Morris and Essex Railroad Company and the Delaware, Lackawanna and Western Railroad Company, lessee, for approval of proposed issue of \$9,839,000 bonds and the validation of issue of bonds to the amount of \$9,238,000. It appeared that in all other respects the bonds heretofore issued were issued in accordance with law.

Approved November 3d, 1915, after hearing.

MONMOUTH LIGHTING CO.—\$3,600 STOCK.

Application was made by the Monmouth Lighting Company for approval of proposed issues of \$24,600 stock and \$4,000 bonds. The Board, on September 15th, 1915, approved the purpose of the issue of stock with the understanding that certificates would issue approving the same upon certification by the Chief Inspector of the Utilities Division of the amount actually expended for construction of the transmission line. The Board received a report from its Chief Inspector up to and including October 22d, 1915, stating that expenditures have been made for which stock may be issued to the amount of \$3,600.

Approved November 8th, 1915, after hearing.

PUBLIC SERVICE ELECTRIC CO.—\$3,000,000 CAPITAL STOCK.

Application being made by the Public Service Electric Company for approval of issue of its capital stock to the amount of \$3,000,000, the Board approved the issue, reserving for future consideration the matter of charging to "capital account" requirements for sinking funds, approval for which was withheld.

Approved November 16th, 1915, after hearing.

PEOPLE'S WATER CO.—\$1,000 STOCK.

Application was made by the People's Water Company for approval of an issue of capital stock to the amount of \$1,000 for the purpose of completing its organization. The Board granted the application, but directed attention "to a decision filed by the Board May 31st, 1911, in the matter of the application of the Atlantic Highlands Gas Company for approval of an ordinance passed by the Township Committee of the Township of Shrewsbury, November 17th, 1910 (No. 3, Vol. I, P. U. C. Reports), and the

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granting of this application must not be taken as indicating that the Board will approve any municipal consent, giving the People's Water Company permission to operate in a territory now served or which may be served by a company now operating."

Approved December 6th, 1915, after hearing.

NEW YORK CENTRAL AND HUDSON RIVER R. R. CO.—MODIFICATION OF CERTIFICATE.

Application was made by the New York Central Railroad Company, successor, through consolidation, of the New York Central and Hudson River Railroad Company, for a modification of certificate of this Board, dated February 25th, 1914, in re issue of \$70,000,000 mortgage bonds. The Board ordered that the certificate be modified so as to suspend, until its further order, the issuance and sale of any of the refunding and improved mortgage bonds beyond the \$40,000,000 already issued and sold.

Approved December 7th, 1915, after hearing.

LONG BRANCH SEWER CO.—MORTGAGE—\$70,000 BONDS.

Application was made by the Long Branch Sewer Company for approval of its mortgage in the sum of \$100,000 to the First National Bank of Long Branch, as Trustee, and for approval of issue of \$70,000 bonds under the same, the bonds to be sold at not less than 97½ per cent.

Approved December 7th, 1915, after hearing.

PRINCETON LIGHT, HEAT AND POWER CO.—\$23,000 BONDS.

Application was made by the Princeton Light, Heat and Power Company for approval of the proposed issue of its first and refunding mortgage and gold bonds to the amount of \$23,000.

Approved December 28th, 1915, after hearing.

Ordinances and Resolutions Granting Privileges to Public Utilities and Submitted to the Board for Approval.

ORDINANCE—TOWNSHIP OF HANOVER, MORRIS COUNTY—WHIPPANY WATER CO.

Application was made by the Whippany Water Company for approval of an ordinance authorizing said company to lay and maintain its system of pipes, etc., in portions of the Township of Hanover for the supply and distribution of water for domestic and public use.

Approved March 2d, 1915, after hearing.

ORDINANCE—CITY OF SOMERS POINT—DELAWARE AND ATLANTIC TELEGRAPH AND TELEPHONE CO.

Application was made by the Delaware and Atlantic Telegraph and Telephone Company for approval of an ordinance of the City of Somers Point authorizing the company to lay and maintain all necessary terminal and distributing poles, etc., and other necessary underground fixtures and appliances for the conduct of its business in, upon, along and under each and every of the public roads, streets, alleys and highways of the City of Somers Point.

Approved March 9th, 1915, after hearing.

RESOLUTION—BOARD OF CHOSEN FREEHOLDERS OF ESSEX COUNTY—NEW YORK TELEPHONE CO.

Application was made by the New York Telephone Company for approval of a resolution of the Board of Chosen Freeholders of Essex County granting permission to said company to construct, reconstruct, maintain and operate for its local and through lines and systems twenty-eight poles, wires, cables, etc., upon, over and across Pompton Turnpike, between Brunswick Road and North Caldwell Road in the Township of Cedar Grove.

Approved March 23d, 1915, after hearing.

ORDINANCE—BOROUGH OF BAYHEAD—COAST GAS CO.

Application was made by the Coast Gas Company for approval of an ordinance of the Borough of Bayhead granting permission to said company to use certain streets, avenues, highways and public places for the purpose of extending its mains in and through said streets, etc.

Approved March 23d, 1915, after hearing.

ORDINANCES AND RESOLUTIONS.

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ORDINANCE—CAMDEN—CAMDEN HORSE R. R. CO.—PUBLIC SERVICE RAILWAY CO., LESSEE.

Application was made by the Public Service Railway Company, lessee of the Camden Horse Railroad Company, by petition in writing, for approval of an ordinance of the City of Camden, granting consent and permission to the Camden Horse Railroad Company to locate, construct, operate and maintain a double track, electric surface street railway in the new location of White Horse Pike from the center line of Ferry Avenue to Haddon Avenue, with connections between same and the tracks in Haddon Avenue in the City of Camden.

Approved March 23d, 1915, after hearing.

ORDINANCE—CAMDEN—CAMDEN HORSE R. R. CO.—PUBLIC SERVICE RAILWAY CO., LESSEE.

Application was made by the Public Service Railway Company, lessee of the Camden Horse Railroad Company, for approval of an ordinance of the City of Camden granting consent and permission to the Camden Horse Railroad Company to locate, construct, operate and maintain a single track electric surface street railway in Border Street between Haddon Avenue and Starr Avenue, with connections in the City of Camden.

Approved March 23d, 1915, after hearing.

ORDINANCE—CAMDEN—CAMDEN HORSE R. R. CO.—PUBLIC SERVICE RAILWAY CO., LESSEE.

Application was made by the Public Service Railway Company, lessee of the Camden Horse Railroad Company, for approval of an ordinance of the City of Camden granting consent and permission to the Camden Horse Railroad Company to locate, construct, operate and maintain a single track electric surface street railway in Starr Avenue, crossing Border Street, with connections between same and private property situated on the northwesterly side of Starr Avenue and on the westerly side of Border Street, in the City of Camden.

Approved March 23d, 1915, after hearing.

ORDINANCE—ORANGE—PUBLIC SERVICE RAILWAY CO.

Application was made by the Public Service Railway Company for approval of an ordinance of the City of Orange granting permission to said company to locate, construct, operate and maintain extensions northeastwardly and southwestwardly to the northwesterly track of the passing siding in Scotland Street, opposite Fairview Avenue, in the City of Orange.

Approved March 23d, 1915, after hearing.

ORDINANCE—ORANGE—PUBLIC SERVICE RAILWAY CO.

Application was made by the Public Service Railway Company for approval of an ordinance of the City of Orange granting permission to said

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company to locate, construct, operate and maintain a passing siding in Scotland Street, northeast of Morris Street, in the City of East Orange.

Approved March 23d, 1915, after hearing.

ORDINANCE—ORANGE—PUBLIC SERVICE RAILWAY CO.

Application was made by the Public Service Railway Company for approval of an ordinance of the City of Orange granting permission to said company to locate, construct, operate and maintain an extension southwardly of the passing siding in Scotland Street, northeast of Freeman Street, in the City of Orange.

Approved March 23d, 1915, after hearing.

ORDINANCE—ORANGE—PUBLIC SERVICE RAILWAY CO.

Application was made by the Public Service Railway Company for approval of an ordinance of the City of Orange granting permission to said company to locate, construct, operate and maintain a connection between the single track in Scotland Street southwest of Central Avenue, and the southwesterly track in Central Avenue southeast of Scotland Street, as proposed to be re-located in the City of Orange.

Approved March 23d, 1915, after hearing.

ORDINANCE—ORANGE—PUBLIC SERVICE RAILWAY CO.

Application was made by the Public Service Railway Company for approval of an ordinance of the City of Orange granting permission to said company to locate, construct, operate and maintain a double track electric surface street railway in Central Avenue from easterly boundary line of the City of Orange westwardly to Lincoln Avenue, with connections between the same and its tracks in Central Avenue, west of Lincoln Avenue; and in Lincoln Avenue, north of Central Avenue, and to double track electric street railway in Central Avenue, east of Scotland Street, with "Wye" connection in Scotland Street, in the City of Orange.

Approved March 23d, 1915, after hearing.

ORDINANCE—NEWARK—PUBLIC SERVICE RAILWAY CO.

Application was made by the Public Service Railway Company for approval of an ordinance of the City of Newark granting permission to said company to construct, maintain and operate connections between the tracks in Orange Street west of First Street, and the tracks in First Street south of Orange Street, in the City of Newark.

Approved March 23d, 1915, after hearing.

ORDINANCE—NEWARK—PUBLIC SERVICE RAILWAY CO.

Application was made by the Public Service Railway Company for approval of an ordinance of the Board of Street and Water Commissioners of Newark granting permission to said company to relocate the present connection between its northerly and southerly tracks in Thomas Street, east of the crossing of said tracks in Broad Street, and to locate, construct, operate and maintain a connection between the same, as relocated, and the easterly track in Broad Street, south of Thomas Street, in the City of Newark.

Approved March 23d, 1915, after hearing.

ORDINANCE—NEWARK—PUBLIC SERVICE RAILWAY CO.

Application was made by the Public Service Railway Company for approval of an ordinance of the Board of Street and Water Commissioners of Newark granting permission to said company to locate, construct, operate and maintain an extension from tracks now being operated in Broad Street, south of Rector Street, through Rector Street and connecting with existing tracks in Park Place, in the City of Newark.

Approved March 23d, 1915, after hearing.

ORDINANCE—NEWARK—PUBLIC SERVICE RAILWAY CO.

Application was made by the Public Service Railway Company for approval of an ordinance of the Board of Street and Water Commissioners of Newark granting permission to said company to locate, construct, operate and maintain a single track extension from tracks now being operated in Clinton Avenue, over Parkhurst Street, to and connecting with track now being operated in Broad Street, in the City of Newark.

Approved March 23d, 1915, after hearing.

ORDINANCE—NEWARK—PUBLIC SERVICE RAILWAY CO.

Application was made by the Public Service Railway Company for approval of an ordinance of the Board of Street and Water Commissioners of Newark granting permission to said company to locate, construct, operate and maintain a connecting track between easterly track in Pennsylvania Avenue south of Parkhurst Street, and the single track in Parkhurst Street east of Pennsylvania Avenue, as proposed to be constructed, in the City of Newark.

Approved March 23d, 1915, after hearing.

ORDINANCE—WEST ORANGE—PUBLIC SERVICE RAILWAY CO.

Application was made by the Public Service Railway Company for approval of an ordinance of the Town of West Orange granting permission to said company to construct, operate and maintain a double track extension in

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Central Avenue, west of the dividing line between the Town of West Orange and the City of Orange, westwardly to the westerly side line of Valley Street, in the Town of West Orange.

Approved March 30th, 1915, after hearing.

**ORDINANCE—TOWN OF ALPHA, WARREN COUNTY—DELAWARE
AND ATLANTIC TELEGRAPH AND TELEPHONE CO.**

In this application the following report was adopted by the Board:

REPORT.

Application is made to this Board by the Delaware and Atlantic Telegraph and Telephone Company for approval of an ordinance of the Borough of Alpha, dated the twenty-eighth day of December, nineteen hundred and fourteen, granting permission to the Delaware and Atlantic Telegraph and Telephone Company to erect, construct, lay and maintain all necessary poles, wires, cables, cross-arms and conduits, manholes and other fixtures and appliances for its telegraph and telephone lines in, upon, along, over and under each and every of the public roads, streets, alleys and highways of the Borough of Alpha in the County of Warren and State of New Jersey.

The matter was set down for hearing on Tuesday, February 23d, 1915, at Trenton. Objections were raised against the approval of the ordinance, and the matter was laid over until Tuesday, March 30th, 1915, and was then heard and briefs submitted by counsel for the petitioner.

The procedure adopted in connection with the passage of the ordinance was that provided for in Chapter 36, Laws of 1906, Limited Franchise Act, so called, which among other things provides:

"Upon the filing of such petition, the same shall not be considered by the board or body of such municipality authorized by law to make the grant therein petitioned for, until public notice shall be given by publication in one or more newspapers published and circulated in said municipality, or, if there be no newspaper published in said municipality, then in one or more newspapers published in the county in which said municipality is located, to be designated by said board or body, *once a week for at least two weeks*, and by posting such notice in five of the most public places in said municipality for *at least fourteen days* before the meeting of the said board or body at which the said application shall be considered."

The day fixed for the consideration of the petition by the municipality was November 9th, 1914, at eight o'clock P. M. The notice of the hearing was published in the "Washington Star," a newspaper published in the County of Warren and circulating in the Borough of Alpha, on October 29th and November 5th, 1914. The notice was published in the newspaper *once a week in each of two calendar weeks*, but the actual time or period of publication was one week and four days, instead of fourteen days or two whole weeks.

The question for determination is whether the requirement of the statute that notice be published "*once a week for at least two weeks*" means merely two publications once a week in each of two weeks, or whether it means two whole weeks, fourteen days, period of time should intervene between the first notice and the date of hearing.

(1879.) In *Parsons v. Lanning*, 27 N. J. Eq. (C. E. Green), p. 70, the Court had under consideration an act relative to sales of lands under a public statute or by virtue of any judicial proceeding (Revision, p. 752, Comp. Stat. Vol. 4, pp. 4667 and 4668) which provides that notice of the sale be given by public advertisements set up at five or more public places in the county, one whereof shall be in the township, borough or city where such real estate is situated, of the time and place of such sale at least two months next before the time appointed for the sale, and by notice published in two of the newspapers printed and published, &c., *at least four weeks successively once a week next preceding the time appointed for the sale.*

The Chancellor, at page 70, says:

"The notice in this case was published in one of the two newspapers, 'The Princeton Press,' for the first time on the 15th of January. That is a weekly paper published on Saturday. The sale was advertised to take place on the 10th of February following. This publication was not a compliance with the requirement of the statute. The notice by advertisement in the newspapers is to be for four weeks next preceding the day appointed for the sale. There must be four whole weeks between the first insertion of the advertisement in the newspaper and the day fixed for the sale. There were only twenty-six days in the publication in 'The Princeton Press.' There were indeed four insertions in that paper, viz.: on the 15th, 22d and 29th of January and on the 5th of February, but that is not a compliance with the direction of the act. * * * For this defect in the notice the sale will be set aside."

(1879 Sp. Ct.) In *State, Barcly, Pros., v. Elizabeth*, 41 N. J. L. (12 Vr.), p. 517, the Court had under review certain sections of the act to revise and amend the charter of the City of Elizabeth (P. L. 1863, p. 109) which, among other things, provided, with respect to assessment and collection of taxes, as follows:

"Public notice of the time and place of the sale of lands and real estate under the provisions of this act shall be given by advertisement, signed by the City Treasurer and published in a newspaper printed and published or circulating in said city for the *space of six weeks at least once in each week* before the time appointed for such sale."

Reed, J., at pages 518 and 519, says:

"The first insertion would not make six weeks previous to the said sale, although there were six insertions, one in each week. Six weeks should intervene between the first insertion and the day of sale. The constructions given by the Chancellor to the provisions of the 'act relative to the sales of land under a public statute or by virtue of any judicial proceedings' which directs the

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notice to be published *at least four weeks successively once each week* next preceding the time of sale, was that the first publication must be made *four whole weeks* next preceding the day of sale. *Parsons v. Lanning*, 12 C. E. Green 70.

"This is clearly the only rational interpretation, and applies to the section of the charter under which the present advertisements were made. The sale and proceedings thereon will be vacated, with costs."

(1894 Sp. Ct.) In *Pardee v. Perth Amboy*, 57 N. J. L. (28 Vr.), p. 106, the Court passed on a section of an act entitled "An act to revise the charter of the City of Perth Amboy," which provided, with respect to assessments for city improvements, as follows:

"Whereupon said clerk shall cause to be inserted in a newspaper published and circulating in said city for *at least two weeks*, or if no newspaper be published in said city, then in some newspaper published in the County of Middlesex and circulating in said city, a notice of filing of said report."

Magee, J., on page 108, says:

"The time fixed by counsel for considering the assessment reported and hearing objections thereto, was January 18th, 1892. The notice published in a newspaper is shown to have been first inserted on January 9th, 1892. This did not satisfy the requirement of a publication for *at least two weeks*. *Barclay v. Elizabeth*, 12 Vr. 517; *Parsons v. Lanning*, 12 C. E. Green 70. * * * The assessment and resolution of confirmation must be set aside."

In *Hodge v. United States Steel Corporation*, 64 Eq. (19 Dick. Chan.) p. 90, the Court had under consideration a certain provision in the act of 1902 which required that before any corporation could issue bonds for the purpose of retiring preferred stock, they had to show that dividends exceeding a rate of five per cent. per annum had been paid for a period of at least one year next preceding the meeting at which the resolution authorizing retirement is adopted.

Emery, V. C., on pages 101 and 102, quotes with approval *Parsons v. Lanning*; *State*, *Barclay v. Elizabeth*; *Pardee v. Perth Amboy*, cited *supra*. On appeal, Van Syckel, J., in 64 Eq. (19 Dick.), p. 821, said:

"Our laws require publication of notice of sale 'at least four weeks preceding the time of sale.' It has been uniformly and properly held to require a publication for four full weeks once a week and that the publication must begin four weeks next before the day of sale, and that four full weeks must elapse before the first publication and the day of sale. The statute requires that there shall be four weeks' notice of sale and if sale can be made after four weekly publications it might be made after the expiration of only twenty-two days. A publication has no relation to a previously elapsed period; it is a publication only on the very day it is made while a dividend relates to and is for a time previously run."

(1912.) In *Trenton Trust, &c., Co. v. Fitzgibbon & Crisp*, 81 N. J. Eq. (11 Buch.) p. 1, the Court was considering the present statute with respect to sale of lands (P. L. 1912, p. 131), which provides that the advertisement

of sale shall be published four times in two newspapers at least once a week during four consecutive calendar weeks, "the last publication to be not more than seven days prior to the time appointed for selling the same." The last publication in this case appeared in the newspaper on the day of sale.

Walker, Chancellor, on page 2, says:

"And it was held in *Parsons v. Lanning*, 27 N. J. Eq. (12 C. E. Green) 70, to require four whole weeks between the first insertion in the newspaper and the day fixed for sale. The only bearing that case has upon the one in hand, as I view it, is to establish the facts that 'weeks' are the periodical units which must be observed in the matter of advertising, that is, that the advertisement must be made four whole weeks next preceding the day of sale, and that the day of sale may not be within the last week. This case was followed in the Supreme Court in *State v. Elizabeth*, 41 N. J. L. (12 Vr.) 517. * * *

"Here it must be observed 'days' are the periodical units of time within which the last advertisement is to be inserted—that is to say, it may be inserted one day prior to the time appointed for the sale or two days, &c. It is as though the act read: 'The last publication to be not more than one, two, three, four, five, six or seven days prior to the time appointed for selling the same.'" * * *

On page 8:

"Now, by the application of these rules, I must ascribe a meaning to the words 'day prior'—that is, days prior to the sale, found in our statute, and it may be *one day*, because *day* is the unit of time mentioned in and contemplated by the statute, properly written in the plural, *days*.

"If I adopted the construction contended for on behalf of the receiver, I would have to excise from the statute the word '*days*,' because if the last publication of notice of sale should be made on the day of sale, then it would be some *hours* but not *days*, or even a *day* prior to the sale. As already seen, the last advertisement, as I view it, may be on some day (not more than seven) before the sale, but cannot be an *hour* or any number of *hours* before the sale on the day of sale. This, in my judgment, is the only way in which the words 'prior' and 'days' (which latter includes 'day') may be read together and given the full force and effect which the Legislature intended should be given to them."

To the same general effect is *Early v. Doe*, 66 How. (U. S.) 610; 14 L. E. 1079.

It follows, therefore, that in the statute under review, "week" is the periodical unit to be considered and observed in the matter of advertising under the statute—that is to say, the advertising or publication of the notice must be for two whole weeks or fourteen days. The first publication to appear in the newspaper at least fourteen days before the petition is considered.

It is contended by counsel for the petitioner that the word "week" as used in the statute means "calendar week" beginning Sunday morning and ending

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Saturday midnight, and that, irrespective of the number of days of publication, if the notice required by the statute is published *once a week* in two such weeks, it is a compliance with the statute.

If that construction is sound it is possible for the day fixed for the hearing to be on, say, Tuesday, the first publication to appear in the newspaper on Saturday, which is in one calendar week, and the second on Monday, which is in the second calendar week, and there would be a publication once a week in two calendar weeks, but only three days, instead of fourteen days, actual notice given.

It is to be noticed, however, that this construction of the statute ignores, it seems to us, two things: First, the number of days, or that time is an element to be taken into consideration; and second, that there is any kind of week other than a calendar week. We cannot think that this is the intention of the Legislature.

In the cases cited, as here, the language of the statute is *once a week for at least so many weeks*. In each case the number of days or time is the controlling element, each requiring the full number of days corresponding to the number of weeks—that is to say, if it be two, four, six or twelve weeks, it must also be fourteen, twenty-eight, forty-two or eighty-four days, so that “week” is the periodical unit to be dealt with, meaning strictly a period of time of seven days, regardless of what day in the week the period begins. It may begin on any day in the week, but the period starts to run from the first publication and then continues for fourteen days before the matter, concerning which the notice is given, is considered.

The undisputed fact here is that the first publication of the notice appeared in the newspaper eleven days only prior to the consideration of the petition instead of fourteen days or two whole weeks, and that is not a compliance with the direction of the act, and the advertisement, therefore, is insufficient.

The Board withholds its approval of the ordinance and the petition is dismissed.

Dated June 1st, 1915.

**ORDINANCE—PISCATAWAY TOWNSHIP, MIDDLESEX COUNTY—
NEW YORK TELEPHONE CO.**

In this application the following was ordered entered:

REPORT.

Application is made to this Board by the New York Telephone Company for approval of an ordinance of the Township of Piscataway, in the County of Middlesex, entitled

“An Ordinance granting permission and consent to the New York Telephone Company, its successors and assigns, to use the various streets, roads, avenues and highways and parts thereof in the Township of Piscataway, Middlesex County, New Jersey, both above and below the surface thereof for the construction, maintenance and operation of its local and through lines and systems in connection

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with the transaction of its business and prescribing the manner of so doing."

The application is made under Section 24 of Chapter 195 of the Laws of 1911, which, among other things, provides that no privilege or franchise thereafter granted to any public utility as therein defined by any political subdivision of this State shall be valid until approved by this Board; such approval to be given when, after hearing, this Board determines that such privilege or franchise is necessary and proper for the public convenience and properly conserves the public interest.

The procedure adopted in the enactment of the ordinance, approval of which is asked, complies with the provisions of the statute commonly designated "The Limited Franchise Act" (Chapter 36, Laws 1906), and the acts supplemental thereto and amendatory thereof.

The ordinance, among other things, provides:

"Section 13: That the said Telephone Company shall, upon this ordinance going into effect, after the execution by the proper township official of the company's regular contracts for service, furnish and maintain free of charge, at such locations as shall be designated by resolution of the Township Committee, along the lines of said company within the township limits, as long as this ordinance is in effect, three telephone stations, and when the number of subscribers secured by the said company in the Township of Piscataway equals or exceeds two hundred (200), a fourth telephone station; said telephone stations shall be connected with the company's nearest central office, and service therefrom within the limits of the Plainfield, Metuchen, Dunellen, New Brunswick and Bound Brook telephone exchange areas shall be allowed free of charge; it being understood that these telephone stations are furnished to accommodate the Township of Piscataway on official business of said township, as well as on public school business, and for such business only; the same attention to be given to the Township of Piscataway as is given to private subscribers, the township in the use of the said telephone to be bound by the same rules and regulations of the company as are or may be imposed upon private subscribers in the township; the township agreeing to pay for all calls from said telephone stations outside of the free local area provided for herein, upon presentation of bills therefor."

In view of the decision of the Supreme Court in *Public Service Electric Company v. Board of Public Utility Commissioners, etc.*, 93 Atl. 707, this Board is constrained to withhold its approval of the ordinance.

The Board, however, suggests that if the New York Telephone Company or the township authorities desire a further hearing of the matter, the Board will afford such opportunity.

The Board, therefore, withholds its approval of the ordinance.

Dated June 8th, 1915.

ORDINANCE—HIGHLAND PARK—PUBLIC SERVICE RAILWAY CO.

The following majority opinion was entered in the above matter, Commissioners Donges and Slocum voting in the affirmative:

REPORT.

Application is made to this Board to file under Conference Ruling No. 8, an ordinance of the Borough of Highland Park, passed July 13th, 1914.

The Board considered that the ordinance raised certain questions, to wit:

1. Whether the privilege or franchise provided for in said ordinance is not such that in the grant thereof Chapter 36, Laws of 1906, and the acts supplemental thereto and amendatory thereof, should have been complied with.

2. Whether the privilege or franchise is not one which requires the approval of the Board.

The Board, therefore, set the matter for hearing on Tuesday, January 19th, 1915. Testimony was taken and argument heard thereon.

It appears that the Township of Raritan, which now includes the Borough of Highland Park (case, p. 11), passed an ordinance July 1st, 1897, granting consent and permission to the Brunswick Traction Company (predecessor in title to the Public Service Railway Company), to construct, operate and maintain an electric street railway in the Township of Raritan, to be operated by the overhead trolley system, and to locate the route thereof and the tracks of said railway conformably to said route and the poles.

The ordinance of the Township of Raritan, however, provided for the construction, operation and maintenance of a street railway of *single track of four feet eight and one-half inch gauge*, and also provides that the *sidings and turnouts shall be two hundred and forty feet in length*.

There were in existence at the time of the passage of the Township Ordinance, to wit, July 1st, 1897, the "Traction Act" of March 14th, 1893 (Laws 1893, page 302; Comp. Stat., Vol. 4, page 5021), and "The Street Railroad Act" of April 21st, 1896 (Laws 1896, page 329; Comp. Stat., Vol. 4, page 5040). The language of these statutes, so far as pertinent, is as follows:

Act 1893, page 307, Section 7:

"That the board of aldermen, common council, or the body having control of streets or highways, or other governing body of any city, town, borough, village, township or county, upon the petition of the directors of any company, incorporated under this act, or a majority thereof, *for a location of the tracks* of any extension or new line of its railway conformably to the route designated in description of the route of such extension of new line, and the map exhibiting the same filed as aforesaid in the office of the Secretary of State, shall *give notice to all parties interested* by publication in one or more newspapers published and circulated in said municipality, &c., &c. * * *

"And after hearing they shall either pass a resolution refusing such location or pass a resolution or ordinance, as may be necessary or proper, granting the said *location*, or any part thereof, *under such lawful restrictions as they deem the interests of the public may require.*"

Act 1896, page 329, Section 1:

"No street railroad shall, from and after the passage of this act, be constructed in, over or upon any street, avenue, highway or other public place in any city, town, township, village or borough of this State, *except upon the consent of the governing body* of such municipality, town, township, village or borough, and such *consent* shall be granted only upon a petition of the corporation desiring to construct, operate and maintain such street railroad to be filed with the clerk or other equivalent officer of such municipality, town, township, village or borough; before such *permission* shall be granted public notice of the application therefor shall be given by publication in one or more newspapers published or circulated in said city, town," &c., &c. * * *

"Provided, however, that such permission to construct, maintain and operate a street railway shall in no case be granted in whole or in part until there shall be filed with the clerk of such governing body, or other equivalent officer, the *consent in writing* of the owner or owners of at least one-half in amount in lineal feet of property fronting on the streets, highways, avenues and other public places, or upon the part of the street or streets, highway or highways, avenue or avenues and other public places through or upon which permission to construct, operate and maintain a street railway is asked."

It is assumed that the procedure adopted in the enactment of the ordinance of the Township of Raritan complies with the provisions of the above statutes, and that the ordinance was passed in accordance therewith.

The ordinance under review is an ordinance passed by the Borough of Highland Park, July 13th, 1914, granting permission to Public Service Railway Company, its successors and assigns, to relocate the present southerly track in Raritan Avenue, and to extend the northerly track in Raritan Avenue a distance of one thousand eight hundred and ten and forty-two hundredths (1,810.42) feet, which, in effect, is the extension of the double track in the place of a single track from Third Avenue, to where it already extended to Woodbridge Avenue (Case, p. 5), or the substitution of the double track system for the single track system the distance of one thousand eight hundred and ten and forty-two hundredths (1,810.42) feet on Raritan Avenue.

At the time of the passage of this ordinance, in addition to the statutes herein cited, there was another statute in effect, the "Limited Franchise Act," so called, on March 27th, 1906 (Laws 1906, p. 50; Comp. Stat., Vol. 3, p. 3562; Amended Laws 1912, p. 756), the language of which, so far as relevant, is as follows:

"No consent for the use of any street, avenue, park, parkway or

other highway, either above, below or on the surface thereof, shall be granted by any municipality until a petition shall have been filed with the clerk of such municipality by the person or corporation desiring the same. * * *

"Upon the filing of such petition the same shall not be considered by the board or body of such municipality authorized by law to make the grant therein petitioned for, *until public notice shall be given* by publication in one or more newspapers published and circulated in said municipality," &c., &c.

No formal proceedings were adopted leading up to the enactment of this ordinance other than those incidental to the formal passage thereof.

In determining whether the provisions of the "Limited Franchise Act," so called, should have been complied with in the enactment of the ordinance of July 13th, 1914, we must inquire as to the nature of the action of the municipal authorities of the township of Raritan in passing the ordinance of July 1st, 1897. Was it judicial or legislative? That the solution of this question depends almost entirely upon the result of this inquiry is practically settled law in this State.

In *Moore vs. Haddonfield*, 61 N. J. L. 470 (Supreme Court), and 62 N. J. L. 386 (E. & A.), the Court had under review a certain supplemental ordinance of the Borough of Haddonfield of May 12th, 1897, which, among other things, eliminated a derailing switch, permitted the narrowing of the gauge of the tracks and removed certain restrictions provided for in the original ordinance of March 6th, 1895.

The Court, in passing upon the validity of this supplemental ordinance, discussed the effect of certain statutes then in force, namely, the Traction Act of March 14th, 1893, above referred to, and the Street Railroad Act of May 16th, 1894 (Laws of 1894, p. 374; Gen. Stat., p. 3247).

The supplemental ordinance was attacked mainly upon the ground that there was no public hearing upon a notice posted and published as required by said statutes.

Garrison, J., delivered the opinion of the Court, and, after pointing out the difference between the statutes and the reasons therefor (pages 388 and 389), said:

"Here, however, the statutes diverge in their bearing upon the litigated point, from the fact that the notice required for 'consent' is one concerning a public matter involving action that is purely legislative, whereas the notice to 'parties interested' of a proposed location of tracks suggests that the proposed action may be of that mixed quality that has been called 'quasi-judicial.' This is the pivot upon which the case turns, and not upon the statutory requirement that notice be given. For if the municipal action be one for which, but for the statute, notice was not required, then the statutory requirement extended only to the original ordinance. When complied with, it was satisfied and at an end. If, on the contrary, regardless of the statute, notice was requisite because of the judicial quality of the act, then so long as that quality inheres notice will be a necessary prerequisite to its exercise. In fine, if the statute had

been silent as to notice, judicial action would still have required notice, while legislative action would have called for none. This is the footing upon which the case now stands, from which the 'consent' given under the act of 1894, which was clearly legislative, may be dropped, leaving the 'location' act to be considered to all intents as if the statute had been silent as to notice. The fact that the supplemental ordinance left the location untouched and dealt with the restriction as to time is not of legal significance, for if, upon principle, the original ordinance was a judicial act, it could not be abrogated, even in part, save upon notice.

"The inquiry, therefore, is, whether the action of the council under the statute of 1893 was legislative or judicial."

And he further said (page 389):

"As to all public rights in the street, the municipal action was clearly legislative. *It became judicial only in case it imposed an additional burden upon the land of the abutting owners.* That such has not been held to be the legal effect of ordinances granting to railroads operated by the trolley system the right to lay tracks in the streets will appear from two expressions of opinion by the Chancellor and at least one in the Supreme Court. *West Jersey Railroad Co. v. Camden, Gloucester and Woodbury Railroad Co.*, 7 Dick. Ch. Rep. 31; *Borden v. Atlantic Highlands and Red Bank Railway Co.*, 18 N. J. L. J. 305; *Kennelly v. Jersey City*, *supra*."

And he concluded by summarizing the case thus (p. 390):

"The route of the railroad and the proceedings upon which rests its right to be in the streets are not before us. The right of the railroad in this respect must be assumed upon this writ of error. This being so, it would seem to be clear that the location of the tracks in the street was a question that called for legislative action only. It was as purely an act of municipal regulation of the use of the highways as was the consent to the proposed route. The 'restriction' which is the immediate subject of review, being of a subsidiary nature, can rise no higher than its sources. If the 'consent' and the 'location' were acts of legislation, the 'restriction' was of the same character."

* * * * *

"The passage of the supplemental ordinance in the present case being therefore a regulation of the public use was an act of legislation for which notice was not required. This disposes of the question that was reargued from the point of view upon which the decision rests."

As already stated, the court in the case cited had before it the Traction Act of March 4th, 1893, cited *supra*, and the Street Railroad Act of May 16th, 1894, in passing on the validity of the supplemental ordinance then under review. These statutes, however, are the same two in effect at the time of the enactment of the ordinance of the Township of Raritan, to wit, July 1st, 1897, except that the Street Railroad Act of May 16th, 1894, was repealed by the act of April 21st, 1896, *supra*, but the language of which, so far as here material, is the same.

And moreover, as in the case cited, so here, the route of the petitioner and the proceedings upon which rest its right to be in the street are not before us. The right of the petitioner in this respect must be assumed in this proceeding.

And the Court having found that the action of the municipal authorities, both as to the "location" under the Act of March 4th, 1893, and as to the "consent" under the Act of May 16th, 1894, was legislative, so, therefore, the Board concludes that the enactment of the ordinance of the Township of Raritan of July 1st, 1897, both as to the "location" under the Act of March 4th, 1893, and as to the "consent" under the Act of April 21st, 1896, was legislative in character.

If there is any difference between the case cited and this proceeding it is to be found in the nature of the consent and permission in the ordinances themselves, that is, the supplemental ordinance of May 12th, 1897, of the Borough of Haddonfield, and the ordinance of July 13th, 1914, here submitted. The former restricts somewhat the provisions in the original ordinance; the latter provides for the *location of an additional track*. But a careful study of the reasoning upon which the decision in the case cited is founded discloses that the difference is one of form merely and not of substance.

This Board in passing on the ordinance of July 13th, 1914, is not dealing with an ordinance granting "consent" to the use of the street, but rather an ordinance providing for the "location" of tracks in the street; not the grant of the original use of the street, but something in addition to or a change in the use already granted. And this being so, the question of the application of the Limited Franchise Act, so called, may now be disposed of.

Upon examination it will be noted that this statute as well as the Act of May 16th, 1894, and also the Act of April 21st, 1896, calls for "public notice" and deals with the "consent" to the use of the streets. The notice required for "consent" is one concerning a public matter involving action that is purely legislative, so that the action required under the Limited Franchise Act is likewise legislative.

A statute providing for legislative action and notice relating to the "consent" to the use of the street, that is, the original use, having been once complied with, it is satisfied and at an end, and repetition of "public notice" cannot avail anything when from the character of the action itself it is not required. It follows, therefore, that in the enactment of the ordinance of July 13th, 1914, it was not necessary to comply with the provisions of the Limited Franchise Act.

The difficulty, if any, with the ordinance under review is the same difficulty encountered by the Court in *Moore v. Haddonfield*, *supra*, with the original ordinance of March 6th, 1895, namely, whether the action of the municipal authorities under the Act of March 4th, 1893, which deals with "location" of tracks and requires notice to be given "to all parties interested," was legislative or judicial.

Specht v. Central Passenger Railway Co., 76 N. J. L. 631, relied on by counsel for the petitioner as controlling, does not assist us here, for it is material in the present decision only in so far as it settles any doubt as to

the right of municipal authorities to authorize incidental changes in the character of street railroads without public notice and hearing and without the consent of abutting property owners. The decision itself or the language of the Court is neither controlling nor helpful in the final solution of the question before this Board. The Court expressly limits its decision to incidental changes and leaves unanswered the question whether notice would be required if the additional or supplemental ordinance provided for the laying of a double track.

The change provided for in the ordinance under review is practically nothing more than the removal of a certain restriction on the use of the street. The original ordinance restricted the use of the street to the laying of a *single track*, while the ordinance under review removes that restriction and fixes the number and location of the tracks in the street. Whether or not this change is incidental or radical, as was suggested in *Specht v. Central Passenger Railway Co.*, *supra*, is, in our opinion, immaterial. Having determined that the action of the municipal authorities of the Township of Raritan in enacting the original ordinance was legislative, it seems to us that, unless "private rights" are affected by the passage of the ordinance removing this restriction, public notice and hearing, or proceedings *de novo*, were unnecessary.

"Private rights" are affected only in case an additional burden is imposed upon the land of the abutting owners. This cannot be the effect of the ordinances under review, for if the adoption of the trolley system and the laying of double tracks, as in *Kennelly v. Jersey City*, *supra*, does not impose an additional burden on the land of abutting owners, or, if in compelling the plaintiff, where the ties and poles are so close to the northerly line of the street, called the building line, to swing his doors and gates inward, does not amount to an additional servitude, as in *Budd v. Camden Horse Railroad Co.*, 70 N. J. L. 782, then it follows that the removal of the restriction and the laying or location of an additional track, as provided for in the ordinance under review, does not.

The Board concludes, therefore, that the action of the municipal authorities in enacting the ordinance of July 13th, 1914, was purely an act of municipal regulation of the use of the highways under the Borough Act (P. L. 1897, page 285; Comp. Stat., Vol. I, p. 239). It was legislative in character, and the act by virtue of which it was passed being silent as to notice, notice was not required.

The Board, having determined that in the enactment of the ordinance under review, it was unnecessary to comply with the provisions of the Limited Franchise Act, there is nothing which requires the approval of the Board.

Dated June 14th, 1915.

DISSENTING OPINION BY COMMISSIONER TREACY.

Under an ordinance of the Township of Raritan passed July 1st, 1897, the Public Service Railway was authorized to construct, and did construct, a street railway of *single track*. For the purposes of this application it will be taken for granted that that ordinance was regularly passed.

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On July 13th, 1914, another ordinance, the one under review, was passed, which authorizes the construction of a *double* track through the Borough. No notice of the intended adoption of this ordinance was given nor were the consents of property owners obtained as provided for by the Limited Franchise and Street Railway acts.

Section 8 of Chapter 41 of Laws of 1910 provides that

"no privilege or franchise hereafter granted to any public utility
* * * shall be valid until approved"

by this Board.

Is the ordinance in question a privilege or franchise?

If it is it should be approved by this Board unless approval is not necessary because of the order of this Board known as Conference Ruling No. 8. This ruling provides that where a privilege or franchise was granted prior to July 4th, 1910, the date when the above act became effective, an agreement or ordinance

"providing merely for a change in the mode of exercising a privilege or franchise granted prior to July 4th, 1910, and granting no new privilege or franchise"

is not required to be approved by the Board. The franchise granted by the ordinance of 1897 is that

"consent and permission of the Township Committee of the Township of Raritan is hereby given and granted to the Brunswick Traction Company, its successors, lessees and assigns, to construct, operate and maintain a street railway of *single track*, &c."

It is limited to a single track. What it gets by the new ordinance is in effect the right to construct, operate and maintain another street railway of single track. If the first ordinance was such that under the law of 1910 approval by this Board would be necessary it would seem that approval of the ordinance of 1914 is likewise necessary.

Is the 1914 ordinance affected by the provisions of the Limited Franchise Act as to the necessity for the formal proceedings therein required?

The Limited Franchise Act (Comp. Stat. 3562, S. 1) provides as follows:

"Hereafter, where by law the consent of any municipality is required for the use of any street * * * highway or other public place such consent shall not be granted except as hereinafter provided."

Then follow the provisions as to notice of the proposed ordinance.

It must be borne in mind that the act applies to every case where after the year 1906 the consent of a municipality is necessary to the use of a street.

In the case before the Board the *consent* of the municipality was necessary to the installation of a double track, that is, to the *use* of the street. If such consent was not necessary no ordinance was necessary. The petitioner admits that an ordinance, and therefore *consent* to use of the street, was necessary, for it relies on it as the source of its authority to lay the additional track. Likewise, if the laying of the second track was not a "use" of the street no "consent" was necessary. The petitioner admits that it was a "use" of the street by its action procuring consent of the municipality.

It is said that the laying of the second track is not a "use" of the street; that it is merely a "location" of tracks. But the right to locate tracks is the right to use the street. In the case of *Theberath v. Newark*, 57 N. J. L. 309, 312, the Supreme Court held that the consent to the "location" of tracks was a consent to the use (although not exclusive) of the street. The word "use" in the Limited Franchise Act should be taken in its broadest sense and means any use. The philosophy and history of the act sustain this view. It was to prevent the practices like the one under consideration in this case that it was enacted. It was the crystallization into law of the public feeling of protest against the surrender of the use of city streets by complacent municipal officers without the knowledge of the people of the municipality. As an expression of the public policy of the State it should be given a literal construction and every doubt should be resolved in its favor. The use of a street to double track an existing single-track railway is a new and distinct use and not a mere incident of the original use granted eighteen years ago for a single track.

The case of *Moore v. Haddonfield*, 62 N. J. L. 386, is cited as the basis of the prevailing opinion in this matter. That case was decided in 1898 and held that an ordinance passed in 1897 supplementing an ordinance of 1895 (which latter was legally adopted upon notice under the Traction and Street Railway Acts of 1893 and 1894) did not also require the notice provided for in the acts of 1893 and 1894, as the "consent" and the "location of tracks" under those acts were legislative acts by the municipality; that the statutory requirement as to notice extended only to the original ordinance and when once complied with it was satisfied and at an end.

In the present case, however, a new statute (the Limited Franchise Act) has intervened between the passage of the first and second ordinance. If in the Haddonfield case the Court had before it for consideration (1) the acts of 1893 and 1894, (2) the ordinance of 1895, (3) a statute (for the sake of argument) similar to the Limited Franchise Act passed in 1896, (4) the new or supplemental ordinance of 1897, the case would be more nearly similar to the one before us. And though in the supposed case, the Court might hold the requirements as to notice under the acts of 1893 and 1894 to be again unnecessary, it would require notice under the supervening statute of 1896, providing, as it does, that

"hereafter where the consent of a municipality is required to the use of a street such consent shall not be granted except upon notice," if the view hereinbefore expressed of the word "use" is correct, I think, therefore, that the Limited Franchise Act interposes a new formula to be followed by municipalities whenever the consent to a new or additional use of a street is granted, and that in the case at bar a use of the street is given by the new ordinance, namely, the duplication of the existing railway line by another alongside it through the borough.

It is said that the right of the petitioner to be in the street is not now before us. This is so as to the right granted by the Raritan ordinance of 1897 for a single-track railway, but not as to the right now sought to be obtained, namely, a double-track railway. It is also contended that the installation of a double-track system in the place of a single track is an incidental addition or mere change in the use such as was under considera-

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tion in the cases reported in our courts. In the Haddonfield case and all the others where the acts complained of were held to be those of municipal regulation merely, the ordinances dealt with minor changes such as switches and turnouts. The Court of Errors and Appeals in *Specht v. Central Passenger Ry.*, 76 N. J. L. 631, at p. 634, says:

"The installation of additional turnouts in a single-track railroad when increased travel makes them necessary for the public convenience is not a radical change in the system itself, requiring (perhaps) proceedings *de novo* under the act of 1896, but a mere incidental change in the use of the street, as much so as the taking out of derailing switches and the narrowing of gauge."

In that case the resolution under review was one permitting the installation of turnouts 260 feet in length. The Supreme Court had condemned the resolution on the ground *that the effect of installing these turnouts would be to change the character of the railway from a single- to a double-track system* at the places where they were located, and that the *Act of 1896 prohibited this* unless upon notice and hearing. The decision of the Supreme Court was not reversed on that ground, namely, that a double tracking was not permissible under the Act of 1896, but upon the ground that what the Supreme Court thought was a double track was in reality a "turnout." When it is remembered that the Court of Errors and Appeals had the theory of the Supreme Court under consideration, the conclusion is not unwarranted that it considered that the actual installation of a double track in place of a single-track system would be vastly different from a turnout or other incidental change, and that it in reality is "a radical change in the system, requiring proceedings *de novo*."

The Court in *Specht* case holds that the change provided in the ordinance there under review was a mere incidental one, and cites the Haddonfield case as holding only that an *incidental* change does not require that notice and the other statutory steps should precede the new ordinance. It holds that the Supreme Court was wrong in deciding that a turnout was a double tracking of the system, declares that it is a mere incidental change made necessary by reason of defects in the system, and, relying upon the Haddonfield case as authority for the proposition that such an incidental change does not call for the statutory prerequisites, suggests, as I understand the opinion, that double tracking is not an incidental change, but perhaps a radical departure, and not contemplated by the Haddonfield case. The Supreme Court opinion in the *Specht* case is the only adjudication in this State upon the question whether the laying of two tracks where there was formerly the right to lay only one track requires the notice prescribed by the statute of 1896. That case, although reversed for a different reason, still stands in undiminished force as authority for the proposition that a street railway company cannot, when granted the right to lay one track in a street, use that right to double track its system without complying with the statutory formalities as to notice. Until that proposition is declared unsound by the court of last resort, it should be followed.

Dated June 14th, 1915.

(Signed) JOHN J. TREACY,
Commissioner.

RESOLUTION—MIDDLESEX COUNTY BOARD OF CHOSEN FREEHOLDERS—NEW YORK TELEPHONE CO.

Application was made by the New York Telephone Company for approval of a resolution of the Board of Chosen Freeholders of Middlesex County granting permission to said company to construct, reconstruct, maintain and operate for its local and through lines and systems underground conduits, etc., including necessary street openings and lateral connections to curb poles and property lines under and across Highland Park-Bonhamton Road, from the existing manhole, 240 feet east of Millville Road, southerly to the curb line for a total distance of about 33 feet.

Approved June 22d, 1915, after hearing.

RESOLUTION—LAWRENCE TOWNSHIP AND BOARD OF CHOSEN FREEHOLDERS OF MERCER COUNTY—TRENTON AND MERCER COUNTY TRACTION CORPORATION.

Application was made by the Trenton and Mercer County Traction Corporation, lessee of the Trenton Street Railway Company, for approval of a resolution of the Township of Lawrence, and a resolution of the County of Mercer, granting permission to said Trenton and Mercer County Traction Corporation to change the location of its tracks located in the public highway known as the Lawrenceville Road, in the vicinity of Five Mile Run bridge, the change being more particularly described on a map and submitted with the petition.

Approved July 6th, 1915, after hearing.

RESOLUTION—MIDDLESEX COUNTY BOARD OF CHOSEN FREEHOLDERS—NEW YORK TELEPHONE CO.

Application was made by the New York Telephone Company for approval of a resolution of the Board of Chosen Freeholders of the County of Middlesex granting permission to said company to construct, reconstruct, maintain and operate for its local and through lines and systems its underground conduits and place wires, etc., including necessary street openings and lateral connections to curb poles and property lines required in connection therewith under and across the River Road from the northwesterly corner of New Market Road easterly to the easterly curb line for a total distance of about 50 feet in the Township of Piscataway, Middlesex County.

Approved August 17th, 1915, after hearing.

RESOLUTION—MIDDLESEX COUNTY—NEW YORK TELEPHONE CO.

Application was made by the New York Telephone Company for approval of a resolution of the Board of Chosen Freeholders of Middlesex County granting permission to said company to construct, reconstruct, maintain and operate for its local and through lines and systems its poles, wires and

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cables, etc., upon, over and across the River Road from a point 125 feet southeast of Bound Brook Road to a point about 500 feet southeast in the Township of Piscataway, Middlesex County.

Approved August 17th, 1915, after hearing.

RESOLUTION—MIDDLESEX COUNTY—NEW YORK TELEPHONE CO.

Application was made to the Board by the New York Telephone Company for approval of a resolution of the Board of Chosen Freeholders of Middlesex County granting permission to said company to erect, construct, reconstruct, maintain and operate for its local and through lines and systems its poles, wires, cables, etc., over and across South Amboy-Old Bridge Turnpike, from a point opposite the Brookfield Glass Company to a point about 4,200 feet northeast in the Township of Sayreville, Middlesex County.

Approved September 14th, 1915, after hearing.

ORDINANCE—TOWNSHIP OF WALL, MONMOUTH COUNTY—SEA GIRT WATER CO.

Application was made by the Sea Girt Water Company for approval of an ordinance of the Township of Wall, in the County of Monmouth, granting permission to said company to use any and all the streets, avenues, parks, parkways or other highways now or hereafter located in said township for the purpose of laying pipe or other appliances therein or thereon, necessary for the proper operation of a water system in said township below or above the surface thereof, when necessary for said purpose.

Approved September 28th, 1915, after hearing.

ORDINANCE—CITY OF ABSECON—DELAWARE AND ATLANTIC TELEGRAPH AND TELEPHONE CO.

In this application the following report was adopted by the Board:

REPORT.

Application is made to this Board by the Delaware and Atlantic Telegraph and Telephone Company for approval of an ordinance of the City of Absecon, entitled:

"An ordinance authorizing the Delaware and Atlantic Telegraph and Telephone Company, its successors and assigns, to erect, construct, lay and maintain all necessary poles, wires, cables, cross-arms, conduits, manholes and other fixtures and appliances for its lines in, upon, along, over and under each and every of the public roads, streets, alleys and highways of the City of Absecon, in the County of Atlantic, and State of New Jersey, for the conduct of its business, and prescribing the manner of placing the same and regulating the use of the public streets, alleys and highways by said company."

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The application is made under Section 24 of Chapter 195 of the Laws of 1911, which, among other things, provides that no privilege or franchise thereafter granted to any public utility as therein defined by any political subdivision of this State shall be valid until approved by this Board; such approval to be given when, after hearing, this Board determines that such privilege or franchise is necessary and proper for the public convenience and properly conserves the public interest.

The proceedings adopted in the enactment of the ordinance, approval of which is asked, comply with the provisions of the statute commonly designated "The Limited Franchise Act" (Chapter 36, Laws 1906), and the acts supplemental thereto and amendatory thereof.

A certain agreement bearing date the twenty-sixth day of May, 1915, made between the Delaware and Atlantic Telegraph and Telephone Company and the City of Absecon provides that in consideration of the enactment of said ordinance said company agrees as follows:

"To install and maintain free of charge one (1) telephone, at such time, and at such location, within the limits of the City of Absecon as the Council thereof may, by resolution, designate; *provided*, such location is within two hundred feet (200') of company's then existing pole lines or conduits, and to furnish free service from the said telephone for the transaction of municipal business only to all of company's telephones located within Atlantic County."

"Company further agrees to continue to maintain, free of charge, one (1) telephone in city's fire engine house, and to furnish free service therefrom for the transaction of municipal business only to all telephones in the area within which local service is, from time to time, furnished at standard rates to telephone subscribers in the City of Absecon."

"Company also agrees to change the location of the said two (2) telephones, from time to time, free of charge, to such location or locations within the limits of the City of Absecon as the Council thereof may, by resolution, designate, provided any location selected is within two hundred feet (200') of the then existing pole lines or conduits of company."

In view of the decision of the Supreme Court in *Public Service Electric Company v. Board of Public Utility Commissioners, etc.*, 93 Atl. 707, this Board is impelled to withhold its approval of the ordinance.

The Board, however, suggests that if the Delaware and Atlantic Telegraph and Telephone Company or the city authorities desire a further hearing of the matter, the Board will afford such opportunity.

The Board, therefore, withholds its approval of the ordinance.

October 5th, 1915.

ORDINANCE—GLEN ROCK—GLEN ROCK WATER WORKS, INC.

Application was made by the Glen Rock Water Works, Inc., for approval of an ordinance of the Borough of Glen Rock granting consent to said company to lay water pipes and place hydrants in the public street and

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highways in the Borough of Glen Rock for the purpose of supplying water for domestic and public use in said borough.

Approved October 29th, 1915, after hearing.

**ORDINANCE—TOWNSHIP OF POMPTON, COUNTY OF PASSAIC—
BOROUGH OF BUTLER.**

On the application of the Borough of Butler for approval of an ordinance of the Township of Pompton, the following report was entered by the Board:

Application is made to this Board by the Borough of Butler for the approval of an ordinance of the Township of Pompton entitled "An ordinance granting to the Borough of Butler, in the County of Morris, and State of New Jersey, the consent, right and privilege of constructing, maintaining and operating an electric light, heat and power plant, and distributing and transmission system on certain streets, avenues and highways in the Township of Pompton, in the County of Passaic."

The statute under which the Borough of Butler appears to have proceeded and also under which application for approval is made is Chapter 336, Laws of 1915, an act entitled "A supplement to an act entitled 'A general act relating to Boroughs (Revision, 1897),' " which, among other things, provides:

1. "*Subject to the approval of the Board of Public Utility Commissioners, it shall be lawful for the council of any borough of this State, owning and operating an electric light plant,*

b. To supply electric current for heat, light or power purposes, for public or private use, to the inhabitants individually or to any private corporations within any adjoining municipality; provided, however, that the governing body of said adjoining municipality shall, by resolution, consent thereto."

The proceedings adopted in the enactment of the ordinance, approval of which is asked, are those incident merely to the formal passage of the ordinance by the municipality, the Township of Pompton.

The statute (Chap. 336, Laws of 1915) under which the ordinance was adopted does not provide for notice to the public of its passage, and no notice was given either by publication or otherwise. Is, then, *notice* required? Or is the formal passage of the ordinance *without notice* by the municipality all that is required to give the "consent" to the Borough of Butler as provided for in said ordinance?

For if, ignoring the statute, *notice* was a prerequisite to its legal passage, the consent given thereunder is invalid, and this Board would, therefore, feel bound to withhold its approval.

Whether or not *notice* is required depends on the character of the municipal action; that is to say, whether the municipal action is judicial or legislative.

In *Moore v. Haddonfield*, 62 N. J. L. 386, Mr. Justice Garrison, delivering the opinion of the Court, page 388, says:

"This is the pivot upon which the case turns, and not upon the statutory requirement that notice be given. For if the municipal action be one for which, but for the statute, notice was not required, then the statutory requirement extended only to the original ordinance. When complied with, it was satisfied and at an end. If, on the contrary, regardless of the statute, notice was requisite because of the judicial quality of the act, then so long as that quality inheres notice will be a necessary prerequisite to its exercise. In fine, if the statute had been silent as to notice, judicial action would still have required notice, while legislative action would have called for none."

And further, at page 389:

"The inquiry, therefore, is whether the action of the Council under the statute of 1893 was legislative or judicial."

"The difficulties of formulating a universal solvent of this question are rehearsed rather than removed by the opinions that deal with it. It is, therefore, to be assumed that the perplexity is inherent in the subject."

"An examination of these decisions will show that where 'person or property' or 'personal rights' are clearly involved the rule is plain, but that it perceptibly shades off whenever debatable ground is reached. I do not see, however, that there is in the present case much ground for debate. As to all public rights in the street, the municipal action was clearly legislative. *It became judicial only* in case it imposed an additional burden upon the land of the abutting owners."

What, then, is the character of the municipal action here submitted? Is it legislative or judicial? Inquiry into its character becomes necessary and material.

The ordinance, Section 1, provides:

"Subject to the terms and conditions of this ordinance, there is hereby granted to the Borough of Butler, in the County of Morris, *the consent, right and privilege of constructing, maintaining and operating* an electric light, heat and power plant, together with the necessary distributing, conveying and transmitting means and system, such as overhead wires and cables, and underground cables, subways, conduits, ducts, appliances and appurtenances of every kind that may be necessary, useful and usually connected therewith, and necessary poles and cross-arms, in, on, through, under, along and above all and any of the parks, highways, parkways, streets, roads and avenues of the Township of Pompton, in the County of Passaic and State of New Jersey, embraced in or included within the corporate limits of Fire District No. 1 of the said Township of Pompton, for the usual purposes of supplying light, heat and power to purchasers, public and private, wherever applied for within the limits of said District above specified, and for otherwise disposing of the product of said light, heat and power plant as may be necessary."

Strictly, then, the ordinance authorizes the Borough of Butler to erect poles and cross-arms to be located in the parks, highways, parkways, streets, roads and avenues of the Township of Pompton with wires and cables, including underground cables, subways, conduits, &c., for the purpose of supplying light, heat and power to and in the manner prescribed in said ordinance.

Does this *grant or privilege* impose an additional burden upon the land of the abutting owners?

In *Andreas v. Gas and Electric Company*, 61 Eq. 69, Pitney, V. C., at page 69 and 77, says:

"The object of the bill is to obtain an injunction from this Court to prevent the defendant from erecting poles to support electric wires in front of the complainant's land."

"The question, then, is whether the placing on the public sidewalk, the fee of which with the adjoining property is owned by the complainant, poles for that purpose will be a taking of his land. I am of the opinion that it will be, in the sense that it will impose upon it a greater burden than can justly be implied from the laying out of a highway across, or the dedication of a part of his land for the purposes of a highway. As pointed out by Vice Chancellor Van Fleet in the Halsey case, the lighting of streets may be considered as necessary in order to make them safe for use at night. But this consideration does not reach the lighting of the interior of the houses built along their route."

"It is a matter of common knowledge that the larger the pole and the more numerous its arms and wires the greater the nuisance to the premises before which it is erected. So that it is impossible to say that it is no greater injury to the owner of the land to erect thereon poles with arms for the purpose of conducting a current of electricity sufficient to be used for the purpose of power and for private lighting in a large district than the erection of poles for a more restricted purpose."

And this doctrine was approved in

Taylor v. Public Service Corporation, 75 Eq. 371, affirmed C. of E., 78 Eq. 300.

Thropp v. Public Service Electric Corporation, 83 Eq. 564, affirmed C. of E., 93 Atl. 693.

The ordinance under review provides for the erection of poles and stringing of wires

"for the usual purposes of supplying light, heat and power to purchasers, *public and private*, whenever applied for within the limits of said district above mentioned."

It would seem, therefore, that the "consent" to the erection of poles and the stringing of wires for the purpose of conducting electric current to supply private consumers in the manner prescribed in the ordinance, clearly involves "person or property" and personal rights, and imposes an additional burden on the land of abutting owners. So that the action of the municipal authorities of the Township of Pompton in granting the privilege as pro-

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vided for in the ordinance was judicial in quality, and, being judicial, *notice* was requisite regardless of the statute.

The ordinance submitted for approval, therefore, having been passed without "notice," the "consent" given thereunder is invalid and the Board is compelled to withhold its approval.

The Board withholds its approval of the ordinance and the petition is DISMISSED.

Dated November 9th, 1915.

**ORDINANCE—BOROUGH OF WOODBURY HEIGHTS—DELAWARE
AND ATLANTIC TELEGRAPH AND TELEPHONE CO.**

Application was made by the Delaware and Atlantic Telegraph and Telephone Company for approval of an ordinance of the Borough of Woodbury Heights authorizing said company to erect, construct, reconstruct, lay and maintain all necessary poles, wires, cables, cross-arms, conduits, manholes, etc., for its local and through lines in, upon, along, over and under each and every of the public roads, streets, alleys and highways of the Borough of Woodbury Heights.

Approved December 21st, 1915, after hearing.

Leases, Mergers, Agreements and Sales of Property.

West Jersey and Seashore R. R. Co.—Sale of Three Tracts of Land— Kirkwood Station.

Application was made by the West Jersey and Seashore Railroad Company for approval of sale of three tracts of land at Kirkwood Station, Clementon Township, Camden County, lying northeast of the railroad.

Approved January 5th, 1915, after hearing.

Delaware and Atlantic Telegraph and Telephone Co.—Agreement With Trenton Water Power Co.

Application was made by the Delaware and Atlantic Telegraph and Telephone Company for approval of an agreement dated November 19th, 1914, with the Trenton Water Power Company relating to the joint use of certain poles.

Approved January 5th, 1915, after hearing.

Point Pleasant Traction Co.—Sale of Land in Point Pleasant.

Application was made by the Point Pleasant Traction Company for approval of sale of land in the Borough of Point Pleasant, being lots 547 and 548 on Atlantic Avenue, and lot 558 on New Jersey Avenue.

Approved January 5th, 1915, after hearing.

Pennsylvania Tunnel and Terminal R. R. Co.—Agreement With Penn- sylvania R. R. Co.

Application was made by the Pennsylvania Tunnel and Terminal Railroad Company for approval of an agreement with the Pennsylvania Railroad Company for the operation of the railroad and appurtenances of the Pennsylvania Tunnel and Terminal Railroad by the Pennsylvania Railroad Company from January 31st, 1915, to December 31st, 1915.

Approved January 12th, 1915, after hearing.

Wildwood and Delaware Bay Short Line R. R. Co.—Agreement and Sup- plementary Agreement With Eastern Telephone and Telegraph Co.

Application was made by the Wildwood and Delaware Bay Short Line Railroad Company for approval of an agreement, dated January 31st, 1914, and supplementary agreement, dated September 8th, 1914, with the Eastern Telephone and Telegraph Company, relating to joint use of poles.

Approved January 12th, 1915, after hearing.

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J. Wiss & Sons Co. and R. Heinisch's Sons Co.—Merger Under Chapter 19, P. L. 1913.

Application was made by J. Wiss & Sons Company and R. Heinisch's Sons Company, corporations organized and existing under laws of the State of New Jersey, for approval of a merger of said corporations as required by Chapter 19 of the Laws of 1913.

Approved January 12th, 1915, after hearing.

West Jersey and Seashore R. R. Co.—Sale of Land in Atlantic City.

Application was made by the West Jersey and Seashore Railroad Company for approval of sale of land in Atlantic City at the southwest corner of Arctic Avenue and Illinois Avenue, containing 5,800 square feet.

Approved January 26th, 1915, after hearing.

West Jersey and Seashore R. R. Co.—Sale of Land at Wildwood.

Application was made by the West Jersey and Seashore Railroad Company for approval of sale of land on the southwest side of Oak Avenue, Wildwood, containing 4,000 square feet.

Approved January 26th, 1915, after hearing.

Philadelphia and Camden Ferry Co.—Sale of Land in Camden.

Application was made by the Philadelphia and Camden Ferry Company for approval of sale of land in Camden known as Nos. 126 to 134 Arch Street.

Approved February 2d, 1915, after hearing.

Philadelphia and Camden Ferry Co.—Sale of Land in Camden.

Application was made by the Philadelphia and Camden Ferry Company for approval of sale of land on the northerly side of Federal Street, Camden, containing 13,121.03 square feet.

Approved February 2d, 1915, after hearing.

Pennsylvania and Atlantic R. R. Co.—Consolidation Agreement.

Application was made for approval of an agreement of merger and consolidation, dated December 21st, 1914, by and between the Philadelphia and Long Branch Railroad Company, the Pemberton and Hightstown Railroad Company and the Kinkora and New Lisbon Railroad Company, forming the Pennsylvania and Atlantic Railroad Company.

Approved February 2d, 1915, after hearing.

New Jersey Water Service Co.—Consolidation Agreement.

Application was made for approval of agreement of merger and consolidation, dated August 14th, 1914, by and between the Camden County Water Supply Company and the New Jersey Water Service Company, forming the New Jersey Water Service Company.

Approved February 2d, 1915, after hearing.

Jersey Electric Co.—Sale of Property of Clinton Electric Light Co.

Application was made by the Jersey Electric Company for the approval of the sale of the property of Elmer E. Thompson, which was operated in the name of the Clinton Electric Light Company, in Clinton, New Jersey. A copy of the contract and agreement of sale was filed with the petition.

Approved March 9th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in Trenton.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of the sale of a tract of land on the northerly side of Quarry Alley, having a frontage thereon of 184.67 feet, some distance west from Green's Alley, in the City of Trenton, and containing 8,718 square feet.

Approved March 16th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in Trenton.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of the sale of a tract of land on the southwesterly side of Olden Avenue along Assunpink Creek, in the City of Trenton, containing 12,106 square feet, more or less.

Approved March 16th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in South Amboy.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of the sale of premises known as Nos. 67, 69, 71, 73, 75, 77, 83, 85, 87, 89 Main Street, in the City of South Amboy.

Approved March 23d, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in Jersey City.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of sale of two pieces of land situate westwardly from the Hudson County Boulevard, Jersey City, containing 2,186.48 square feet and 507.06 square feet,

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more particularly shown by means of a blue print submitted with said petition.
Approved March 23d, 1915, after hearing.

Pennsylvania and Newark R. R. Co.—Sale of Land in Woodbridge Township, Middlesex County.

Application was made by the Pennsylvania and Newark Railroad Company for approval of sale of a tract of land situate on the northerly side of Woodbridge Road in Woodbridge Township, Middlesex County, containing 3.975 acres.

Approved March 23d, 1915, after hearing.

Pennsylvania and Newark R. R. Co.—Sale of Land in South Brunswick Township, Middlesex County.

Application was made by the Pennsylvania and Newark Railroad Company for approval of the sale of a triangular piece of land in South Brunswick Township, containing 6.928 acres, said land being more particularly described by means of a blue print submitted with said petition.

Approved March 30th, 1915, after hearing.

West Jersey and Seashore R. R. Co.—Sale of Land in Camden.

Application was made by the West Jersey and Seashore Railroad Company for the approval of the sale of land on the south side of Atlantic Avenue, west of the Van Hook cutoff of the Atlantic City Division, in the City of Camden, containing 5.36 acres, said land being more particularly shown by means of a blue print submitted with said petition.

Approved March 30th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in Trenton.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of the sale of a plot of land on the southeast side of Brunswick Avenue, northeast of Southard Street, in the City of Trenton, containing 58,366 square feet, subject to the right of the City of Trenton to use and maintain the present sewer.

Approved April 6th, 1915, after hearing.

Perth Amboy Gas Light Co.—Sale of Land in Perth Amboy.

Application was made by the Perth Amboy Gas Light Company for approval of the sale of a tract of land located in the blocks bounded by Wisteria, Lewis and State Streets, in the City of Perth Amboy, said land being more particularly shown by means of a blue print submitted with said petition.

Approved April 20th, 1915, after hearing.

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New York Telephone Co.—Lease of Premises in Ridgewood.

Application was made by the New York Telephone Company for approval of the lease of a store located at No. 2 Broad Street, in the City of Ridgewood.

Approved April 27th, 1915, after hearing.

Public Service Newark Terminal Railway Co.—Sale of Land in Newark.

Application was made by the Public Service Newark Terminal Railway Company for approval of the sale of three tracts of land in the City of Newark to the Holland Company, said land being more particularly described in said petition.

Approved May 4th, 1915, after hearing.

Holly Beach, Wildwood and North Wildwood Water Co.—Sale of Property to Wildwood Water Works Co.

Application was made by the Holly Beach, Wildwood and North Wildwood Water Company for approval of the sale of its property to the Wildwood Water Works Company for the sum of \$1,700. No reason to the contrary appearing, the Board approved the sale upon condition that the proceeds be used in retiring all of the capital stock of the Holly Beach, Wildwood and North Wildwood Water Company.

Approved May 4th, 1915, after hearing.

Postal Telegraph-Cable Co.—Sale of 61 Poles to Point Pleasant Electric Light and Power Co.

Application was made by the Postal Telegraph-Cable Company for approval of the sale of sixty-one poles to the Point Pleasant Electric Light and Power Company, the location of said poles being shown in the copy of the agreement with blue print annexed thereto, submitted with the petition.

Approved May 7th, 1915, after hearing.

Postal Telegraph-Cable Co.—Sale of 336 Poles to New York Telephone Co.

Application was made by the Postal Telegraph-Cable Company for approval of the sale of 336 poles to the New York Telephone Company, the location of these poles being shown in the copy of the agreement and the blue print annexed thereto submitted with said petition.

Approved May 7th, 1915, after hearing.

Flemington Water Co.—Sale of Water Rights.

Application was made by the Flemington Water Company for approval of the sale of certain water rights on two farms located about one and one-half miles from its reservoir.

Approved May 18th, 1915, after hearing.

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West Jersey and Seashore R. R. Co.—Sale of Two Lots of Land in Egg Harbor Township.

Application was made by the West Jersey and Seashore Railroad Company for approval of sale of two lots of land opposite Cardiff Station in Egg Harbor Township, both 100 feet wide by 200 feet in depth, one extending from Whealey Avenue to Doyle Avenue, the other from Doyle Avenue to Reed Avenue, each containing .46 of an acre.

Approved May 18th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in Perth Amboy.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of sale of a piece of land on the southeast side of Front Street, southwest of Smith Street, containing 93 feet, more or less, on Front Street, and extending to Staten Island Sound, in the City of Perth Amboy.

Approved May 18th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in Elizabeth.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of sale of a piece of land on the east side of Union Street, south of West Jersey Street, in the City of Elizabeth, containing 12,976 square feet.

Approved May 28th, 1915, after hearing.

West Jersey and Seashore R. R. Co.—Sale of Land in Wildwood.

Application was made by the West Jersey and Seashore Railroad Company for approval of the sale or dedication of six tracts of land in the City of Wildwood, being lots Nos. 1 and 16 in Block No. 56, containing 10,000 sq. ft.; parts of lots Nos. 28 and 29 in Block No. 9, containing 7,780 sq. ft.; parts of lots Nos. 26 and 27 in Block No. 10, containing 8,000 sq. ft.; parts of lots Nos. 28 and 29 in Block No. 11, and part of lot No. 27, in Block No. 12, containing 10,736 sq. ft.; a strip within the lines of Holly Beach Avenue from a point southwest of Hildreth Avenue to a point in the middle of Taylor Avenue, containing 10,830 sq. ft., and another strip within the lines of Taylor Avenue, extending from the southwest side of Burke Avenue to the former boundary line of the Borough of Holly Beach, containing 26,180 sq. ft.

Approved June 1st, 1915, after hearing.

Public Service Newark Terminal Railway Co.—Lease by Public Service Gas, Public Service Electric and Public Service Railway Cos.

Application was made by the Public Service Newark Terminal Railway Company for approval of an agreement with the Public Service Gas Company, Public Service Electric Company and Public Service Railway Com-

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pany, for the occupancy of certain premises by the three last named companies for a term of fifty years from June 1st, 1915, more particularly set forth in the copy of the agreement submitted with the petition. The Board approved the act of the Public Service Railway Company in demising the premises affected, but stated in its certificate that in doing so it did not pass upon or approve the assumption by the lessee companies, or any or either of them, of the rentals fixed by the agreement; the question of the reasonableness of such undertakings being left to be passed upon and determined in any future proceeding in which such question may be involved.

Approved June 1st, 1915, after hearing.

Wildwood Water Works Co.—Sale of Plant and Property to City of Wildwood.

Application was made by the Wildwood Water Works Company for approval of the sale of its plant and property to the City of Wildwood for the sum of \$554,000, exclusive of accounts receivable, cash and operating supplies on hand, said valuation and appraisement to be taken and considered to be as of March 24th, 1915, in accordance with the findings of an arbitrator appointed to value the said plant. The Board approved the sale subject to the following conditions:

1. That the proceeds be used for the purpose of retiring all of the company's stock and bonds, and in satisfaction of all of the outstanding liabilities of the company;
2. That the company surrender to the various municipalities in which it operates, or to the City of Wildwood, as may be appropriate, all of its franchises;
3. That the corporation be dissolved.

Approved June 4th, 1915, after hearing.

Public Service Newark Terminal Railway Co.—Sale of Land in Newark.

Application was made by the Public Service Newark Terminal Railway Company for approval of the sale of a tract of land in the City of Newark to the Holland Company, the tract being more particularly described in the deed annexed to and made part of the petition.

Approved June 4th, 1915, after hearing.

Pennsylvania and Atlantic R. R. Co.—Lease to Pennsylvania R. R. Co.

Application was made by the Pennsylvania and Atlantic Railroad Company for approval of a lease, dated April 14th, 1914, of its railroad, property and franchises to the Pennsylvania Railroad Company, from and including February 25th, 1915, until terminated at any time by sixty days' prior notice in writing by either party to the other, a copy of said lease being submitted with said petition.

Approved June 4th, 1915, after hearing.

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Princeton Water Co.—Sale of Land in Princeton.

Application was made by the Princeton Water Company for approval of the sale of a plot of land in Mercer Heights in the southern part of the Borough of Princeton, containing 100 sq. ft.

Approved June 8th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in New Brunswick.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of the sale of a tract of land in New Brunswick, between George Street and the Delaware and Raritan canal, containing six acres more or less.

Approved June 15th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Two Pieces of Land in Trenton.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of the sale of two tracts of land in the City of Trenton, one on the easterly side of the Delaware and Raritan canal, between Greenwood Avenue and Lewis Street, the other on the easterly side of the canal, between Lewis Street and a point near Assunpink Creek.

Approved June 15th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in South Amboy.

Applications were made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of sale of several lots of land in the City of South Amboy, as follows: Property known as Nos. 25, 27, 29, 31, 33, 35, 37, 39 Second Street, Lot No. 16 in Block No. 105 and Lot No. 8 in Block No. 110, all in the City of South Amboy.

Approved June 29th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in Trenton.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of sale of property known as No. 317 Fair Street, in the City of Trenton.

Approved June 29th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in Hopewell Township.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of the sale of a plot of land in Hopewell Township, Mercer County, containing 2.247 acres, subject to the rights of the public in so much of said land as had theretofore been dedicated for public road purposes, the tract being

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more particularly described by means of a blue print submitted with the petition.

Approved June 29th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in Washington Township, Mercer County.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of sale of a tract of land in Washington Township, Mercer County, containing .979 of an acre, the location of the land being more particularly described by means of a blue print submitted with the petition.

Approved June 29th, 1915, after hearing.

Passaic Water Co.—Sale of an Easement Over and Under Land Near Shore Line of Passaic River.

Application was made by the Passaic Water Company for approval of the sale to the Society for Establishing Useful Manufactures, for the sum of \$5,000 of an easement over and under a strip of land 20 feet wide by 310 feet long and 30 feet wide by 2,222 feet long, near the shore line of the Passaic River, the location of said land being more particularly set forth on a map submitted with the petition.

Approved June 29th, 1915, after hearing.

Ocean City Electric R. R. Co.—Sale of Land in Ocean City.

Application was made by the Ocean City Electric Railroad Company for approval of the sale of lot No. 322, in Section C, in Ocean City, on the plan of the Ocean City Association to the Ocean City Electric Light Company for the sum of \$1,000.

Approved June 29th, 1915, after hearing.

Ocean City Electric Light Co.—Sale of Land in Ocean City.

Application was made by the Ocean City Electric Light Company for approval of the sale of lot No. 255, in Section C, in Ocean City, on the plan of the Ocean City Association, to the Ocean City Water Company for the sum of \$1,000.

Approved June 29th, 1915, after hearing.

Delaware and Atlantic Telegraph and Telephone Co.—Agreement With West Jersey Electric Co.

Application was made by the Delaware and Atlantic Telegraph and Telephone Company for approval of an agreement dated June 10th, 1915, between said company and the West Jersey Electric Company, relating to the joint use of each other's poles in the City of Wildwood, Boroughs of North Wildwood and Wildwood Crest, all in the County of Cape May.

Approved July 12th, 1915, after hearing.

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New York Telephone Co.—Agreement With Western Union Telegraph Co.

Application was made by the New York Telephone Company for approval of an agreement between said company and the Western Union Telegraph Company, dated April 23d, 1915, for the sale of three poles on Water Street and five poles on Somerset Street, in the City of New Brunswick, owned by the New York Telephone Company.

Approved July 12th, 1915, after hearing.

New York Telephone Co.—Agreement With Borough of Butler.

Application was made by the New York Telephone Company for approval of an agreement dated May 10th, 1915, with the Borough of Butler, referring to the joint use of certain poles in the borough.

Approved August 17th, 1915, after hearing.

Consolidation Agreement—Commonwealth Water Co.

Application was made by the Mountain Water Company, the West Orange Water Company and the Clinton Water Company for approval of agreement of merger and consolidation forming the Commonwealth Water Company, said agreement being dated July 22d, 1915.

Approved August 17th, 1915, after hearing.

Delaware and Atlantic Telegraph and Telephone Co.—Agreement With Pleasantville Heat, Light and Power Co.

Application was made by the Delaware and Atlantic Telegraph and Telephone Company for approval of an agreement dated July 8th, 1915, with the Pleasantville Heat, Light and Power Company, and referring to the joint use of poles in Absecon, Somers Point, Pleasantville, Linwood and a portion of the Townships of Galloway and Egg Harbor.

Approved August 17th, 1915, after hearing.

American Telephone and Telegraph Co.—Agreement—Sale of Telephone Station Equipment in Trenton.

Application was made by the American Telephone and Telegraph Company for approval of a bill of sale dated July 13th, 1915, covering certain telephone station equipment in the City of Trenton, more particularly set forth in copy of said bill of sale which was submitted with the petition.

Approved August 17th, 1915, after hearing.

Delaware and Atlantic Telegraph and Telephone Co.—Agreement With Pennsgrove Electric Light, Heat and Power Co.

Application was made by the Delaware and Atlantic Telegraph and Telephone Company for approval of an agreement dated July 8th, 1915, with the

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Pennsgrove Electric Light, Heat and Power Company, for the joint use of 104 poles in the Borough of Pennsgrove.

Approved August 17th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in South Brunswick Township.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of the sale of eight pieces of land in South Brunswick Township, containing altogether 114.175 acres.

Approved August 17th, 1915, after hearing.

Pennsylvania and Newark R. R. Co.—Sale of Two Tracts of Land—Woodbridge Township.

Application was made by the Pennsylvania and Newark Railroad Company for approval of the sale of two tracts of land on Ford Road, in Woodbridge Township, Middlesex County, one containing 0.131 of an acre and the other 4.187 acres, the company reserving the right, liberty and privilege of keeping and using as a roadway or means of access to its other land a strip of land ten feet wide along the northerly line of the larger tract extending from Ford Road eastwardly to a stream of water across said line.

Approved September 14th, 1915, after hearing.

Pennsylvania and Newark R. R. Co.—Dedication of Land to Hamilton Township.

Application was made by the Pennsylvania and Newark Railroad Company for approval of the dedication to the Township of Hamilton, Mercer County, for a public highway, of a strip of land containing .416 of an acre.

Approved September 14th, 1915, after hearing.

Knickerbocker Ice Co., Ice Manufacturing Co. and Interborough Ice Co.—Merger Under Chapter 19, P. L. 1913.

In the matter of the above application the Board entered the following report:

Application is made by Knickerbocker Ice Company, a New Jersey corporation, and Ice Manufacturing Company and Interborough Ice Company, New York corporations, for the approval of this Board, under Chapter 19, Laws of 1913, of the merger of the three corporations.

Hearing was held August 10th, 1915, at the State House, Trenton.

It appears that the New Jersey corporation, Knickerbocker Ice Company, owns all of the outstanding capital stock of both of the New York corporations, Ice Manufacturing Company and Interborough Ice Company, and it is proposed to merge the two latter companies into the Knickerbocker Ice Company by filing in the office of the Secretary of State of New York the

certificate required by the New York statute. Upon the filing of a certificate setting forth that a domestic or foreign corporation owns all of the capital stock of a domestic or foreign corporation, a merger of such corporations is effected.

The provision of the statute of New York is as follows:

Section 15 of the New York Stock Corporation law reads as follows:

"Any domestic stock corporation and any foreign stock corporation authorized to do business in this State lawfully owning all the stock of any other stock corporation organized for, or engaged in, business similar or incident to that of the possessor corporation, may file in the office of the Secretary of State, under its common seal, a certificate of such ownership, and of the resolution of its Board of Directors to merge such other corporation, and thereupon it shall acquire and become, and be possessed of, all the estate, property, rights, privileges and franchises of such other corporation, and they shall vest in and be held and enjoyed by it as fully and entirely, without change or diminution, as the same were before held and enjoyed by such other corporation, and be managed and controlled by the Board of Directors of such possessor corporation, and in its name, but without prejudice to any liability of such other corporation or rights of any creditors thereof.

"Any bridge corporation may be merged under this section with any railroad corporation which shall have acquired by contract to run its cars over the bridge of such bridge corporation."

No such authority exists in New Jersey. Nor is there any statute permitting the merger of a New Jersey corporation with a foreign corporation. To merge and consolidate corporations there must be statutory authority; otherwise no such authority exists.

In *Riker & Sons Co. v. United Drug Co.*, 79 (9 *Buch.*) *N. J. Equity* 580 (1911), Chief Justice Gummere, speaking for the Court of Errors and Appeals (p. 582), said:

"The fundamental question now to be decided is whether a corporation of this State, organized under our General Corporation Act, may legally be merged into or consolidated with a corporation created by and organized under the laws of a sister State. The answer to this question seems to us not to be in doubt. As was said by this court in *Colgate v. United States Leather Co.*, 75 *N. J. Eq.* (5 *Buch.*) 229, the power of corporations to consolidate and merge is not to be implied, and exists only by virtue of plain legislative enactment; and no statute of our State can be found which authorizes the proposed scheme. The only right given, by our Legislature, to two or more corporations to merge or consolidate into a single corporation is expressly limited to those which are organized under the laws of our own State. Revised Corporation Act, Sec. 104; P. L. 1896, p. 309."

Again the Court said:

"The scheme, in the carrying out of which the dissolution of the company is a proposed step, is a fraud upon the statute (the word

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is used in a legal, not a moral sense); and every act done in furtherance thereof, no matter whether it be legal, standing alone, or not, is equally a fraud under the statute."

In the instant case what is sought to be accomplished is the dissolution of the two New York corporations by merging them into the New Jersey corporation. No agreement of merger and consolidation has been adopted by the companies, as required by the New Jersey statute, and none is proposed. We are asked to approve the swallowing up by the New Jersey company of the two foreign companies, in accordance with the practice laid down by the New York statute.

At the hearing counsel frankly stated there was no statutory authority for such proceeding. In this situation this Board is without authority to approve the proposed merger. The application is DISMISSED.

Dated September 20th, 1915.

Consolidation Agreement—Camden and Burlington County Railway Co.

Application was made for approval of an agreement of merger and consolidation dated May 17th, 1915, by and between the Camden and Burlington County Railroad Company, the Vincentown Branch of the Burlington County Railroad Company and the Mount Holly, Lumberton and Medford Railroad Company, forming the Camden and Burlington County Railway Company.

Approved September 21st, 1915, after hearing.

West Jersey and Seashore R. R. Co.—Sale of Land in Atlantic City.

Applications were made by the West Jersey and Seashore Railroad Company for approval of the sale of two plots of land, one on Illinois Avenue, south of Baltic Avenue, Atlantic City, containing 1,960 square feet, the other at the northwest corner of Illinois and Diston Avenues, Atlantic City, containing 828 square feet.

Approved September 21st, 1915, after hearing.

Delaware and Atlantic Telegraph and Telephone Co.—Agreement with Pennsgrove Electric Light, Heat and Power Co.

Application was made by the Delaware and Atlantic Telegraph and Telephone Company for approval of an agreement dated July 20th, 1915, with the Pennsgrove Electric Light, Heat and Power Company, for the joint use of thirteen poles in the Village of Pedricktown, Upper Oldmans Township, Salem County.

Approved September 21st, 1915, after hearing.

American Telephone and Telegraph Co. and Delaware and Atlantic Telegraph and Telephone Co.—Sale of Central Office Equipment in Atlantic City.

Application was made by the American Telephone and Telegraph Company and the Delaware and Atlantic Telegraph and Telephone Company for approval of a bill of sale dated July 29th, 1915, covering certain central office

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equipment in Atlantic City, more particularly described by means of a copy of the bill of sale submitted with the petition.

Approved September 21st, 1915, after hearing.

Lambertville Public Service Co.—Sale of Property of Lambertville Heat, Light and Power Co. by Receiver.

Application was made by the Lambertville Public Service Company for approval of the sale to it by the Receiver of the Lambertville Heat, Light and Power Company, of all the property, effects and franchises of the last-named company, which was made in accordance with an order of the Court of Chancery.

Approved September 28th, 1915, after hearing.

Charles S. Moore, Receiver, Pleasantville Water Co.—Sale of Property.

Application was made by Charles S. Moore, Receiver of the Pleasantville Water Company, for approval of the sale of the plant and property to Lewis S. Sadler and others, made in accordance with an order of the Court of Chancery.

Approved September 28th, 1915, after hearing.

New York Bay R. R. Co.—Sale of Land in Newark.

Application was made by the New York Bay Railroad Company for approval of sale of land situate on the route of its Branch Railroad in the City of Newark, containing 3.932 acres, and designated as the "Lister Branch."

Approved October 5th, 1915, after hearing.

Public Service Railway Co.—Lease of Land in Elizabeth to Public Service Electric Co.

Application was made by the Public Service Railway Company for approval of a lease to the Public Service Electric Company for a period of fifty years of a tract of land in the City of Elizabeth, more particularly described in copy of the lease submitted with the petition.

Approved October 15th, 1915, after hearing.

Public Service Railway Co.—Lease of Land in Montclair to Public Service Electric Co. and Public Service Gas Co.

Application was made by the Public Service Railway Company for approval of lease to the Public Service Electric Company and the Public Service Gas Company of a tract of land for a period of fifty years, in Montclair, more particularly described in a copy of the lease submitted with the petition.

Approved October 15th, 1915, after hearing.

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Delaware and Atlantic Telegraph and Telephone Co.—Agreement With Electric Co. of New Jersey.

Application was made by the Delaware and Atlantic Telegraph and Telephone Company for approval of an agreement dated September 22d, 1915, with the Electric Company of New Jersey, for the joint use of each others poles located in parts of Camden, Gloucester and Salem Counties.

Approved October 18th, 1915, after hearing.

Delaware, Lackawanna and Western R. R. Co., Lessee—Sale of Land in Milburn Township.

Application was made by the Delaware, Lackawanna and Western Railroad Company, lessee of the Morris and Essex Railroad Company, for approval of the dedication of two strips of land in the Township of Milburn, and for the approval of the grant of a sub-surface easement as set forth in a copy of the agreement which was submitted with the petition.

Approved October 19th, 1915, after hearing.

James Kerney, Receiver, Interstate Telephone and Telegraph Co.—Sale to New York Telephone Co. and Delaware and Atlantic Telegraph and Telephone Co.

Application was made by James Kerney, Receiver, Interstate Telephone and Telegraph Company of New Jersey, for approval of the sale of all the property, effects and franchises of said company in part to the New York Telephone Company, and in part to the Delaware and Atlantic Telegraph and Telephone Company, made in compliance with an order of the Court of Chancery of New Jersey.

Approved October 19th, 1915, after hearing.

James Kerney, Receiver, Bordentown Telephone and Telegraph Co.—Sale to Farmers' Telephone Co.

Application was made by James Kerney, Receiver of the Bordentown Telephone and Telegraph Company, for approval of the sale of all property, effects and franchises of said company to the Farmers' Telephone Company, made in compliance with an order of the Court of Chancery of New Jersey.

Approved October 19th, 1915, after hearing.

James Kerney, Receiver, Elizabeth Telephone Co.—Sale to New York Telephone Co.

Application was made by James Kerney, Receiver, Elizabeth Telephone Company, for approval of the sale of all property, effects and franchises of said company to the New York Telephone Company, made in compliance with an order of the Court of Chancery of New Jersey.

Approved October 19th, 1915, after hearing.

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George F. Wright, Receiver, Paterson, Passaic and Suburban Telephone Co.—Sale to New York Telephone Co.

Application was made by George F. Wright, Receiver, Paterson, Passaic and Suburban Telephone Company, for approval of sale of all assets, property, effects and franchises of said company to the New York Telephone Company, made in compliance with an order of the Court of Chancery of New Jersey.

Approved October 19th, 1915, after hearing.

Passaic Water Co. et al.—Sale of Land in Little Falls Township, Passaic County.

Application was made by the Passaic Water Company, the Acquackanonk Water Company and the Montclair Water Company, for approval of the sale of a parcel of land in Little Falls Township, Passaic County, containing 2.60 acres, to the Beattie Manufacturing Company.

Approved October 20th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Lands in South Amboy.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of sale of several tracts of land in the City of South Amboy, located as follows:

Lots No. 18 and No. 19 in Block No. 129; lot No. 11 in Block No. 110; lots No. 2 and No. 3 in Block No. 107; lots No. 12 and No. 13 in Block No. 110, and a tract of land on the southeast side of Second Street, sixty feet more or less southwest from Broadway, extending back to a ten-foot alley and containing 7,326 sq. ft. more or less.

Approved October 26th, 1915, after hearings.

Pennsylvania R. R. Co.—Sale of Land in New Brunswick.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of the sale of a strip of land on the southwesterly side of the sluiceway of the Delaware and Raritan Canal in New Brunswick, containing .353 of an acre.

Approved October 26th, 1915, after hearing.

Delaware and Atlantic Telegraph and Telephone Co.—Agreement With Farmers' Telephone and Telegraph Co. of Moorestown.

Application was made by the Delaware and Atlantic Telegraph and Telephone Company, for approval of an agreement with the Farmers' Telephone and Telegraph Company, of Moorestown, dated September 14th, 1915, for the sale of 271 sets of telephone instruments (less transmitters and receivers).

Approved October 26th, 1915, after hearing.

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Lakewood Water, Light and Power Co.—Sale of its Property to Point Pleasant Electric Light and Power Co.

Application was made by the Lakewood Water, Light and Power Company for approval of sale to the Point Pleasant Electric Light and Power Company (which last-named company by an amendment of its certificate of incorporation was to change its name to Lakewood and Coast Electric Company) of its electric properties including the power plant and real estate in consideration of the issuance to said company of stock to the amount of \$25,000 and bonds to the amount of \$175,000.

Approved October 27th, 1915, after hearing.

Lakewood Water, Light and Power Co.—Sale of Sewage System to Lakewood Water, Light and Power Co.

Application was made by the Lakewood Water, Light and Power Company for approval of sale of its sewage system in Lakewood to the Lakewood Water Company, for the sum of \$130,152.

Approved October 27th, 1915, after hearing.

Lakewood Water Co.—Sale of Property in Lakewood.

Application was made by the Lakewood Water Company for approval of the sale to the Lakewood Water, Light and Power Company of the power plant site in Lakewood, office building at No. 35 Madison Avenue, Lakewood, and three lots on Ocean and Laurel Avenues, more particularly described in the petition.

Approved October 27th, 1915, after hearing.

Commonwealth Water and Light Co.—Sale of Water Property and Franchises, etc.

Application was made by the Commonwealth Water and Light Company for approval of sale to the Commonwealth Water Company of all water properties and franchises of every kind and nature; open book accounts against the Mountain, West Orange, and Clinton Water Companies; consumers' accounts receivable; special deposits and investments and a working capital of \$5,000.

Approved October 27th, 1915, after hearing.

Commonwealth Water and Light Co.—Sale of Electric Properties, etc.

Application was made by the Commonwealth Water and Light Company for approval of the sale to the Commonwealth Electric Company, of all its electric properties of every kind and nature and \$5,000 cash, as a working capital in consideration of the issuance to it by said Commonwealth Electric Company of its capital stock and bonds, each to the amount of \$165,000.

Approved October 27th, 1915, after hearing.

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**Frederic V. Pitney, Receiver, New Jersey and Pennsylvania R. R. Co.—
Sale to George E. Fisher and Frank B. Allen.**

Application was made by Frederic V. Pitney, Receiver of the New Jersey and Pennsylvania Railroad Company, for approval of the sale of all the property of said company in part to George E. Fisher and in part to Frank B. Allen, made in compliance with an order of the Court of Chancery of New Jersey.

Approved October 29th, 1915, after hearing.

New York Bay R. R. Co. et al.—Agreement for Joint Use of Manufacturers' Extension R. R. Co.

Application was made by the New York Bay Railroad, Everly M. Davis, Central Railroad Company of New Jersey, and the Manufacturers' Extension Railroad Company for approval of an agreement dated October 1st, 1915, between said parties relating to the joint use of a portion of the railroad of the Manufacturers' Extension Railroad Company and the branch tracks and sidings therefrom, more particularly set forth in a copy of the agreement which was submitted with the petition.

Approved October 29th, 1915, after hearing.

Glen Rock Water Works, Inc., and Bergen Aqueduct Co.—Sale of Property of Bergen Aqueduct Co.

Application was made by the Glen Rocks Water Works, Inc., and Bergen Aqueduct Company for approval of the sale of the property of the Bergen Aqueduct Company, being its distribution system in the Borough of Glen Rock, to Glen Rock Water Works, Inc.

Approved October 29th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in New Brunswick.

Application was made by the Pennsylvania Railroad Company, lessee of United New Jersey Railroad and Canal Company, for approval of sale of two contiguous lots of land in New Brunswick on the easterly side of Burnett Street, containing 13,300 square feet.

Approved November 2d, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in Rahway.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of sale of two tracts of land in Rahway on the northerly side of Poplar Street, one containing 4,602 sq. ft., the other 6,300 sq. ft.

Approved November 9th, 1915, after hearing.

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Pennsylvania R. R. Co.—Sale of Land in North Brunswick Township, Middlesex County.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of sale of land in North Brunswick Township, Middlesex County, containing 8.004 acres, bounded by land of Peter W. Traphagen, Jacob Christopher, and railroad of the United New Jersey Railroad and Canal Company.

Approved November 9th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in Trenton.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of sale of No. 718 South Warren Street, in the City of Trenton, containing 1,532 sq. ft.

Approved November 9th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in Hillsborough Township, Somerset County.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of sale of land in Hillsborough Township, Somerset County, bounded on the north and south by land of Peter E. Van Doren, on the east by the county road, and on the west by lands of the Manor Real Estate and Trust Company and Edward Baker, containing 3.6 acres.

Approved November 9th, 1915, after hearing.

Pennsylvania R. R. Co.—Sale of Land in New Brunswick.

Application was made by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, for approval of the sale of two contiguous lots of land in New Brunswick on the easterly side of Burnett Street, containing 13,300 square feet.

Approved November 9th, 1915, after hearing.

Middlesex Water Co.—Sale of Land in Woodbridge Township, Middlesex County.

Application was made by the Middlesex Water Company for approval of the sale of a small tract of land in Woodbridge Township, Middlesex County, which was more particularly described in the petition.

Approved November 15th, 1915, after hearing.

New York Telephone Co.—Agreement With Point Pleasant Electric Light and Power Co. of New Jersey.

Application was made by the New York Telephone Company for approval of an agreement, dated December 21st, 1915, with the Point Pleasant Electric Light and Power Company of New Jersey, referring to the joint use of

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fifteen poles on Encampment Avenue, south of Sea Girt Avenue, in Wall Township, Monmouth County.

Approved November 23d, 1915, after hearing.

New York Telephone Co.—Agreement With Atlantic Coast Electric Light Co.

Application was made by the New York Telephone Company for approval of an agreement with the Atlantic Coast Electric Light Company, dated September 22d, 1915, providing for the sale of six poles in Asbury Park.

Approved November 23d, 1915, after hearing.

Delaware, Lackawanna and Western R. R. Co., Lessee of Morris and Essex Railroad Co.—Sale of Land in West Paterson.

Application was made by the Delaware, Lackawanna and Western Railroad Company, lessee of the Morris and Essex Railroad Company, for approval of the sale of a piece of land in the Borough of West Paterson, containing .23 of an acre.

Approved November 29th, 1915, after hearing.

Delaware, Lackawanna and Western R. R. Co., Lessee of Morris and Essex R. R. Co.—Sale of Land in Delawanna.

Application was made by the Delaware, Lackawanna and Western Railroad Company, lessee of the Morris and Essex Railroad Company, for approval of sale of certain lands lying on the northeasterly side of River Road, in Delawanna (Acquackanonk Township), the exact location being more particularly described in a petition submitted to the Board.

Approved November 29th, 1915, after hearing.

New York Bay R. R. Co.—Sale of Land in Newark.

Application was made by the New York Bay Railroad Company for approval of sale of a strip of land in the City of Newark, containing 1.734 acres, and lying 30 feet southeastwardly from and parallel with Avenue R, as more particularly set forth in said petition.

Approved November 30th, 1915, after hearing.

Hunterdon Electric Co.—Agreement With Borough of High Bridge.

Application was made by the Hunterdon Electric and Power Company for approval of an agreement, dated November 1st, 1915, with the Borough of High Bridge, referring to street lighting.

Approved December 6th, 1915, after hearing.

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New York Telephone Co.—Agreement With Sussex Telephone Co.

Application was made by the New York Telephone Company for approval of an agreement, dated October 9th, 1915, with the Sussex Telephone Company, providing for the joint use and ownership of 64 poles in the Borough of Franklin and Village of Hamburg, Hardyston Township, Sussex County. Approved December 6th, 1915, after hearing.

New York Telephone Co.—Agreement With Sussex Telephone Co. and the Borough of Franklin.

Application was made by the New York Telephone Company for approval of an agreement with the Sussex Telephone Company and the Borough of Franklin, dated October 8th, 1915, providing for the joint use and ownership of 125 poles on the main road in the Borough of Franklin, between northern and southern boundaries.

Approved December 6th, 1915, after hearing.

New York Telephone Co.—Agreements With Willsbrook Electric Co.

Application was made by the New York Telephone Company for approval of five agreements with the Willsbrook Electric Company, as follows:

Dated August 30th, 1915, referring to joint ownership of 5 poles in the Borough of Netcong;

Dated July 6th, 1915, referring to the joint ownership of a pole line of 29 poles on Allen Street, 2 on Main Street, a line of 4 on Allen Street west of road to Port Norris, a line of 9 poles on the Netcong-Hardyston trunk line, etc.;

Dated July 6th, 1915, referring to the joint ownership of a line of 3 poles on private property in Roxbury Township, Morris County;

Dated April 24th, 1915, referring to the joint ownership of pole on King Street, Stanhope;

Dated August 28th, 1915, for sale of 6 poles on private property in Netcong, Morris County.

Approved December 6th, 1915, after hearing.

New York Telephone Co.—Agreements With Eastern Pennsylvania Power Co. of New Jersey.

Application was made by the New York Telephone Company for approval of seven agreements with Eastern Pennsylvania Power Company of New Jersey, as follows:

Dated July 17th, 1915, for joint ownership and use of 20 poles on Pottersville Road, etc.;

Dated January 2d, 1915, for joint ownership of poles on Chester Turnpike, in Peapack-Gladstone Borough;

Dated July 27th, for joint ownership of pole in the Township of Denville, Morris County;

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Dated July 16th, 1915, for joint ownership and use of poles on Cold Spring Road, in Peapack-Gladstone Borough;

Dated November 4th, 1915, for joint ownership and use of poles on West Clinton Street, Dover;

Dated August 16th, 1915, for joint ownership and use of pole on Morris Street, Dover;

Dated September 25th, 1915, for joint ownership and use of 7 poles on Church Street, Mendham.

Approved December 6th, 1915, after hearing.

Postal Telegraph-Cable Co. of New Jersey—Agreement With Public Service Electric Co.

Application was made by the Postal Telegraph-Cable Company of New Jersey for approval of agreement with the Public Service Electric Company, providing for the sale of 30 poles along the Ocean Boulevard between Highland Beach and Sea Bright.

Approved December 6th, 1915, after hearing.

Pennsylvania Tunnel and Terminal R. R. Co.—Agreement With Pennsylvania R. R. Co.

Application was made by the Pennsylvania Tunnel and Terminal Railroad Company for approval of an agreement with the Pennsylvania Railroad Company for the operation of the railroad and appurtenances of the Pennsylvania Tunnel and Terminal Railroad Company by the Pennsylvania Railroad Company as agent from December 31st, 1915, to November 30th, 1916.

Approved December 7th, 1915, after hearing.

New York Bay R. R. Co.—Sale of Land in Newark.

Application was made by the New York Bay Railroad Company for approval of sale of a tract of land in the City of Newark, containing 395 feet on the southwest side of Poinier Street, northwest of Avenue C, containing 46,103 square feet.

Approved December 21st, 1915, after hearing.

New Crossings at Grade.

In the Matter of the Application of the Mayor and Council of the Borough of Seaside Park for Permission to Extend E Avenue at Grade Over the Tracks of Pennsylvania Railroad Company, in Said Borough. } REPORT.

F. R. Austin, for the Borough and certain property owners.

J. F. Chandler, for Pennsylvania Railroad Company.

The Mayor and Council of the Borough of Seaside Park filed a petition for permission to extend E Avenue over the tracks of the Pennsylvania Railroad Company at grade.

A hearing was held at the State House, Trenton, on February 23d, 1915, at which the municipality was represented by the Mayor and members of Council, and numerous property owners were in attendance. It was shown that the section through which E Avenue extends is developing rapidly; that there is no crossing over the tracks of the railroad for a distance of 2,290 feet, or at North Avenue, 1,250 feet to the south on the one side, and at Ellsworth Street, 1,040 feet to the north on the other side; and that the development of the community requires a crossing at E Street. The matter was referred to the Chief Inspector of the Railroad Division of the Board, who reported in part, as follows:

"I recommend that the petition for extension of E Street to cross the railroad be granted, and suggest that a boulevard be constructed from North Avenue on the west side to the north end of Seaside Park Borough to avoid the necessity of the extension of any more streets across the railroad between the points named."

In view of the proof as to the development of the community affected, the Board concludes that the crossing in question is taken out of the rule adopted by the Board concerning the establishing of new grade crossings and that to deny the application would result in retarding the development of the community and that public necessity requires such crossing. Permission to cross the tracks at grade will be granted.

Dated March 23d, 1915.

In the Matter of the Application of the Three-in-One Oil Company for Permission to Construct Siding at Grade Across Scott Avenue, Rahway, from Tracks of the Pennsylvania Railroad. } REPORT.

F. V. Dobbins, for Three-in-One Oil Company.

J. F. Chandler, for Pennsylvania Railroad Company.

The application in this matter is for the extension of an existing siding on the Pennsylvania Railroad, which siding is now on the west side of Scott

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Avenue, in the City of Rahway. The Three-in-One Oil Company plant is located several hundred feet east of Scott Avenue, and the siding in question leaves the Pennsylvania Railroad elevated tracks several hundred feet west of Scott Avenue, descends to grade and taps several industries along Broad Street or Railroad Avenue, which runs alongside the railroad, and terminates at or near Scott Avenue. The Board is asked to approve the extension of this spur at grade across Scott Avenue to the Three-in-One Oil Company's plant.

At a hearing the application was endorsed by the counsel for the City of Rahway, both on behalf of the city and of the Three-in-One Oil Company. The Common Council of the city, by a vote of eleven to one, approved the proposed extension of this siding at grade across Scott Avenue to the Three-in-One Oil Company plant. Various property owners appeared at the hearing and asked for the same relief.

The Board, owing to its reluctance to allow any crossings at grade, held a number of hearings with a view to bring out, if possible, some other scheme than the one proposed, by which the industry in question could be furnished with siding facilities. A suggestion was made that a spur might be constructed to the Three-in-One Oil Company plant from a point on the Pennsylvania Railroad tracks east of Scott Avenue. The cost, however, of such a spur would be very much greater than the extension of the existing one. In addition, the engineer of the Pennsylvania Railroad testified that the making of an additional switch connection from the main tracks would add another element of danger to the main track operations. It appears that the traffic at the present time over Scott Avenue is very light.

In view of these conditions, which the Board considers exceptional, the extension of the existing siding at grade over Scott Avenue will be permitted for the purpose of serving the applicant, Three-in-One Oil Company, subject to the following conditions:

1. That movements of cars upon this siding across Scott Avenue shall not exceed six miles an hour.
2. That all such movements shall be preceded by a flagman to warn pedestrians at the Scott Avenue crossing.

Dated March 23d, 1915.

<p>In the Matter of the Application of the Pennsylvania Railroad Company, Lessee of the Philadelphia and Long Branch Railroad Company, for Permission to Construct a Siding at Grade Across Sherman Avenue, Seaside Heights.</p>	}	<p>CERTIFICATE.</p>
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Application being made to the Board of Public Utility Commissioners by the Pennsylvania Railroad Company, lessee of the Philadelphia and Long Branch Railroad Company, by petition in writing, for permission to construct a spur track or siding at grade across Sherman Avenue, in the Borough of Seaside Heights, Ocean County, New Jersey, to reach the lands of the Barnegat Ice Manufacturing Company, said application being accompanied by a blue print showing more particularly the location of said siding, which blue

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print and petition are, by reference thereto herein, made part hereof, and said application being also accompanied by certified copy of resolution passed by the Borough Council of Seaside Heights February 23d, 1915, granting permission for the construction of said siding.

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY APPROVES of the construction of said spur track or siding at grade, subject to the following condition:

That the crossing to be constructed be placed in as good condition as the present crossing over the two tracks now existing at Sherman Avenue.

Dated April 6th, 1915.

In the Matter of the Application of the Public Service Railway Company, Lessee of the Camden and Suburban Railway Company, for Permission to Lay an Additional Track at Grade Across Browning's Lane Road, in the Township of Centre, Camden County, New Jersey. } CERTIFICATE.

Application being made to the Board of Public Utility Commissioners by the Public Service Railway Company, lessee of the Camden and Suburban Railway Company, by petition in writing, for permission to construct an additional track at grade across Browning's Lane Road, in the Township of Centre, Camden County, New Jersey, as shown on map attached to said petition, which map and petition are, by reference thereto, herein made part hereof,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY GRANTS permission for the construction of said track subject to the following condition:

That both tracks be fully planked to a width of thirty-six feet, which is the present width of the planking on the steam railroad.

Dated April 27th, 1915.

In the Matter of the Application of the Delaware, Lackawanna and Western Railroad Company for Permission to Construct an Industrial Siding at Grade Across Colfax Avenue in Acquackanonk Township, Passaic County. } CERTIFICATE.

Application being made to the Board of Public Utility Commissioners by the Delaware, Lackawanna and Western Railroad Company, by petition in writing, for permission to construct an industrial siding at grade across the public street known as Colfax Avenue, in Acquackanonk Township, Passaic County, New Jersey, to serve the Richardson Scale Company, said application being accompanied by a blue print showing more particularly the location of said siding, which blue print and petition are by reference thereto herein made part hereof, and said application being also accompanied by a certified copy of motion passed by the Township Committee

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of the Township of Acquackanonk December 1st, 1914, granting permission for the construction of said siding,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY APPROVES of the construction of said industrial siding at grade, subject to the following conditions:

1. That all train movements over said crossing be preceded by a flagman.
2. That train movements over said siding be restricted to a speed of not more than six miles per hour.

Dated May 7th, 1915.

In the Matter of the Application of the Bennett Gravel Company for Permission to Construct a Siding Track at Grade Across Three Public Highways in the Township of Wall. } CERTIFICATE.

Application being made to the Board of Public Utility Commissioners by the Bennett Gravel Company, by petition in writing, for permission to construct an industrial crossing at grade across three public highways in the Township of Wall, one extending from Farmingdale to Glendola, one extending from Farmingdale to Hurley's Pond, and one being an old road known as "Payntar's Road," the location of said track at the crossings of said public roads or highways being more particularly shown on a blue print annexed to said petition, which blue print and petition are by reference thereto herein made part hereof, and said application being also accompanied by a certified copy of a resolution of the Township Committee of the Township of Wall, passed April 13th, 1915, granting permission for the construction of said siding, subject to certain conditions,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY APPROVES of the construction of said industrial siding at grade, subject to the conditions contained in said resolution, and subject, further, to the following conditions:

1. That all train movements over the crossings of the public road extending from Farmingdale to Glendola, and the public road leading from Farmingdale to Hurley's Pond, be preceded by a flagman.
2. That crossing signs be located at both approaches at all crossings.
3. That locomotive whistle be sounded on the approach of all train movements at all of the above-mentioned crossings.

Dated May 7th, 1915.

In the Matter of the Application of George S. White for a Crossing Over the Tracks of the New Jersey and Pennsylvania Traction Company in Lawrenceville. } REPORT.

George S. White, the petitioner in this matter, is the owner of a tract of land in Lawrence Township, running along the right of way of the New

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Jersey and Pennsylvania Traction Company. It is located between Phillips Avenue on the north and Titus Lane on the south. It appears that Mr. White formerly owned land on both sides of the New Jersey and Pennsylvania Traction Company's right of way, but he sold all the land that he owned on the east side of the tracks, that is to say, the portion which was bounded by Main Street on the east, Titus Lane on the south, and Phillips Avenue on the north, and he cut through the center of this last-mentioned tract a street which is partly improved, running from Main Street to the tracks, which he calls Craven Avenue. He desires to extend this street across the tracks and through the tract of land owned by him on the west side of the tracks. The length of Mr. White's property, measured along the right of way of the New Jersey and Pennsylvania Traction Company, is 761 feet. There is at the present time a crossing over the tracks at Titus Lane and another crossing at Phillips Avenue. The distance between Titus Lane and Phillips Avenue is 947 feet. If the Craven Avenue crossing, which is asked for by the petitioner, were permitted, it would be distant about 380 feet from Titus Lane crossing, and a little over 500 feet from the Phillips Avenue crossing. The tract of land which Mr. White wishes to serve with the proposed crossing is at present undeveloped. There are no buildings of any kind upon it, no streets are laid out, and it is practically farm land. The petitioner desires the crossing to aid him in the sale of the property on the west side of the tracks.

We do not believe that a crossing at the point in question is necessary at the present time. No facts have been shown which, in our judgment, would warrant the establishment of such crossing. It appears that there is a trolley stop at Phillips Avenue and another at Titus Lane, and that at Craven Avenue, the point where the new crossing is proposed, the cars of the New Jersey and Pennsylvania Traction Company, which is a fast electric line, run at a speed of 18 or 20 miles an hour. We think that the petitioner's development of the tract of land in question can be accomplished without the aid of the crossing at Craven Avenue, if he lays out a street running alongside the right of way of the New Jersey and Pennsylvania Traction Company's lines. This would give persons access from any part of Mr. White's tract of land to the station at Titus Lane, on the New Jersey and Pennsylvania Traction Company's road.

The petition will, therefore, be dismissed, and an order will so enter.

Dated May 11th, 1915.

ORDER.

This application having been duly heard, and the Board having, on the date hereof, made and filed a report containing its findings of fact and conclusions thereon, which said report is hereby referred to and made a part hereof, the Board's approval of this application is withheld and the same is HEREBY DISMISSED.

Dated May 11th, 1915.

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In the Matter of the Application of the Pennsylvania Railroad Company for Permission to Construct a Siding at Grade Across Magee Avenue, in the Borough of Lavallette. } **CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners by the Pennsylvania Railroad Company, by petition in writing, for permission to construct a spur track or siding at grade across Magee Avenue, in the Borough of Lavallette, Ocean County, New Jersey, to reach the lands of Brackman and Bloom Brothers, said application being accompanied by a blue print showing more particularly the location of said siding, which blue print and petition are, by reference thereto herein, made part hereof, and said application being also accompanied by certified copy of resolution passed by the Borough Council of Lavallette January 2d, 1915, granting permission for the construction of said siding,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY APPROVES of the construction of said spur track or siding at grade, subject to the following conditions:

1. That the switch point and frog be so constructed as not to encroach upon Magee Avenue.
2. That all train movements over the crossing be preceded by a flagman.
3. That train movements over said crossing do not exceed a speed of six miles per hour.

Dated May 18th, 1915.

In the Matter of the Application of the Welsbach Company for Permission to Construct a Siding at Grade Across King, Warren and Ellis Streets, in the City of Gloucester, from Tracks of the Atlantic City Railroad Company. } **CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners, by the Welsbach Company, by petition in writing, for permission to construct a siding at grade across King Street, Warren Street and Ellis Street, in the City of Gloucester, from tracks of the Atlantic City Railroad Company, as shown by means of a blue print annexed to said petition, which petition and blue print, by reference thereto herein, are made part hereof, said petition being also accompanied by a certified copy of an ordinance of the City of Gloucester, passed April 1st, 1915, and approved April 12th, 1915, authorizing the construction of said siding, upon certain conditions,

The Board of Public Utility Commissioners, after hearing and investigation, no reason to the contrary appearing,

HEREBY GRANTS permission for the construction of said siding at grade, subject to the conditions contained in said ordinance, and subject further to the following conditions:

1. That the town track now in King Street be taken up.
2. That standard crossing signs be erected at King Street also at Ellis Street.

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3. That the crossings be made to conform with the streets.
 4. That all train movements over said crossings be protected by a flagman.
 5. That train movements over said siding be restricted to a speed of not more than six miles per hour.
 6. That train movements over said siding be restricted to six per day.
- Dated May 28th, 1915.

In the Matter of the Application of the Department
of Public Roads of the State of New Jersey for
Permission to Construct the "Princeton Bolmer's
Corner Road" at Grade Across Tracks of the New
Jersey and Pennsylvania Traction Company at
Bayard Lane, Princeton, New Jersey. } **CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners, by the Department of Public Roads of the State of New Jersey, by petition in writing, for permission to construct the "Princeton Bolmer's Corner Road" at grade across the tracks of the New Jersey and Pennsylvania Traction Company, at Bayard Lane, in the Borough of Princeton, Mercer County, New Jersey, at which point there already exists a crossing at grade over the tracks of said company, and it appearing that by the construction of the new crossing at grade the present crossing will be widened so as to make a crossing at this point eighty-five feet in width,

The Board of Public Utility Commissioners, after hearing and investigation, no reason to the contrary appearing,

HEREBY GRANTS permission for the construction of said crossing at grade, as prayed for in said petition.

Dated June 8th, 1915.

In the Matter of the Application of Fidelity Land
Company for Permission to Extend Pennsylvania
Avenue Over the Tracks of the Barnegat and
Beach Haven Railroad. } **REPORT.**

George A. Smith, for petitioner.

J. F. Chandler, for respondent.

The Fidelity Land Company asks permission to extend Pennsylvania Avenue, in Beach Haven Terrace, across the tracks of the Barnegat and Beach Haven Railroad Company at grade.

The petitioner is developing a tract of land, and desires, in the interest of its development, to create an additional grade crossing, by extending Pennsylvania Avenue. Maryland Avenue, distant two hundred feet from Pennsylvania Avenue, extends across the railroad tracks. Baltic Avenue is adjacent to and parallels the tracks on the Barnegat Bay side and extends from Pennsylvania Avenue to Maryland Avenue. The Ocean County Boulevard runs along the tracks on the ocean side and connects Pennsylvania and Maryland Avenues. It appears, therefore, that there is ready access from

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Pennsylvania Avenue to the Maryland Avenue crossing. On the record before us there does not appear to be any public necessity for the crossing asked for. Under the established policy to permit the construction of additional grade crossings only when required by public convenience and necessity, the Board is constrained to withhold the permission sought.

The petition will be dismissed.

Dated June 10th, 1915.

ORDER.

This application having been duly heard, and the Board having, on the date hereof, made and filed a report containing its findings of fact and conclusions thereon, which said report is hereby referred to and made a part hereof, the Board's approval of this application is withheld and the same is HEREBY DISMISSED.

Dated June 10th, 1915.

In the Matter of the Application of the Borough of
Beach Haven for Permission to Extend Twelfth
Street Over the Tracks of the Long Beach Rail-
road, Operated by the Pennsylvania Railroad
Company. } CERTIFICATE.

Application being made to the Board of Public Utility Commissioners, by the Borough of Beach Haven, by petition in writing, for permission to extend Twelfth Street at grade across the tracks of the Long Beach Railroad (operated by the Pennsylvania Railroad Company), in the Borough of Beach Haven, Ocean County, New Jersey, as shown by means of a blue print annexed to said petition, which petition and blue print, by reference thereto herein, are made part hereof,

The Board of Public Utility Commissioners, after hearing and investigation, no reason to the contrary appearing,

HEREBY GRANTS permission for the extension of said Twelfth Street at grade, as prayed for in said petition.

Dated June 10th, 1915.

In the Matter of the Application of the Borough of
Beach Haven for Permission to Extend Centre
Street Over Tracks of the Long Beach Railroad,
Operated by the Pennsylvania Railroad Company. } REPORT.

L. J. Osborne, for petitioner.

J. F. Chandler, for respondent.

Application is made for permission to extend Centre Street, in the Borough of Beach Haven, over the tracks of the Long Beach Railroad, operated by the Pennsylvania Railroad Company. It appears that the proposed crossing is distant 117 feet from Dock Road, which crosses the tracks. Dock Road on the Bay side of the tracks is built upon; Centre Street is not. The borough authorities urge that Centre Street will ultimately be a more im-

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portant thoroughfare than Dock Road. They state that Dock Road will eventually be vacated over the railroad tracks. There appears to be no public necessity for both crossings. When Dock Road is vacated over the tracks the Board will grant permission to substitute therefor a crossing at Centre Street. The present application will, therefore, be dismissed, without prejudice to the filing of a new petition when Dock Road is vacated over the tracks.

Dated June 10th, 1915.

In the Matter of the Application of the Borough of
Seaside Heights for a Crossing at Hamilton Avenue
Over the Tracks of the Philadelphia and Long
Branch Railroad Company. } REPORT.

The petition in this matter prays for an order directing the Philadelphia and Long Branch Railroad Company to establish a grade crossing on Hamilton Avenue to cross the tracks of that railroad. There is a grade crossing at Sumner Avenue between four and five hundred feet to the north of Hamilton Avenue. Sumner Avenue is the central part of the hilltop section of the Borough, and the railroad station is located at that point. There are twelve trains a day each way over Hamilton Avenue in the summer time. The Borough authorities, while demanding the establishment of a grade crossing at Hamilton Avenue, are unwilling that the crossing at Sumner Avenue be abandoned. The Mayor testified that the crossing at Sumner Avenue is required for the accommodation of the people of the Borough because by far the greater part of the population is north of Hamilton Avenue. But he contends that the crossing at Hamilton Avenue is necessary to accommodate the automobile travel from points outside of Seaside Heights which goes through to Island Heights and Toms River, and points in the southern part of New Jersey.

We do not believe that the proposed crossing at Hamilton Avenue is necessary at this time for the development of the Borough. It has not been shown that the needs of the Borough require an additional crossing to that at Sumner Avenue. We do not think that we should establish this crossing upon the application of the Borough for the accommodation of persons, automobilists and others outside the Borough, who merely desire to pass through on their way to points south of the Borough. None of those for whose benefit it is alleged that this crossing is demanded has asked for the establishment of the crossing. So far as automobilists and other persons desiring to cross the tracks of this railroad are concerned, we do not think, even if they had complained, that the crossing at Sumner Avenue is an inconvenient one.

The Borough, not having shown a present urgent need for the crossing at Hamilton Avenue for its own advantage, the petition will be denied.

Dated June 22d, 1915.

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In the Matter of the Application of the West Jersey and Seashore Railroad Company for Permission to Construct a Spur Track or Siding at Grade Across Atlantic Avenue, and to Extend a Siding Across Union Avenue, in the Town of West Berlin, Camden County, New Jersey. } **CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners by the West Jersey and Seashore Railroad Company, by petition in writing, for permission to construct a spur track or siding at grade across Atlantic Avenue, in the Town of West Berlin, Camden County, New Jersey, to reach the lands of J. H. Jaggard; also to extend its freight delivery siding at grade across Union Avenue, in said town, said application being accompanied by a blue print showing more particularly the location of said spur track and siding, which blue print and petition are, by reference thereto herein, made part hereof, and said application being also accompanied by a certified copy of resolution passed by the Township Committee of Berlin Township, May 31st, 1915, granting permission for the construction of said spur track and siding,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY APPROVES of the construction of said spur track and siding at grade, subject to the following conditions:

1. That the crossing on Union Avenue be made to conform with that now there.
2. That Atlantic Avenue be planked on both sides of rail.

Dated June 29th, 1915.

In the Matter of the Application of the West Jersey and Seashore Railroad Company for Permission to Construct a Spur Track at Grade Across Front and State Streets, in the Borough of Elmer, Salem County, New Jersey. } **CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners by the West Jersey and Seashore Railroad Company, by petition in writing, for permission to construct a spur track at grade across Front and State Streets, in the Borough of Elmer, Salem County, New Jersey, said application being accompanied by a blue print showing more particularly the location of said spur track, which blue print and petition are, by reference thereto herein, made part hereof, and said application being also accompanied by a certified copy of permission of the Mayor and Council of the Borough of Elmer, dated June 18th, 1915, for the construction of said spur track,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY APPROVES of the construction of said spur track at grade, subject to the following conditions:

1. That all train movements over both State and Front Streets be restricted to six miles per hour.

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2. That all train movements over State and Front Streets be protected by a flagman.

Dated June 29th, 1915.

In the Matter of the Application of the Victor Talking Machine Company for Permission to Construct an Additional Track at Grade Across Front Street, in the City of Camden, Camden County, New Jersey. } CERTIFICATE.

Application being made to the Board of Public Utility Commissioners by the Victor Talking Machine Company, by petition in writing, for permission to construct an additional track at grade across Front Street, in the City of Camden, Camden County, New Jersey, said application being accompanied by a certified copy of an ordinance passed by the City of Camden, June 24th, 1915, authorizing the construction of said crossing at grade, which petition is, by reference thereto herein, made part hereof,

The Board of Public Utility Commissioners, after hearing and investigation, no reason to the contrary appearing,

HEREBY, subject to the conditions contained in said ordinance and upon the following further conditions, APPROVES of the construction of said crossings:

1. That all train movements over said crossing be protected by a flagman.
2. That all train movements over said crossing be restricted to a speed of not more than six miles per hour.

Dated July 12th, 1915.

In the Matter of the Application of the Galena-Signal Oil Company of Pennsylvania for Permission to Construct a Siding at Grade Across Richmond Street and South Front Street, in the City of Elizabeth. } CERTIFICATE.

Application being made to the Board of Public Utility Commissioners by the Galena-Signal Oil Company of Pennsylvania, by petition in writing, for permission to construct a spur track or siding at grade across Richmond Street and South Front Street, in the City of Elizabeth, Union County, New Jersey, to reach the lands of the Galena-Signal Oil Company of Pennsylvania, said application being accompanied by a blue print showing more particularly the location of said siding, which blue print and petition are, by reference thereto herein, made part hereof, and said application being also accompanied by certified copy of ordinance adopted by the Board of Public Works of the City of Elizabeth July 15th, 1915, approved by the Mayor July 19th, 1915, granting permission for the construction of said siding,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY APPROVES of the construction of said siding at grade, subject to

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the conditions contained in said ordinance, and subject to the following conditions:

1. That crossing be planked both inside and outside of rail.
2. That all train movements over said siding be protected by a flagman.
3. That train movements over said siding do not exceed a speed of six miles per hour.

Dated July 27th, 1915.

In the Matter of the Application of the West Jersey and Seashore Railroad Company for Permission to Construct a Siding at Grade Across a Portion of Delaware Street, in the City of Camden, County of Camden, New Jersey. } **CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners by the West Jersey and Seashore Railroad Company, by petition in writing, for permission to construct a spur track or siding at grade across a portion of Delaware Street, in the City of Camden, Camden County, New Jersey, to reach the lands of the Nelson & Hall Company, said application being accompanied by a blue print showing more particularly the location of said siding, which blue print and petition are, by reference thereto herein, made part hereof, and said application being also accompanied by copy of ordinance passed by the City of Camden February 27th, 1896, authorizing the construction of siding on this street and across the same in order to reach manufacturing establishments,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY APPROVES of the construction of said spur track or siding at grade, subject to the conditions contained in said ordinance, and also subject to the further condition.

That the street be left in as good condition as it now is.

Dated August 17th, 1915.

In the Matter of the Application of the Pennsylvania Railroad Company (Lessee of the United New Jersey Railroad and Canal Company) for Permission to Construct a Spur Track or Siding at Grade Across the Bordentown and South Amboy Turnpike at Runyon, in the County of Middlesex, New Jersey. } **CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners by the Pennsylvania Railroad Company (lessee of the United New Jersey Railroad and Canal Company), by petition in writing, for permission to construct a spur track or siding at grade across the Bordentown and South Amboy Turnpike at Runyon, in the County of Middlesex, State of New Jersey, to reach the lands of the Westinghouse Air Brake Company, said application being accompanied by a blue print showing more particularly the location of said siding, which blue print and petition are, by reference

thereto herein, made part hereof, and said application being also accompanied by a certified copy of resolution adopted by the Board of Chosen Freeholders of the County of Middlesex July 6th, 1915, granting permission for the construction of said siding,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY APPROVES of the construction of said spur track or siding, subject to the conditions contained in said resolution, and also subject to the following conditions:

1. That a standard crossing sign be erected.
2. That the crossing be planked, one plank outside of the rail and fully between the rails, for a distance of not less than thirty feet in width.
3. That all train movements over the crossing be protected by a flagman.
4. That train movements over said crossing do not exceed a speed of six miles per hour.

Dated August 17th, 1915.

In the Matter of the Application of the Pennsylvania Railroad Company (Lessee of the United New Jersey Railroad and Canal Company) for Permission to Construct a Spur Track or Siding at Grade Across Public Road East of Old Bridge, in the County of Middlesex, New Jersey.	}	CERTIFICATE.
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Application being made to the Board of Public Utility Commissioners by the Pennsylvania Railroad Company (lessee of the United New Jersey Railroad and Canal Company), by petition in writing, for permission to construct a spur track or siding at grade across Public Road east of Old Bridge, in the County of Middlesex, State of New Jersey, to reach the lands of the Old Bridge Enameled Brick and Tile Company, said application being accompanied by a blue print showing more particularly the location of said siding, which blue print and petition are, by reference thereto herein, made part hereof, and said application being also accompanied by a certified copy of resolution adopted by the Board of Chosen Freeholders of the County of Middlesex July 6th, 1915, granting permission for the construction of said siding,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY APPROVES of the construction of said spur track or siding, subject to the conditions contained in said resolution, and also subject to the following conditions:

1. That plank be placed on outside of rail, and the crossing filled in between the rails for a distance of not less than fifty feet in width.
2. That a standard crossing sign be erected.
3. That all train movements over the crossing be protected by a flagman.
4. That train movements over said crossing do not exceed a speed of six miles per hour.

Dated August 17th, 1915.

NEW CROSSINGS AT GRADE.

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In the Matter of the Application of the Pennsylvania Railroad Company for Permission to Construct a Siding at Grade Across the Public Road East of Moore Station, Mercer County, New Jersey. } CERTIFICATE.

Application being made to the Board of Public Utility Commissioners by the Pennsylvania Railroad Company, by petition in writing, for permission to construct a siding at grade across the public road east of Moore Station, on the Belvidere-Delaware Railroad, Mercer County, New Jersey, for the Mercer County Workhouse, so that their industrial operations can be conducted by rail, instead of by feeder, as shown by blue print accompanying said petition, which blue print and petition are, by reference thereto herein, made part hereof,

The Board of Public Utility Commissioners, after hearing and investigation, no reason to the contrary appearing,

HEREBY GRANTS permission for the construction of said siding, subject to the following conditions:

1. That the crossing be fully planked both inside and out for the full width of the improvement.
2. That a standard crossing sign be erected at said crossing.
3. That all train movements over the crossing be preceded by a flagman.
4. That all train movements over said crossing do not exceed a speed of six miles per hour.

Dated September 21st, 1915.

In the Matter of the Application of the Bridgeton Sand Company for Permission to Construct a Siding at Grade from the Tracks of the Atlantic City Railroad Across Three Public Highways and one Private Way, in the Township of Winslow, Camden County, New Jersey. } CERTIFICATE.

Application being made to the Board of Public Utility Commissioners by the Bridgeton Sand Company, by petition in writing, for permission to construct a siding at grade from the tracks of the Atlantic City Railroad, across the following public highways and private way located in the Township of Winslow, Camden County, New Jersey:

1. Road designated as "Private Way," and leading from the farm of Lawrence Peacock to the Williamstown Road;
2. Public road designated as "Williamstown Road," being the road leading from New Freedom Church to Williamstown;
3. Public road designated as "Brooklyn Road," being the road leading from New Freedom Church aforesaid southerly;
4. Public road designated as "Old Egg Harbor Road," being the road leading from New Freedom Church aforesaid southerly to a point where the same is crossed by said Atlantic City Railroad, or its branches;

as shown in blue print accompanying said petition, which blue print and petition are, by reference thereto herein, made part hereof, said application

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being also accompanied by certified copy of Resolution of the Township Committee of the Township of Winslow granting permission for the construction of said siding at grade.

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY GRANTS permission for the construction of said siding at grade, as prayed for in said petition, subject to the conditions contained in said resolution, and also subject to the following conditions:

1. That standard crossing signs be placed at all of said crossings.
2. That all of said crossings be planked.
3. That all train movements over said crossings be protected by a flagman.
4. That all train movements over said crossings do not exceed a speed of six miles per hour.

Dated September 21st, 1915.

In the Matter of the Application of the West Jersey
and Seashore Railroad Company for Permission
to Construct a Spur Track or Siding at Grade
Across Leaming Avenue, in the City of Wildwood,
New Jersey. } CERTIFICATE.

Application being made to the Board of Public Utility Commissioners by the West Jersey and Seashore Railroad Company, by petition in writing, for permission to construct a spur track or siding at grade across Leaming Avenue, in the City of Wildwood, New Jersey, for the purpose of installing a turntable between Leaming and Bennett Avenues, as shown by blue print accompanying said petition, which blue print and petition are, by reference thereto herein, made part hereof, said application being also accompanied by certified copy of Ordinance adopted by the Board of Commissioners of the City of Wildwood, August 19th, 1915, granting permission for the construction of said siding.

The Board of Public Utility Commissioners, after hearing and investigation, no reason to the contrary appearing,

HEREBY GRANTS permission for the construction of said spur track or siding at grade, as prayed for in said petition, subject to the following conditions:

1. That the said crossing be properly planked.
2. That a standard crossing sign be erected.
3. That all train movements over said crossing be protected by a flagman.
4. That all train movements over said crossing do not exceed a speed of six miles per hour.
5. That no engines be allowed to be stored either on the turntable or tracks leading thereto.

Dated September 21st, 1915.

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In the Matter of the Application of the Borough of Lavalette for Permission to Cross the Tracks of the Pennsylvania Railroad at Grade at President Avenue. } REPORT.

John H. Switzer, for the petitioner.

J. F. Chandler, for the respondent.

There is a crossing at grade at Reese Avenue within two hundred feet of the proposed crossing. President Avenue on both sides of the railroad tracks is unimproved. While there are six houses on the west or bay side of the tracks, three of these are unoccupied. It is for the convenience of the occupants of these houses that the proposed crossing is asked. There are at least ten train movements over the crossing daily.

We cannot see any urgent public need for this crossing at the present time, and will, therefore, DISMISS the application.

Dated September 28th, 1915.

In the Matter of the Application of the Trenton, Lakewood and Seacoast Railway Company for Permission to Construct and Operate its Track at Grade Across the Highways Between Point Pleasant and Lakewood. } CERTIFICATE.

Application being made to the Board of Public Utility Commissioners by the Trenton, Lakewood and Seacoast Railway Company, by petition in writing, for permission to construct and operate its track at grade across the highways between Point Pleasant and Lakewood, more particularly set forth in said petition, and shown upon map filed with said petition, which map and petition are, by reference thereto herein, made part hereof,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY GRANTS permission for the construction of said track, subject to the following conditions:

1. *Lakewood Road at Laurelton Farms Station*: Loud tone bell, with system of lights showing red at night. Standard grade crossing sign at both approaches, also signs with wording thereon "Railroad Crossing 300 Feet Distant." Trees and brush to be removed as far as possible to afford a good view of approaching cars to travel on the highway. Slow order covering speed of cars over the crossing.

2. *Herbertsville Road*: Standard grade crossing signs at both approaches; trees and brush to be removed at all corners.

3. *Manasquan River Road*: Standard grade crossing signs at both approaches.

4. *Clover Street*: Standard grade crossing signs at both approaches. Remove brush and trees.

5. *Ocean Avenue, Lakewood*: Standard grade crossing signs. System of lights showing red at night. Slow order covering speed of cars.

6. *Pine Bluff Avenue*: Standard grade crossing signs. System of lights showing red at night.

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7. *Allenwood Road*: Standard grade crossing signs at both approaches.
 8. Speed limit restrictions to be established between Herbertsville Road and easterly end of line.
 9. Whistle signs to be installed for all highways located a reasonable distance from crossings between Lakewood and Bolton Avenue.
 10. All crossings to be properly planked.
- Dated October 5th, 1915.

**In the Matter of the Application of the West Jersey
and Seashore Railroad Company for Permission
to Construct a Siding at Grade Across Commerce
Street, Paulsboro. } CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners by the West Jersey and Seashore Railroad Company, by petition in writing, for permission to construct a siding at grade across Commerce Street, in the Borough of Paulsboro, Gloucester County, New Jersey, said application being accompanied by a certified copy of resolution adopted by the Mayor and Council of the Borough of Paulsboro, September 27th, 1915, granting permission for the construction of said siding,

The Board of Public Utility Commissioners, after hearing and investigation, no reason to the contrary appearing,

HEREBY APPROVES of the construction of said siding at grade, as prayed for in said petition, subject to the conditions contained in said resolution, and subject further to the following conditions:

1. That a standard crossing sign be erected.
2. That the crossing be properly planked.
3. That all train movements over said siding be protected by a flagman.
4. That all train movements over said siding do not exceed a speed of six miles per hour.

Dated October 19th, 1915.

**In the Matter of the Application of the Interocean
Oil Company for Permission to Construct, Main-
tain and Operate a Siding Track at Grade Across
Woodbridge Avenue, in the Borough of Roose-
velt. } CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners by the Interocean Oil Company, by petition in writing, for permission to construct, maintain and operate a siding track at grade across Woodbridge Avenue, to connect the two portions of Interocean Oil Company's plants, in the Borough of Roosevelt, Middlesex County, New Jersey, more particularly set forth in said petition, which, by reference thereto herein, is made part hereof, said petition being accompanied by certified copy of ordinance passed by the Borough Council of Roosevelt September 7th, 1915, and certified copy of resolution passed by the Board of Chosen Freeholders of Middlesex County September 20th, 1915, granting permission for the construction of said siding at grade,

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The Board of Public Utility Commissioners, after hearing and investigation, no reason to the contrary appearing,

HEREBY GRANTS permission for the construction and operation of said siding at grade, as prayed for in said petition, subject to the conditions contained in said ordinance of the Borough of Roosevelt and resolution of the Board of Chosen Freeholders of Middlesex County.

Dated October 29th, 1915.

**In the Matter of the Application of the Borne,
Scrymser Company for Permission to Construct
a Siding at Grade Across Richmond Street and
South Front Street, in the City of Elizabeth. } CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners by the Borne, Scrymser Company, by petition in writing, for transfer to it of the permission granted July 27th, 1915, to the Galena Signal Oil Company of Pennsylvania, to construct a spur track or siding at grade across Richmond and South Front Streets, in the City of Elizabeth, Union County, New Jersey, and for further permission to construct said siding in accordance with the blue print submitted with the petition of said Borne, Scrymser Company, instead of in accordance with the blue print submitted with the petition of the Galena Signal Oil Company, and the petitioner having also submitted certified copy of an ordinance passed September 30th, 1915, by the Board of Public Works of Elizabeth, granting permission to said Borne, Scrymser Company for the construction of the siding,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY REVOKES the permission heretofore granted the Galena Signal Oil Company of Pennsylvania, under certificate dated July 27th, 1915, and HEREBY APPROVES of the construction of said siding at grade, in accordance with the application of the Borne, Scrymser Company, subject to the conditions contained in the ordinance referred to above, and subject to the following conditions:

1. That crossing be planked both inside and outside of rail.
2. That all train movements over said siding be protected by a flagman.
3. That train movements over said siding do not exceed a speed of six miles per hour.

Dated November 9th, 1915.

**In the Matter of the Application of the Pennsylvania
Railroad Company for Permission to Construct
a Temporary Crossing at Grade Near Plainsboro
Road, Plainsboro, New Jersey. } CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners by the Pennsylvania Railroad Company, by petition in writing, for permission to construct a temporary crossing at grade across the main tracks of its railroad, near Plainsboro Road, Plainsboro, New Jersey, to accommodate

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travel during the time the overhead bridge east of the station is being rebuilt, as shown upon blue print annexed to said petition, which blue print and petition are, by reference thereto herein, made part hereof, and said application being also accompanied by a certified copy of resolution of the Board of Chosen Freeholders of Middlesex County, dated November 4th, 1915, granting permission for the construction of said crossing,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY APPROVES of the construction of said temporary crossing at grade, as prayed for in said petition, for a period of six weeks from date, subject to the conditions contained in the resolution of the Board of Chosen Freeholders referred to above.

Dated November 9th, 1915.

In the Matter of the Application of the Delaware, Lackawanna and Western Railroad Company for Permission to Construct an Industrial Switch at Grade Across the Public Highway Leading From Landing to Mount Arlington, Morris County, New Jersey. } CERTIFICATE.

Application being made to the Board of Public Utility Commissioners by the Delaware, Lackawanna and Western Railroad Company, by petition in writing, for permission to construct an industrial switch at grade across the public highway leading from Landing to Mount Arlington, in the County of Morris, New Jersey, to reach the plant of the Atlas Powder Company, said application being accompanied by a blue print showing more particularly the location of said switch, which blue print and petition are, by reference thereto herein, made part hereof, and said application being also accompanied by a certified copy of resolution passed by the Township Committee of the Township of Roxbury, October 23d, 1915, and certified copy of resolution passed by the Board of Chosen Freeholders of Morris County October 13th, 1915, granting permission for the construction of said switch,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY APPROVES of the construction of said industrial switch at grade, subject to the following conditions:

1. That the road be left in as good condition as it now is.
2. That standard crossing sign be erected and that all train movements over said crossing be protected by a flagman.
3. That all train movements over said crossing do not exceed a speed of six miles per hour.
4. That the position of track in the highway, with respect to surface of highway, be subject to the approval of the Department of Public Roads for the State of New Jersey.

Dated November 23d, 1915.

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In the Matter of the Application of the Pennsylvania Railroad Company (Lessee of the United New Jersey Railroad and Canal Company) for Permission to Construct a Siding at Grade Across Fairview and New Jersey Avenues, Riverside Township, Burlington County, New Jersey. } **CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners by the Pennsylvania Railroad Company, lessee of the United New Jersey Railroad and Canal Company, by petition in writing, for permission to construct and lay at grade a spur track or siding, across Fairview and New Jersey Avenues, in the Township of Riverside, Burlington County, New Jersey, to reach the lands of William F. Taubel, Inc., as shown by blue print accompanying said petition, which petition and blue print are, by reference thereto herein, made part hereof, said application being also accompanied by a certified copy of resolution passed by the Township Committee of the Township of Riverside, October 13th, 1915, and certified copy of resolution passed by the Board of Chosen Freeholders of Burlington County, November 9th, 1915, granting permission for the construction of said siding,

The Board of Public Utility Commissioners, after hearing and investigation, no reason to the contrary appearing.

HEREBY APPROVES of the construction of said siding at grade, as prayed for in said petition, subject to the conditions contained in the resolutions referred to above, and subject further to the following conditions:

1. If increased freight facilities are afforded at Riverside, that the track laid across Fairview Avenue be taken up, and the switch connection for spur across New Jersey Avenue be made with delivery track at a point west of Fairview Avenue.
2. That when cars are drilled across New Jersey Avenue, a member of the freight crew protect the highway while such movements are being made.
3. That all train movements over the crossing do not exceed a speed of six miles per hour.
4. That cars should not be left standing on the delivery siding nearer than 50 feet from the westerly line of the Fairview Avenue crossing.
5. That spur track be used exclusively for placing cars in yard of William F. Taubel, Inc.

Dated November 23d, 1915.

In the Matter of the Application of the West Jersey and Seashore Railroad Company for Permission to Construct a Track at Grade Across Beach Street, in the Borough of Pennsgrove, Salem County, New Jersey. } **CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners by the West Jersey and Seashore Railroad Company, by petition in writing, for permission to construct at grade a track across Beach Street, in the Borough of Pennsgrove, Salem County, New Jersey, to be located as shown on a blue print annexed to said petition, which blue print and petition are, by reference thereto herein, made part hereof.

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The Board of Public Utility Commissioners, after hearing and investigation, no reason to the contrary appearing,

HEREBY GRANTS permission for the construction of said track at grade, as prayed for in said petition, subject to the following conditions:

1. That the speed of all train movements over said crossing be limited to ten miles per hour.
2. That standard grade crossing signs be installed at the crossing.

Dated November 23d, 1915.

**In the Matter of the Application of the West Jersey
and Seashore Railroad Company for Permission
to Construct a Siding at Grade Across and Along
Front Street, in the City of Salem, New Jersey.** } **CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners by the West Jersey and Seashore Railroad Company, by petition in writing, for permission to construct and lay at grade a spur track or siding across Front Street, and running along the west side of this street to reach the property of the Abbott's Alderney Dairies, as shown by blue print accompanying said petition, which petition and blue print are, by reference thereto herein, made part hereof, said application being also accompanied by a certified copy of an ordinance adopted by the Mayor and Council of the City of Salem April 19th, 1915, granting permission for the construction of said siding.

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY GRANTS permission for the construction of said siding at grade, subject to the conditions contained in said ordinance, and subject, further, to the following conditions:

1. That all train movements over said siding do not exceed a speed of six miles per hour.
2. That all train movements over said siding be preceded by a flagman.
3. That all cars placed on siding for loading shall be removed on first milk train following the placing of the cars; and no car or cars are to remain on the siding track from time of departure of the milk train until cars are again placed for loading.

Dated November 30th, 1915.

**In the Matter of the Application of the West Jersey
and Seashore Railroad Company for Permission
to Construct a Track at Grade Across Line Street,
Hammonton.** } **CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners by the West Jersey and Seashore Railroad Company, by petition in writing, for permission to lay and construct a siding track at grade across Line Street, in the Town of Hammonton, to provide additional track facilities necessary for the movement of local trains between Camden and Ham-

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monton, said application being accompanied by a blue print showing more particularly the location of said track, which blue print and petition are, by reference thereto herein, made part hereof, and said application being also accompanied by certified copy of ordinance passed by the Town Council of the Town of Hammonton October 27th, 1915, granting permission for the construction of said track,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY GRANTS permission for the construction of said siding track at grade, subject to the conditions contained in said ordinance, and also subject to the following conditions:

1. That the speed of trains on siding over the highway be limited to six miles an hour.
2. That the crossing be protected by a trainman during the time such movements are made.

Dated December 7th, 1915.

In the Matter of the Application of the Pennsylvania Railroad Company for Permission to Construct a Track at Grade Across the Township Road at Allaire, New Jersey.	}	CERTIFICATE.
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Application being made to the Board of Public Utility Commissioners by the Pennsylvania Railroad Company, by petition in writing, for permission to lay and construct a siding track at grade across the Township Road at Allaire, New Jersey, to be used in connection with the freight station at this point, said application being accompanied by a blue print showing more particularly the location of said track, which blue print and petition are, by reference thereto herein, made part hereof, and said application being also accompanied by certified copy of resolution passed by the Township Committee of the Township of Wall October 12th, 1915, granting permission for the construction of said track.

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY GRANTS permission for the construction of said siding track at grade, subject to the following conditions:

1. That all movements to and from the freight house across the public highway be preceded by a flagman.
2. That the speed of all trains over said siding be limited to six miles an hour.
3. That standard grade crossing signs be installed at the crossing.

Dated December 7th, 1915.

In the Matter of the Application of the Central Railroad Company of New Jersey for Permission to Lay an Additional Track at Grade Across West First Street, in the City of Bayonne. } CERTIFICATE.

Application being made to the Board of Public Utility Commissioners by the Central Railroad Company of New Jersey, by petition in writing, for permission to lay and construct an additional track at grade across West First Street, in the City of Bayonne, New Jersey, to provide additional freight facilities for The Texas Company, said application being accompanied by a blue print showing more particularly the location of said additional track, which blue print and petition are, by reference thereto herein, made part hereof, and said application being also accompanied by certified copy of ordinance adopted by the Board of Commissioners of the City of Bayonne October 9th, 1915, granting permission for the construction of said additional track,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY GRANTS permission for the construction of said additional track at grade, subject to the conditions contained in said ordinance, and subject, also, to the following conditions:

1. That no train movement be made over West First Street until the engineer of the approaching train observes that the flagman is on the crossing before the train passes over the highway.
2. If cars are backed into plant, the trainman on head car should observe that the crossing is protected by flagman before the movement is made across the highway.

Dated December 7th, 1915.

In the Matter of the Application of the Pennsylvania Railroad Company (Lessee of the Works and Property of the United New Jersey Railroad and Canal Company) for Permission to Construct a Spur Track or Siding Across Breunig Avenue, in the City of Trenton. } CERTIFICATE.

Application being made to the Board of Public Utility Commissioners by the Pennsylvania Railroad Company (lessee of the works and property of the United New Jersey Railroad and Canal Company), by petition in writing, for permission to lay and construct at grade a spur track or siding across Breunig Avenue, in the City of Trenton, Mercer County, New Jersey, to reach the lands of the Ajax-Grieb Rubber Company, as shown by blue print accompanying said petition, which petition and blue print are, by reference thereto herein, made part hereof, said application being also accompanied by certified copy of Resolution adopted by the Board of Commissioners of the City of Trenton, October 6th, 1915, granting permission for the construction of said siding,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

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HEREBY GRANTS permission for the construction of said siding at grade, subject to the following condition:

That all train movements across Breunig Avenue be protected by flagman.
Dated December 28th 1915.

**In the Matter of the Application of the Lehigh Valley
Railroad Company for Permission to Construct
an Additional Siding at Grade Across the Public
Road Known as Eary's Road, Near South Plain-
field, New Jersey.** } **CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners by the Lehigh Valley Railroad Company, by petition in writing, for permission to construct an additional siding at grade across the public road known as Eary's Road, near South Plainfield, New Jersey, to reach the tracks of a proposed new classification yard at South Plainfield, said application being accompanied by a blue print showing more particularly the location of said siding, which blue print and petition are, by reference thereto herein, made part hereof, and said application being also accompanied by certified copy of Resolution passed by the Township Committee of the Township of Piscataway, December 11th, 1915, granting permission for the construction of said additional siding,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY GRANTS permission for the construction of said siding at grade, subject to the following conditions:

1. That all train movements over the crossing be protected by a flagman.
2. That all train movements over said crossing do not exceed a speed of six miles per hour.
3. That standard crossing signs be installed north of the proposed track and south of the present siding track.
4. That the speed limit of six miles per hour and flagging of movements apply also to movements over the two existing tracks.

Dated December 21st, 1915.

**In the Matter of the Application of the Central Rail-
road Company of New Jersey for Permission to
Construct Side Track at Grade Across South
Front Street, in the City of Elizabeth, New Jersey.** } **CERTIFICATE.**

Application being made to the Board of Public Utility Commissioners by the Central Railroad Company of New Jersey, by petition in writing, for permission to construct a side track at grade across South Front Street, in the City of Elizabeth, to reach the shipyard plant of the New Jersey Dry Dock and Transportation Company, said application being accompanied by a blue print showing more particularly the location of said side track, which blue print and petition are, by reference thereto herein, made part hereof, and said application being also accompanied by certified copy of an ordinance

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of the City of Elizabeth, passed by the Board of Public Works November 11th, 1915, and approved by the Mayor November 12th, 1915, granting permission for the construction of said side track,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY GRANTS permission for the construction of said side track, at grade, subject to the conditions contained in said ordinance, and also subject to the following condition:

That all train movements across South Front Street be protected by a flagman.

Dated December 21st, 1915.

In the Matter of the Application of the United New Jersey Railroad and Canal Company, Owner, and the Pennsylvania Railroad Company, Lessee, for Permission to Construct a Temporary Track at Grade Across Peddie Street Ditch and Peddie Street, in the City of Newark. } CERTIFICATE.

Application being made to the Board of Public Utility Commissioners by the United New Jersey Railroad and Canal Company, owner, and the Pennsylvania Railroad Company, lessee, by petition in writing, for permission to construct a temporary track at grade across Peddie Street Ditch and Peddie Street, in the City of Newark, New Jersey, in order to provide better facilities for handling the increased freight business and to further relieve the freight congestion and delay incident thereto, as shown upon blue print annexed to said petition, which blue print and petition are, by reference thereto herein, made part hereof, and said application being also accompanied by a certified copy of resolution adopted by the Board of Street and Water Commissioners of Newark December 20th, 1915, granting permission for the construction of said track,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY APPROVES of the construction of said temporary track at grade as prayed for in said petition for a period of six months from date, subject to the condition contained in the above resolution of the Board of Street and Water Commissioners of Newark.

Dated December 21st, 1915.

In the Matter of the Application of the Pennsylvania Railroad Company (Lessee of the Works and Property of the United New Jersey Railroad and Canal Company) for Permission to Construct a Spur Track or Siding at Grade Across Fifth Street and Along New Jersey Avenue, in the Town of Harrison, New Jersey. } CERTIFICATE.

Application being made to the Board of Public Utility Commissioners by the Pennsylvania Railroad Company (lessee of the works and property of

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the United New Jersey Railroad and Canal Company), by petition in writing, for permission to construct and lay at grade a spur track or siding across Fifth Street, and along New Jersey Avenue, to reach the lands of the Hyatt Roller Bearing Company in the Town of Harrison, Hudson County, New Jersey, said application being accompanied by a blue print showing more particularly the location of said siding, which blue print and petition are, by reference thereto herein, made part hereof, and said application being also accompanied by a certified copy of resolution adopted by the Common Council of the Town of Harrison November 9th, 1915, granting permission for the construction of said siding,

The Board of Public Utility Commissioners, after investigation and hearing, no reason to the contrary appearing,

HEREBY GRANTS permission for the construction of said siding, subject to the condition contained in the above resolution, and subject, also, to the following conditions:

1. That all train movements over the crossing be protected by a flagman.
2. That all train movements over said crossing do not exceed a speed of six miles per hour.

Dated December 21st, 1915.

Inspection of Railroads.

The following are from reports of inspectors on inspections of railroads:

ATLANTIC CITY RAILROAD.

Main Line.

This line extends from Kaighn's Point to Atlantic City, a distance of 55.5 miles. It is double track, used for passenger and freight, and laid with 100 and 90 pound rail. Nine hundred tons of 100 pound rail have been placed in track since last inspection. 83% of 1915 ties have been placed in track, and the remainder will be taken care of by the time the summer schedule goes into effect.

Line and surface of track are good. Hall automatic signals are in use. Drawbridge is protected by interlocking signals and derail.

This road is maintained in excellent condition for the heavy, high-speed traffic.

Bridges.

The bridges in general are in good condition, but the repair work noted under each bridge should be done during the year to maintain them in good condition.

Bridge No. 1½, an overhead highway bridge carrying Broadway, Camden, should have new planking on east sidewalk.

Bridge No. 2, a wooden trestle, is being replaced with a reinforced concrete culvert.

Bridge No. 3, a deck plate girder span, has had a new deck placed on it during the past year. Steel work should be painted and missing anchor bolts replaced.

Bridge No. 3½, a half through plate girder solid floor bridge, is in good condition. Guard rail splices should be properly bolted.

Bridge No. 4, a solid floor plate girder bridge, is in good condition, but guard rail splices should be properly bolted.

Bridge No. 5, a wooden overhead highway bridge, three spans of which are owned by the Public Service Railway Company. The railroad has constructed the sidewalk of the bridge across its tracks, but the sidewalk has not been continued by the Public Service Railway across its part of the bridge. As this bridge is located near a schoolhouse, the Public Service should build a sidewalk on its part of the bridge, thus affording safe pedestrian travel over it.

Bridge No. 6, a wooden overhead highway bridge. Wooden posts in both bulkheads should be renewed and sill on south side renewed or properly pieced out.

Bridge No. 7, a stone arch culvert, is in good condition.

INSPECTION OF RAILROADS.

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Bridge No. 7½, an overhead highway bridge. Wooden stringers are in fair condition; remaining portion of bridge is good. Steel work was painted last year.

Bridge over C. R. R. of N. J., at Winslow, a half through plate girder solid floor bridge, is in good condition. Steel work was painted last year.

Bridge over W. J. & S. R. R., a half through plate girder solid floor bridge, is in good condition. Steel work was painted last year.

Steel work of the overhead highway bridge carrying Flattertown Road, is in good condition. The northeast bridge seat is cracking and should be properly repaired; also the facing of abutments, which is peeling, should be cleaned and replastered.

Bridge No. 7¾, an overhead trolley bridge, is in good condition.

Bridge No. 9, a pile trestle, is in fair condition. Considerable work was done on this trestle last year.

Bridge No. 10 is a wooden trestle which was thoroughly overhauled last year. It is now in good condition.

Bridge No. 11, a half through plate girder open floor bridge on concrete abutments, was rebuilt last year. The steel work should be painted.

Bridge No. 12, a concrete culvert, is in good condition.

Bridge No. 13, a pile trestle bridge with steel stringers. This bridge was overhauled last year and is now in good condition.

Bridge No. 14, a pile trestle bridge with steel stringers, was overhauled last year. It is now in good condition.

Bridge No. 15, a pile trestle. It was completely renewed last year, but owing to a fire was badly charred. The bridge is in fair condition and is safe for the traffic.

Bridge No. 16, a plate girder drawbridge with pile trestle approaches, over Beach Thoroughfare. The machinery of the drawbridge has been thoroughly overhauled. The drawspan is in good condition. Four new stringers are needed in the approach spans to keep them in safe condition.

On the Mississippi Avenue and Baltic Avenue Branches, in Atlantic City, there are no bridges.

It is RECOMMENDED that the work outlined above be done during the current year.

Gloucester Branch.

This branch extends from Gloucester Junction to Grenloch, a distance of eleven miles. It is single track, used for passenger and freight, and is laid with 90 pound, 80 pound, and 76 pound rail. Ties are in fair to good condition. New ties have been distributed along the line, and when these are placed in track the road will be in good condition. Tie plates are placed on part of curves on this branch, and a number of them have been distributed and will be placed in track this year.

Line and surface of track are good. Trains are operated according to train orders and 5-minute signals at stations, and speed is limited to 35 miles per hour. Derails were noted on all sidings, and the branch generally is in good condition.

Fifteen tons of 90 pound rail were laid since last inspection.

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Bridges.

The repair work outlined under each bridge should be done during the year to maintain them in good condition to safely carry traffic.

Bridge No. 1, a wooden trestle, is in fair condition. Twenty ties should be renewed.

Bridge No. 2, an overhead railroad bridge, is in good condition.

Bridge No. 3, a concrete culvert, is in good condition. A tree, which has fallen at the north end of the culvert, should be removed, as it impedes the flow of water.

Bridge No. 4, an overhead wooden farm bridge, is in good condition.

Bridge No. 5, a wooden trestle over road, is in good condition.

Bridge No. 6, a high timber trestle, is in fair condition. The following renewals should be made: six new batter posts, two plumb posts, and one sill. Last year it was expected that this bridge would be replaced with a concrete culvert in 1915, but this renewal has been deferred for one year.

Bridge No. 7, a timber trestle, is in fair condition. One new batter post and twenty ties should be renewed.

Bridge No. 8, a timber trestle, is in fair condition. It is expected that this bridge will be replaced with a permanent structure this year. Therefore, the only repair necessary to be made is the temporary renewal of one pile under sill.

Bridge No. 9, a stone arch, is in fair condition, but needs pointing at the west end.

It is RECOMMENDED that the work as outlined above be done during the current year.

Williamstown Branch.

This branch extends from Atco to Mullica Hill, a distance of 22.3 miles. It is single track, laid with 90, 80 and 70 pound rail, and is ballasted with cinders and gravel. Ditches are clean; shoulders wide. Between Atco and Williamstown Junction the line is used only for freight; the remaining portion is used for both passenger and freight. Five-minute flag signals at stations are in use, and maximum speed is 35 miles per hour.

Ties are in fair to good condition; there are about 2,000 on the ground, and when these are placed the track will be in good condition. From 150 to 200 tons of 90 pound rail are to be laid on the branch this year.

Sidings were noted as having derails. The track is being maintained in safe condition.

Bridges.

Bridges are in fair condition. The repair work outlined under each bridge should be done during the year to maintain them in good condition to safely carry traffic.

Bridge No. 1, a wooden trestle. Necessary repairs were made last year, but fifteen new ties are now needed to keep this bridge in good condition.

Bridge No. 2, a wooden trestle, was placed in good repair last year. One cap and ten ties should now be renewed, and guard rails properly spiked.

Bridge No. 3, a wooden trestle, is in fair condition. One stringer, one batter post and one piece of blocking should be renewed.

It is RECOMMENDED that the work outlined above be done during the current year.

Cape May Branch.

This branch extends from Winslow Junction to Cape May, a distance of 54.2 miles. It is double track to Woodbine Junction, single track from there to Cape May, and is used for passenger and freight. Track is laid with 90 pound rail, ballasted with cinders. Ties are in good condition; tie plates, on creosoted ties, are in place on all curves. Line and surface of track are good; wide shoulders; ditches clean.

Hall automatic signals are in operation on double track, and telegraph block on single track. Speed is limited to sixty-five miles per hour. Derails were noted on all sidings. The track has been well maintained and is in first-class condition.

Bridges.

The repair work outlined under each bridge should be done during the year to maintain them in good condition to safely carry traffic.

Bridge over W. J. & S. R. R., a half through, plate girder, solid floor bridge, is in good condition.

Bridge over Main Line, A. C. R. R., is a half through plate girder, open floor bridge. Seventy new ties are needed to place this bridge in good condition.

Bridge over highway, a half through plate girder open floor bridge. Twenty-five new ties are needed to place this bridge in good condition.

The overhead highway bridge at Winslow Junction is a Warren, pony truss bridge, in good condition except for the masonry under two bearings which is cracking. The bearings should be repaired and masonry replastered.

Bridge No. 1, a pile and timber trestle. The southbound track is in good condition, but the westbound track is only in fair condition.

Bridge No. 2, a pile trestle over Hospitality Creek, is in fair condition. Two of the caps should be renewed to place this bridge in good condition.

Bridge No. 3 has been filled in.

Bridge No. 4, an overhead through plate girder bridge of the W. J. & S. R. R., is in good condition.

Bridge No. 6, a deck plate girder drawspan and trestle approach. The drawspan is in good condition, but the renewal of one cap and one stringer is necessary in order to put the approach in fair condition. A new deck was placed on the bridge and the ironwork was painted last year.

Bridge No. 7, a deck plate girder bridge over the W. J. & S. R. R. In general, the bridge is in fair condition. Thirty-five ties should be renewed and backwall at south end of bridge should be cut out to allow proper clearance between face of backwall and the end of girders. One anchor bolt should be replaced on north end. The recommendations made in 1914 have been complied with.

Bridge No. 8, a pile trestle, is in good condition.

Bridge No. 9, a pile trestle, is in good condition.

Bridge No. 10, a plate girder bridge over the W. J. & S. R. R. The north abutment was repaired last year, and the bridge is now in good condition.

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Bridge No. 11, a pile trestle, is in fair condition. Guard rails should be properly spiked to ties.

It is RECOMMENDED that the work as outlined above be done during the current year.

Sea Isle City Branch.

This branch extends from Tuckahoe to Sea Isle City, a distance of 12.1 miles. It is single track, used for passenger and freight, and is laid with 90 pound, 80 pound, 79 pound and 70 pound rail. The 90 pound rail is that included between Tuckahoe and Ocean City Junction. 109 tons of 79 pound rail have been laid since last inspection.

Ties are good, tie plates on new creosoted ties are in place on some of the curves. The track is ballasted with cinders. Line and surface of track are in fair to good condition. Maximum speed limit on this branch is 30 miles per hour for passenger trains, and 20 miles per hour for freight trains. Derails were noted on all sidings, and the branch generally is maintained in safe condition for the traffic.

Bridges.

The repair work outlined under each bridge should be done during the year to maintain them in good condition to safely carry traffic.

Bridge No. 1, a pile trestle, is in poor condition. The stringers are soft; these should be replaced with two 12" x 16" timbers under each rail.

Bridge No. 2, a pile trestle, is in fair condition. Repairs were made last year to this structure, but two piles and twelve ties should now be renewed.

Bridge No. 3, a pile trestle, is in good condition, except that twenty ties should be renewed.

Bridge No. 4, a half through plate girder drawspan at Ben Hands. This drawbridge was rebuilt last year, and is in good condition. The pile trestle approach is in fair condition. Two piles and twelve ties should be renewed.

Bridge No. 5, a wooden A-frame drawbridge with pile trestle approach, over Corson's Inlet. The approach is in fair to poor condition. The following renewals were made last year: Seven caps, 40 stringers and 135 ties, which were sufficient at that time. The renewals required this year to keep this bridge in fair condition are: 100 ties, 18 stringers, 37 caps and 12 wood guards.

It is RECOMMENDED the work as outlined above be done during the current year.

Ocean City Branch.

The branch extends from Ocean City Junction to Ocean City, a distance of 10.3 miles. It is single track, used for passenger and freight, and is laid with 90 pound, 80 pound and 70 pound rail. The 90 pound rail is that included between Ocean City Junction and Fourteenth Street, Ocean City, a distance of 8.6 miles. Two hundred and twenty-one tons of 90 pound rail have been laid since last inspection.

Ties are good; tie plates, on new creosoted ties, are in place on all curves. The track is ballasted with cinders and gravel. Telegraph block signals are in use, and maximum speed is 30 miles per hour. Derails were

noted on all sidings, and the branch generally is maintained in good condition.

Bridges.

Bridge No. 1, a plate girder span on pile bents, is in good condition. Bridge No. 2, a pile trestle, is in good condition.

Bridge No. 3, a through truss drawspan, is in good condition, except for the entire lower chords of trusses, which should be painted.

Bridge No. 4, a pile trestle bridge, which was repaired last year, is now in good condition. Seaweed and driftwood should be cleaned from under the bridge so as to prevent fire from catching in the structure.

Bridge No. 5, a wooden trestle, is in fair condition.

It is RECOMMENDED that the work outlined above be done during the current year.

BALTIMORE AND NEW YORK RAILROAD.

This road extends in New Jersey from Cranford to the Arthur Kill bridge, a distance of 5.2 miles. There are 1.85 miles of double track, balance single. The track is laid with 85 pound rail, ballasted with stone and cinders. There are no signals on this road, the trains being operated by means of train orders. Train movements are protected at Arthur Kill drawbridge by means of signals with smash board arrangement which are controlled by the interlocking arrangement of the drawbridge.

During the year twenty-six tons of new 85 pound rail have been laid and 2,500 ties have been put in the track.

Everything is being done in the way of maintenance to keep the track in safe condition for the traffic. This line is used for freight purposes only.

Bridges.

The recommendation made in last year's annual report to point masonry piers of Arthur Kill bridge has been complied with.

A new concrete culvert has been constructed at the Standard Oil Company's plant to provide for the feed pipes passing under the track. This structure is constructed of I-beams encased in concrete and supported on concrete abutments.

In the timber trestle east of the steel bridge spanning the C. R. R. Co. of N. J., a steel deck plate girder span, 77'-0" over all, and supported on pile towers, has been erected for the purpose of opening up a street known as Amboy Avenue. It is expected that the pile towers will be replaced with concrete abutments in the near future.

About 660 feet of the large timber trestle through Elizabeth has been filled in since last inspection. As soon as some agreement can be reached between the railroad company and the City of Elizabeth in regard to street openings, the remaining portion of the trestles will be filled in.

All the metal bridges on the line are being kept clean, and the superstructures and substructures are in good condition, except for some defective ties on the following bridges:

Bridge No. 22, over Elizabeth Avenue, Linden. There are a number of defective ties on this bridge which should be renewed, and authorization has been given for these renewals by the railroad company.

Bridge No. 19, over Linden Avenue. There are a few defective ties on this bridge which should be renewed.

Bridge No. 13, over C. R. R. of N. J. A few defective ties on this bridge should also be renewed.

Arthur Kill drawbridge and approach span. There are a great many defective ties on this structure which should be renewed. It is understood that these ties have been ordered, and, as soon as the ties are delivered, the railroad company will start renewals.

The timber trestles are maintained in safe condition for the restricted traffic over them.

Recommendations.

That tie renewals be made on Bridges Nos. 13, 19, 22, and Arthur Kill bridge.

BARNEGAT CITY RAILROAD.

This road extends from Barnegat City Junction to Barnegat City, a distance of 8.7 miles. It is single track, used for passenger and freight, and is laid with 60 pound rail. Seventeen hundred ties have already been placed in track, and in addition to this 1,200 are now being placed. The track is ballasted with gravel and cinders. Speed is limited to 25 miles per hour.

This road is being maintained in a reasonably safe condition for the light traffic.

Bridges.

The recommendations resulting from last year's inspection have been complied with.

Bridge No. 8. Two stringers and one cap were found to be in bad condition, and should be renewed.

Bridge No. 9. The recommendation made last year to renew bad piling has been complied with by filling this bridge in.

Bridge No. 14. Four stringers were found to be in bad condition, and should be renewed.

The remaining bridges are pile trestles, in poor to fair condition; some of them will need attention next year. They are safe for the present, as traffic is light over this branch. A few of these bridges could easily be eliminated by filling in.

It is RECOMMENDED that the work outlined above be carried out during the current year.

CENTRAL RAILROAD OF NEW JERSEY.

Main Line.

This road extends from Jersey City to Phillipsburg, a distance of 72.2 miles.

There are four tracks from Jersey City to Bound Brook, and two from Bound Brook Junction to Phillipsburg, all laid with 100 pound rail. Ninety pound rail is used on all sidings. The track is ballasted with stone. Shoulder and drainage is good.

From Jersey City to Bound Brook automatic electro-pneumatic signals are used. The one drawbridge on the line, over Newark Bay, is protected by home and distant semaphore signals and derails, all interlocked with draw.

The steam grade crossing with the Newark and Elizabeth Branch, at Elizabethport, is protected by interlocking signals, and the crossing with the Philadelphia and Reading at Bound Brook Junction is protected in like manner.

The line has been maintained in good, safe condition.

Bridges.

The recommendations made in annual bridge inspection reports of 1914 have all been carried out.

Bridge No. 2/35. Some slight pointing should be done to masonry under the steel truss span. In the wooden trestle spans some defective piles were noted. These piles should be either renewed or cut off and properly blocked.

Bridge No. 4/09, over Morris Canal. This structure was reinforced last year. The bearings of stringers on the masonry are poor, and proper shim plates should be installed so as to give a full bearing for the stringers. The masonry should be slightly pointed. It is expected that this structure will be rebuilt in 1916.

Bridge No. 7/08, overhead highway bridge. Repair stone masonry under north bearing of east approach girder, and point masonry of south abutment.

Bridge No. 11/76, Cherry Street, Elizabeth. This is an overhead wooden bridge which is on the Lincoln Highway. As this bridge is subject to heavy traffic, an examination will be made and a report of its condition filed.

Bridge No. 11/92, Chilton Street, Elizabeth. This bridge is in fair condition, but masonry needs slight pointing.

Bridge No. 18/64. The masonry should be pointed on both abutments, and where stones are loose under bearings on west abutment they should be properly grouted.

Bridge No. 19/42. Some slight pointing should be done to masonry abutments.

Bridge No. 19/44 is a small stone arch lined with brick. The bricks are working loose and should be properly pointed.

Bridge No. 20/56, overhead highway bridge, east of Fanwood Station. The masonry bearings under the iron columns in the west bent should be properly repaired.

Bridges Nos. 23/40, 23/51 and 23/68. The foot of sidewalk columns which are badly pitted and rusted should be scraped and painted.

Bridge 28/77. This is a six span arch culvert consisting of stone and concrete. Where the concrete is joined to the stone masonry cracks have appeared. These cracks should be pointed, and care should be taken when the work is done so as to procure satisfactory results.

Bridge 29/93. The bearing stone under inside girder of north track at the west abutment is cracked and should be renewed.

Bridge 31/15. The east abutment at the south end where stones are cracking should be pointed.

Bridge 34/48, overhead highway bridge. The stone masonry abutments need to be pointed.

Bridge 35/18 is a half through plate girder bridge over Somerset Street, Somerville. The center and north columns of west bent are pounding due to poor bearings. Proper shim plates should be placed under the columns, and the stone pedestal under the center column should be grouted in a satisfactory manner.

Bridges 38/26 and 38/41. These bridges were renewed this year with I-beam spans.

Bridge 38/67. Stone masonry abutments need pointing.

Bridge 39/09. Riprap should be placed at north face of piers.

Bridge 41/59 is a stone arch. The masonry needs pointing.

Bridge 45/03 is a stone arch. The masonry needs pointing at ends of the barrel of the arch.

Bridge 45/41, overhead highway bridge. Steel floor beams should be painted.

Bridge 47/92, a stone arch. The masonry needs pointing.

Bridge 49/36, overhead highway bridge. This bridge has been recently repaired and is now in good condition.

Bridge 50/63. This bridge is to be renewed this year. The material is now at the bridge site.

Bridge 52/89, overhead highway bridge. The recommendation to repair poor post in south bent, as outlined in annual report of 1914, has been complied with.

Bridge 53/38, overhead highway bridge. The iron work should be painted.

Bridge 53/89, a stone arch bridge. Men were at work pointing arch.

Bridge 55/72, a stone arch bridge. Men were at work pointing arch.

Bridge 59/67, overhead highway bridge. This bridge is to be reinforced by placing cover plates on the bottom flanges of the main girders. The steel-work is dirty and should be painted.

Bridge 60/03, a stone arch bridge. The southeast wing wall, which is in bad condition, should be properly repaired.

Bridge 63/67. This is a reinforced concrete arch which was built in 1914, replacing the old steel structure.

Bridge 66/51, an overhead highway bridge. The masonry abutments of this bridge are in very poor condition; also, the iron work is dirty and rusted. The south abutment should be rebuilt, the north abutment should be grouted and pointed, and steel work should be scraped and painted.

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Bridge 66/90. The recommendation made last year to renew defective timber has been complied with.

Bridge 67/97. The recommendation made last year to renew poor stringers has been complied with.

Bridge 70/09. The recommendation made last year to repair masonry has been complied with.

The remaining bridges are in fair to good condition, the steel work being kept clean and painted.

It is RECOMMENDED that the work outlined above be done during the current year.

Newark & New York Branch.

This branch extends from Communipaw to Newark, a distance of 7.5 miles. It is double track, laid with 100 pound rail, and ballasted with stone. The track generally is in good condition.

Automatic electro-pneumatic home and distant semaphore signals are in use.

There are two drawbridges on this branch, both of which are protected by automatic signals and derails.

Bridges.

The recommendations made last year have all been carried out, and the bridges are in fair to good condition. Attention is directed to some points which require attention in the course of ordinary maintenance, particularly in the case of the Hudson County Boulevard bridge.

No. 169, Garfield Street, Jersey City. Three loose rivets were found in end lateral connection and some pointing should be done on the west abutment.

Arlington Avenue overhead bridge. Iron is rusty at top of concrete floor and on underside over center of tracks where exhaust from locomotives strikes. These parts should be scraped and painted. The upper chord of west truss is slightly out of line at third panel point from the north end.

Hudson County Boulevard overhead bridge. Top chord angles of sidewalk brackets and gusset plate connections to girder are rusting badly. At the south end of bridge the girders are covered with dirt for about ten feet along the bottom flange, and the iron is badly rusted in consequence. The ironwork should be cleaned and painted, and repaired, if found necessary, after it has been cleaned.

No. 184, Frederick Street, Newark; No. 191, Monroe Street, Newark; and No. 192, Madison Street, Newark, should receive some light pointing.

No. 200, over P. R. R., Newark. The north wing wall of east abutment is cracked from top to bottom, and expansion ends are up tight against anchor bolts, which have bent about $1\frac{1}{4}$ ".

The remaining bridges are in good condition.

It is RECOMMENDED that the work outlined above be done during the current year.

Newark and Elizabethport Branch.

This branch extends from Elizabethport to Brills Junction, a distance of 5.5 miles. It is double track, used for passenger and freight, and laid with 100 pound rail. The track is ballasted with cinders and stone, in good condition. Electric and electro-pneumatic signals are in use.

There are two steam grade crossings, one at Oak Island Junction, where the tracks of the L. V. R. R. and the P. R. R. cross the above branch, and the other at Elizabethport, where the tracks of the Main Line of the C. R. R. of N. J. are crossed. Both are protected with home and distant semaphore signals and derails.

Attention is called to the fact that there is a broken crossing frog at Oak Island Junction, on the P. R. R. crossing track. A new cross-over frog is on the ground for rectifying this condition, and this should be placed in track as soon as practicable.

Bridges.

The four small pile trestles on this branch are maintained in fair to good condition. Three poor timber guards were noted on No. 208, and on No. 205 lateral rods were noted slack and track slightly low at ends of bridge.

Recommendations.

- No. 205. Tamp up track at ends of bridge and tighten lateral rods.
- No. 208. Renew defective guards.

Elizabethport and Perth Amboy Branch.

This branch extends from Elizabethport to Perth Amboy, a distance of 11.6 miles. It is double track, used for passenger and freight, and laid with 100 pound rail. Ties are good. Ballast is stone.

This line is maintained in first-class condition.

Bridges.

The recommendation made in annual bridge inspection report of 1914 to point masonry on Bridges No. 214 and 217 has been complied with.

Bridge No. 210. One cap, which is broken, being located in bent next to the south end of the trestle, should be renewed at once, and the defective ties replaced with sound timber.

Bridge No. 213. The steel work should be painted.

Bridge No. 214. One cap in bent No. 6 should be renewed and proper shimming should be provided under stringers.

Bridge No. 215. The south abutment needs pointing.

It is RECOMMENDED that the work outlined above be done during the current year, except for broken cap in Bridge No. 210, which should be renewed at once.

Sound Shore Branch.

This branch extends from Elizabethport to Chrome, a distance of 7.0 miles. It is single track, used for passenger and freight, and laid with 90, 85 and 80 pound rail. The track is ballasted with cinders and gravel.

This branch has been maintained in good, safe condition.

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Bridges.

The bridges on this branch are in fair condition, except that the ends should be surfaced at Bridges No. 4 and No. 8, and steel I-beams painted on Bridges No. 1 and No. 2. It is therefore RECOMMENDED that this work be done during the current year.

Flemington Branch.

This branch extends from Somerville to Flemington, a distance of 15.5 miles. It is single track, used for passenger and freight, and is laid with 90, 80 and 76 pound rail. Ballast is cinders and gravel. Ties are in fair to good condition. Trains are run by telegraph orders and flag signals at stations.

This branch has been well maintained and is in good, safe condition.

Bridges.

Bridge No. 0.83. The abutments and pier of this bridge are in poor condition, and should be grouted and pointed. The relief bents at both ends of the bridge, which help to relieve the masonry under the stringer bearings, are in good condition.

Bridge No. 6/07. Some slight pointing should be done to the pier and west abutments.

Bridge No. 7/67. This bridge is in good condition, but the ironwork should be painted.

Bridge No. 7/77. Steel work on this bridge should also be painted.

Bridge No. 11/58. One piece of wooden guard should be renewed.

Bridge No. 13/76. The west end of the pier is getting in bad shape, and should be properly repaired.

Bridge No. 14/53. This is an overhead highway bridge which belongs to the county. The bridge is in poor condition, and a detailed inspection will be made of this structure and report rendered.

The remaining bridges are in fair to good condition.

It is RECOMMENDED that the work as outlined above be carried out during the current year.

High Bridge Branch.

This branch extends from High Bridge to Hibernia, a distance of 34.4 miles. It is single track, used for passenger and freight, and laid with 90, 80 and 76 pound rail. Track is ballasted with cinders and gravel.

The small drawbridge at Dover, over the Morris Canal, is protected by interlocking signals and smash boards.

The track has been well maintained, and is in good, safe condition for the traffic.

Bridges.

Bridge No. 286. This bridge has been placed out of service.

Relief bents under steel spans are still maintained in good condition at Bridges Nos. 283 and 264.

Bridge No. 278, overhead highway bridge. This bridge was rebuilt in 1914 and 1915 with a reinforced concrete structure.

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Bridge No. 276 is a lift bridge over the Morris Canal at Dover. The timber in counterweight frame is poor in several places, and should be renewed; the iron work should also be painted.

Bridge No. 274. This bridge has been placed out of service.

Bridge No. 273, over D., L. & W. R. R. The bottom flange of east girder is bearing on the masonry at north end. A proper bearing plate should be placed under the north end of the east girder providing the necessary clearance between bottom flange and the bridge seat.

Bridge No. 271, a stone arch. Some slight pointing is needed to put this arch in good condition.

Bridge No. 265. The masonry abutments should be pointed and grouted where found necessary.

Bridge No. 263. The masonry abutments should be repaired and defective timber in decking renewed.

Bridge No. 253. Surface and realign track.

Bridge No. 247. The masonry abutments should be repaired and defective ties on siding track renewed.

Bridge No. 246. There are a few defective ties on this bridge which should be renewed. Where ties are soft on top they should be renewed instead of having the soft material adzed out. These ties are subjected to cross bending and their section should not be reduced.

The remaining bridges on this branch are in fair to good condition, the steel work being kept clean and painted.

It is RECOMMENDED that the work outlined above be done during the current year.

Ogden Mine Branch.

This branch extends from Hopatcong Junction to Edison, a distance of 15.3 miles. It is a single track, used for passenger and freight, and laid with 80 pound rail to Hurd, and 62½ pound west of Hurd.

This branch is in good condition, having been well maintained.

Bridges.

Bridge No. 298. The stone masonry of east abutment should be pointed.

The remaining bridges are in fair to good condition, being kept cleaned and painted.

Recommendation.

Point masonry of east abutment of Bridge No. 298.

Lafayette Branch.

This branch extends from Pacific Avenue to Johnston Avenue, a distance of 1.0 mile. It is single track, used only for freight, and laid with 90, 80 and 70 pound rail. Ballast is cinders.

This branch has been maintained in good condition.

Bridges.

There is but one bridge on this branch, which is in good condition.

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Manufacturers' Branch.

This branch extends from East Brills to Passaic River, a distance of 2.91 miles. It is single track, used for freight only, and laid with 90, 80 and 70 pound rail. Yard movements are in operation.

This branch has been well maintained, and is in good, safe condition.

Bridges.

There are twelve bridges on this branch and the spur connections from it. All of them are maintained in good condition except No. 5, and handrail on No. 2, one top length of which is loose. On No. 5, over the Morris Canal, U-bolt nuts are slack on fifth and sixth panel points from south end. Recommendations of last year were carried out.

Recommendations.

Repair handrail on No. 2, and tighten U-bolt nuts on No. 5.

West Side Connection Branch.

This branch extends from West End Avenue to Danforth Avenue, a distance of 0.94 miles. The track is laid with 90, 80 and 70 pound rail, and ballasted with cinders. It is used for freight only.

This branch has been maintained in safe condition for the traffic.

Bridges.

There are four bridges on this branch. On Nos. 2 and 4 slight cracks have appeared in the seat stones, and on all the bridges the paint is scaling off. At present these conditions are not dangerous, and no recommendations are therefore necessary at this time. The recommendation of 1914 has been carried out.

Bay Shore Connection.

This branch extends from Butterworth to L. V. R. R. connection, a distance of 1.1 mile. It is single track, used for freight only, and laid with 90 and 80 pound rail. The track is ballasted with cinders.

This branch has been maintained in good condition.

Bridges.

There are three small pile trestle bridges on this branch, all in good condition.

Chimney Rock Branch.

This branch extends from Bound Brook Junction to Chimney Rock Quarry, a distance of 1½ miles. It is used for freight only, laid with 90 and 80 pound rail, with 76 pound rail on sidings. Ties are in fair to good condition. The track is ballasted with cinders and gravel.

This branch has been maintained in good condition for the light traffic over it.

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Bridges.

There is only one bridge on this branch, which is in fair condition.

Manville Branch.

This branch extends from Manville Station to Manville Factory, a distance of .075 of a mile. It is used for freight, laid with 90 pound rail, and ballasted with cinders.

This branch is in first-class condition.

Bridges.

There is only one bridge on this branch, which is in good condition.

Middle Valley Branch.

This branch extends from Middle Valley to Trap Rock Stone Quarry, a distance of 1.25 miles. It is single track, used for freight only, and laid with 62½ pound rail.

It is in fair condition, and safe for the little traffic over it.

Bridges.

There are three small bridges on this branch which are kept in safe condition for the light traffic over them.

Raritan North Shore Branch.

Bridges.

There are two pile trestle bridges on this branch, which are in fair condition.

New Jersey Terminal Railroad.

Bridges.

There are five bridges on this branch all in fair condition.

Chester Branch.

This branch extends from German Valley to Chester, a distance of 4.25 miles. It is single track, used for passenger and freight. At the present time, two westbound and three eastbound trains are operated per day.

The track is laid 80, 70 and 62½ pound rail, and is ballasted with cinder and gravel. Trains are operated according to schedule and telegraph orders.

The track is in fair condition and is safe for the traffic.

Bridges.

There are three iron bridges and two stone arch bridges on this branch, which are in fair condition. They are safe for the light traffic over this branch.

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Southern Division—Main Line.

This line extends from Red Bank to Bayside, a distance of 104. miles. It is single track, and is used for passenger and freight. The track is laid with 90, 85, 80, 76, 70 and 60 pound rail. From Red Bank to Whitings, 90 pound rail is used. The track is ballasted with cinders and gravel.

Ties are in fair to good condition. A large number of new ties have been distributed, and these are now being placed in track.

Automatic semaphore signals are used between Red Bank and Winslow Junction. The two steam grade crossings, one with the Pennsylvania Railroad at Farmingdale, and the other with the West Jersey and Seashore Railroad at Bridgeton, are both protected by interlocking signals and derails.

This line has been well maintained, and is in good, safe condition.

Bridges.

A number of cast iron blocks at guard rail points were found to be cracked. The blocks are held securely in position and are safe for traffic. They should be replaced as soon as they become loose.

Except as noted below the bridges are in fairly good condition. The recommendations made in annual bridge inspection report of 1914 have all been complied with except for Bridges No. 82 and No. 56, which are noted.

Bridge No. 103, a timber trestle. Two frame bents are in poor condition and the defective timber in them should be renewed.

Bridge No. 101, a pile trestle. This trestle is in fair condition except that one cap, two piles and defective ties should be renewed.

Bridge No. 95, a pile trestle. The trestle is in fair condition except that slight repairs should be made to bulkhead at west end.

Bridge No. 90, a pile trestle. This bridge has been entirely rebuilt with creosoted piles and timber.

Bridge No. 88, a pile trestle. This bridge is in fair condition except that five stringers and one cap should be renewed this year to keep it safe until it is entirely rebuilt in 1916.

Bridge No. 86, a pile trestle. One pile needs to be cut off and blocked.

Bridge No. 83, a pile trestle. One defective stringer in third span should be renewed.

Bridge No. 82, a pile trestle. Last year it was recommended that defective ties be renewed. This recommendation has not been complied with and is therefore repeated.

Bridge No. 79, a pile trestle. This bridge is in poor condition. It is to be entirely rebuilt this year.

Bridge No. 77, a pile trestle. The bearing of stringers on caps is poor, and one pile which does not take a bearing should be blocked.

Bridge No. 75, a pile trestle. This bridge is getting in poor condition. One bad cap should be renewed and bearings under some stringers should be blocked. The stringers are getting in poor condition, but are safe till next year.

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Bridge No. 74, a pile trestle. This bridge is getting in poor condition, but will be safe till next year if four defective stringers and two caps are renewed this year.

Bridge No. 73, a pile trestle. The piling in this bridge is poor in two bents. These defective piles should be renewed this year in order to safely carry traffic until the bridge is rebuilt in 1916.

Bridge No. 72, a pile trestle on wye at Lakehurst. This trestle is in fair to poor condition. The following work should be done to keep it safe. One burnt pile should be cut off and blocked, and one additional pile placed in bent No. 4 from east end to replace a pile which is defective. This bridge should also be rebuilt in 1916.

Bridge No. 59, a pile trestle. One defective stringer in siding track should be renewed.

Bridge No. 58, a pile trestle. Track should be surfaced at ends of bridge, three defective stringers renewed, and stringers should be blocked at ends where they do not take proper bearing.

Bridge No. 57, a pile trestle. This bridge is in poor condition and should be rebuilt not later than 1916. Men were at work making sufficient repairs to provide safety until that time.

Bridge No. 56, a pile trestle. Four defective stringers and several defective ties were noted which should be renewed as recommended last year. The other recommendations made at that time have been carried out.

Bridge No. 49, a deck plate girder span. Ties on main track do not hold the rail spikes. Defective ties were also noted on approaches. All such ties should be renewed as soon as possible. It is expected that a new deck will be placed on this bridge this year.

Bridge No. 48, a deck plate girder span. Ties on main track do not hold the rail spikes. A new deck should be placed on this bridge this year.

Bridge No. 46, a pile trestle. This bridge is in fair condition except that one stringer and cap should be renewed.

The remaining bridges on this line are in fair to good condition.

It is RECOMMENDED that the work outlined above be done during the current year.

Freehold Branch.

This branch extends from Matawan to Freehold, a distance of 12.0 miles. It is single track, used for passenger and freight, and laid with 90 pound rail. Ballast is cinders. Tie renewals have been made in sufficient quantity to maintain track in good, safe condition.

Manual block signals are in operation.

Bridges.

No. 11, a pile trestle bridge. Guard rail splices should be properly bolted.

No. 9, a pile trestle bridge. A few defective ties should be renewed.

No. 8¾, a pile trestle bridge. This bridge is maintained as a pile trestle bridge in fair condition.

No. 8, a wooden overhead highway bridge. The bricks in piers under wooden bent are loose. The piers should be properly pointed and plastered.

No. 4, a steel bridge. Masonry plate on west abutment is skewed around, and should be brought back to proper position.

No. 1, a steel bridge. The columns are slightly out of plumb; however, they are secure and safe for any load that passes over the bridge.

The remaining bridges are in fair to good condition.

It is RECOMMENDED that the work outlined above be carried out during the current year.

Sea Shore Branch.

This branch extends from Matawan to Eatontown, a distance of 25.6 miles. It is single track from Matawan to Atlantic Highlands, double track from Atlantic Highlands to West End, and single track for the balance of the line.

The track is laid with 85 and 70 pound rail from Matawan to Atlantic Highlands; from Atlantic Highlands to West End with 85, 76, 70 and 60 pound rail; from East Long Branch to Eatontown, 70 and 60 pound rail. The track is ballasted with cinders and gravel. Sufficient tie renewals have been made during the past year to keep track in good condition. Also 800 cars of stone were placed along track this year.

Between Atlantic Highlands and West End, electric automatic block signals are in use. Shrewsbury River draw is protected by interlocking signals and smash boards.

The bulkhead about one and a half miles along the ocean north from Seabright is being repaired by driving piling and filling in with stone.

The track generally is maintained in good, safe condition.

Bridges.

The recommendations made last year have been complied with.

Bridge No. 34, a pile trestle. This bridge is soon to be replaced with a deck plate girder span on creosoted pile bents. The steel span is now at bridge site.

Bridge No. 31½, a pile trestle. One cap and stringer under main track should be renewed.

Bridge No. 30½, over Shrewsbury River. The rebuilding of two concrete piers at south end of bridge is now under way. These new piers replace the piers which were undermined after completion of south approach to drawbridge in 1913.

Bridge No. 28 was replaced last year with a 36" cast iron pipe with concrete head walls.

Bridge No. 26, a pile trestle. One defective stringer should be renewed.

Bridge No. 24, a pile trestle. One defective stringer should be renewed.

Bridge No. 22, a steel I-beam bridge. Steelwork should be painted. This structure was built in 1914.

Bridge No. 19, a steel I-beam bridge. Steelwork should be painted.

Bridge No. 16, a pile trestle. Two defective stringers should be renewed, end of stringers at bearing on bent No. 2 should be blocked and guard rails properly spliced at east end.

Bridge No. 15, a pile trestle. Three defective stringers should be renewed.

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Bridge No. 14, a pile trestle. One defective post and block should be renewed.

It is RECOMMENDED that the work outlined above be carried out during the current year.

Toms River Branch.

This line extends from Lakehurst to Barnegat, a distance of 22.2 miles. It is single track, used for passenger and freight, and laid with 70, 66 and 60 pound rail. The track is ballasted with cinders and gravel. Sufficient tie renewals are being made to keep track in good, safe condition.

The grade crossing with the Pennsylvania Railroad at Waretown Junction is protected by interlocking signals.

Bridges.

The recommendation for realignment of track on Bridge No. 66 was carried out. The cracked casting at end of guard rail has been spiked securely in place so as to give the protection necessary.

Bridge No. 60, a pile trestle. This structure is in fair condition, except that one pile in bulkhead should be renewed, a cap which has not proper bearing on piles should be blocked, and defective ties renewed.

Bridge No. 61, a pile trestle. Block caps which do not take proper bearing on piles.

Bridge No. 63, a pile trestle. One defective pile should be renewed in first bent from north end, caps properly blocked on piles, and ties of approaches on both ends tamped.

Bridge No. 66, a pile trestle, is now in safe condition.

Bridge No. 69, a pile trestle. Defective piling should be cut off to solid wood and stringers blocked up to good bearing.

It is RECOMMENDED that the work outlined above be done during the current year.

Cumberland and Maurice River Branch.

This branch extends from Bridgeton Junction to Bivalve, a distance of 22.0 miles. It is single track, used for passenger and freight, and laid with 70, 66 and 60 pound rail in good condition. Trains are operated by schedule and train orders.

This branch has been maintained in safe condition for the light traffic.

Bridges.

Bridge No. 105, a pile trestle, is in very poor condition, but it will be replaced with a deck plate girder span on creosoted pile bents. It is expected that work will be started in two weeks.

Bridge No. 104, a pile trestle, is in poor condition but safe for the light traffic over this branch. The bulkheads at both ends are poor, and should be repaired this year. It is expected that this structure will be replaced in 1916 with a steel span.

The remaining bridges consist of small openings, all of which are in fair condition.

It is RECOMMENDED that the repair work outlined above be carried out during the current year.

DELAWARE, LACKAWANNA & WESTERN RAILROAD.*Main Line.*

The main line, via Newark and Morristown, extends from Hoboken to Denville Junction, a distance of 36.38 miles. The track is laid with 80 pound, 91 pound and 101 pound rail, having 6-hole angle bars 28" and 30" long. Ties generally are treated pine and oak. Untreated pine, oak and chestnut ties are also in track. On all new ties in main track standard tie plates with screw spikes are used. The ballast is stone and gravel.

Four tracks are laid between Hoboken terminal and the Hackensack River bridge; three between Broad Street, Newark, and Fifteenth Street, Roseville, and also between Highland Avenue and Millburn. The remainder of the line is double track. Signals are automatic electric block.

Since July 1st, 1914, the following materials are reported to have been placed in track. The quantities given include the Morristown, Boonton, Passaic and Delaware, and Bloomfield Branches:

Ties.

	<i>Treated.</i>	<i>Pine.</i>	<i>Oak.</i>	<i>Chestnut.</i>	<i>Total.</i>
Repairs, Main Track,	82,736	4,379	256	413	87,784
Repairs, Side Track,	26,515	903	1,242	37,689	66,349
New sidings and switches,	16,032	1,071	18	5,258	22,379
Total,	125,283	6,353	1,516	43,360	176,512

Rail.

	<i>105 lb.</i>	<i>101 lb.</i>	<i>91 lb.</i>	<i>92 lb.</i>	<i>Usable.</i>	<i>Total.</i>
Repairs, Main Track, ..	1,362.98	1,903.57	1,157.06	36.31	210.56	4,670.48
Repairs, Side Track, ..	56.86	116.57	5.11	....	2,158.17	2,336.71
New sidings and switches,	217.32	439.21	631.81	2.39	1,212.16	2,502.89
Total,	1,637.16	2,459.35	1,793.98	38.70	3,580.89	9,510.08

65,705.81 T. of stone ballast have been used for track repairs on M. & E. Division.

Grade crossing elimination is still being considered through East Orange, but no definite agreement has yet been reached. That this company is one of the foremost in eliminating its crossings at grade can be seen by the following:

Through South Orange, crossing elimination is nearing completion, one track having been placed in service on the new elevation September 29th. The other track is to follow about one week later. The grades at four crossings will be divided when this work is done. In Millburn two grade crossings are about to be eliminated. Through Chatham the new line is in use and six crossings have been eliminated. Similar work through Madison

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is under way, but the railroad is still operating on its old line and temporary location. The new undergrade crossing at Morris Plains is in service and nearly complete.

On this line are two double-track tunnels, 4,283 feet long.

The track is in good line and surface, and is in good condition throughout.

Bridges.

The bridges on this line are maintained in good condition.

Bridges on grade crossing elimination are being built at several places. The work on the new bridges in connection with grade crossing elimination at Mountain Station has been completed, which includes a reinforced concrete arch carrying Mountain Avenue over the tracks, and a footbridge at Randolph Avenue.

The work on the new bridges through South Orange is practically completed, traffic being operated over them on the westbound track. East of Madison the bridges have all been completed. The work on the new bridges through Madison and Morris Plains is well under construction. A new overhead concrete arch has been built just east of Morristown.

The wooden highway bridge near Port Murray has been rebuilt with steel encased in concrete.

Newark and Bloomfield Branch.

This branch is a double-track line extending from Roseville Junction to Montclair, 4.20 miles, laid with 91 pound and 80 pound rail having 30" six-hole angle bars. Yellow pine and treated ties are used; tie plates and screw spikes are being placed as ties are renewed in main track. The ballast is crushed stone and gravel. Tie and rail renewals are included under the main line via Morristown. The line is equipped with automatic electric block signals and is in good condition throughout.

Grade crossings have been eliminated through Newark, Bloomfield, Glen Ridge and Montclair, the only remaining grade crossings being the two in East Orange. The elimination work on this branch, ending with the six-track terminal in Montclair, is a model.

Bridges.

The bridges on this line are in first-class condition.

Passaic and Delaware Branch.

It is a single-track line, 21.52 miles long, extending from Summit Junction to Gladstone. The track is laid with 75 pound rail having four-hole angle bars 25" long, and 80 pound rail having six-hole angle bars 30" long. Ties are treated pine and oak and untreated pine, oak and chestnut. Tie plates and screw spikes are being placed on new ties in main track. The ballast is gravel and cinders. Automatic electric block signals are installed the entire length of the line. The quality of tie and rail renewals are included under the main line via Morristown.

The track is well maintained and is in good condition throughout.

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Bridges.

The bridges on this line are in good condition except for a few minor repairs which should be done as mentioned hereinafter. The steelwork is kept clean and painted.

Bridge 34.43, over the Passaic River. The masonry under northwest bearing is working loose and should be properly grouted and pointed.

Bridge No. 33.23, over public highway. The bearings under the girders of this bridge are poor and should be renewed.

Bridges 34.95, 40.78, and 41.95. The masonry abutments of these bridges should have attention with reference to pointing.

It is RECOMMENDED that the work outlined above be carried out during the current year.

Chester Branch.

It is a single-track line, extending from Chester Junction to Chester, a distance of 10.04 miles. The rail is 80 pound with 30", six-hole angle bars, and 67 pound with 26", four-hole angle bars. Ties are oak and chestnut. Ballast is cinders. Manual interlocking signals are installed at the two Central Railroad grade crossings. There are no other signals. Operation is by train orders.

The track is in good condition for the light traffic on the branch.

Bridges.

The recommendations made last year to point masonry of Bridge No. 32.30 has been carried out.

The bridges on this branch are all in good condition.

Sussex Branch.

It is a single-track railroad extending from Netcong to Franklin Furnace, with branch from Branchville Junction to Branchville, a total distance of 30.55 miles. The track is laid with 80 pound rail having 30", six-hole angle bars, and 75 pound rail having 26" four-hole angle bars. Ties are oak and chestnut. Treated ties, tie plates and screw spikes are being placed as ties are being renewed between Netcong and Newton. The ballast is cinders.

Signals are automatic electric block between Netcong and Branchville Junction; beyond, operation is by train orders. At both Lehigh and Hudson River R. R. crossings, and N. Y. S. & W. R. R. crossing, manual interlocked signals are in use. All trains stop before proceeding over the crossings. Track is maintained in good condition throughout.

The following tie and rail renewals are reported by the company:

Ties.

	<i>Treated.</i>	<i>Oak.</i>	<i>Chestnut.</i>	<i>Total.</i>
Repairs, Main Track,	6,893	659	13,316	20,868
Repairs, Side Track,	209	2,242	2,451
New sidings and switches,	57	256	313
Total,	6,893	925	15,814	23,632

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	<i>Rail.</i>	<i>Usable.</i>	<i>Total.</i>
Repairs, Main Track,	1.76		1.76
Repairs, Side Track,	91.41		91.41
New sidings and switches,	34.82		34.82
Total,	127.99		127.99

Bridges.

The recommendation made last year to renew defective ties and wooden guard on Bridge No. 60.81 has not been complied with, and it is again recommended that this work be done.

The remaining bridges are being maintained in good condition.

Branchville Branch.

All bridges on this branch are maintained in good condition.

Hampton Branch.

It is a single track, 4.84 miles long, extending from Washington to Hampton Junction, where connection is made with the Central Railroad. The rail is 67 pound and 75 pound, having 26", four-hole angle bars, and 80 pound with 30", six-hole angle bars. Ties are oak and chestnut; ballast is cinders. Operation is by train orders.

The track is in fair line and surface, and safe for the light traffic.

Bridges.

The bridges on this branch are maintained in good condition.

Phillipsburg Branch.

It is a single-track line, 13.80 miles long, extending from Washington to Phillipsburg. It is laid with 75 pound rail having 26", four-hole angle bars, and 80 pound rail having 30", six-hole angle bars. Ties are chestnut and oak. Treated ties with tie plates and screw spikes are being placed where renewals are made in main track. The ballast is cinders. Automatic electric block signals are in operation, and the track is maintained in good condition.

Bridges.

The bridges on this branch are maintained in good condition. Attention is to be given to pointing the masonry of Bridge No 70.50, and painting of steel-work of Bridge No. 75.45, over Morris Canal.

Boonton Branch.

It is double track, extending from Bergen Junction to the Delaware bridge, 79.15 miles including the Warren Railroad. Between Chester Junction and Port Morris there are two additional tracks. The ballast is crushed stone, gravel and cinders. The track is laid with 80 pound, 90 pound, 91 pound, 101 pound and 105 pound rail, six-hole angle bars 28" and 30" long. Treated

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ties are pine and oak. Untreated ties of pine, oak and chestnut are also used. Tie plates with screw spikes are being used on all ties as they are renewed in the main track.

Renewals since July 1st, 1914, are reported by the company as follows, the figures including the main line west of Denville Junction to Washington, the Phillipsburg and Hampton Branches and the Warren Railroad. Renewals for the Boonton Branch were included under the Main Line via Morristown.

<i>Ties.</i>					
	<i>Treated.</i>	<i>Pine.</i>	<i>Oak.</i>	<i>Chestnut.</i>	<i>Total.</i>
Repairs, Main Track,	39,395	....	1,155	14,183	54,733
Repairs, Side Track,	1,363	....	2,094	24,955	28,412
New sidings and switches, .....	....	....	42	1,169	1,211
Total,	40,758	....	3,291	40,307	84,356

<i>Rail.</i>						
	<i>105 lb.</i>	<i>101 lb.</i>	<i>91 lb.</i>	<i>92 lb.</i>	<i>Usable.</i>	<i>Total.</i>
Repairs, Main Track,	306.81	5.49	....	....	177.63	489.93
Repairs, Side Track, ....	....	....	....	....	263.56	263.56
New sidings and switches,	43.08	....	....	....	154.03	197.11
Total,	349.89	5.49	....	....	595.22	950.60

On the Warren Railroad, between Washington and Manunka Chunk, tie renewals have not been made in as great quantity as on the other parts of the line. The curves, however, are well tied and the track is in safe condition. Elsewhere the condition of track is good.

There are two tunnels on the Warren Railroad, aggregating 3,971 feet in length. The Oxford tunnel is single track width, the tracks being laid in gauntlet, and the one at Manunka Chunk being two parallel single-track tunnels.

Signals are automatic electric block on all parts of the line.

Bridges.

The temporary trestle which was maintained for allowing the construction of Manhattan Avenue sewer has been removed and filling completed.

The southwest wing wall of Bridge No. 2.66 is still in the same condition, no movement having been detected.

Bridge No. 7.63 has been renewed with a concrete arch. The masonry abutments of Bridge No. 21.17 have been renewed and the steelwork under the westbound track has been renewed.

The stringer and floor beam bearings on masonry abutments of Bridge No. 13.22, over the Newark Branch of the Erie R. R., should be properly shimmed to reduce the pounding during the passage of trains.

The top of trusses of Bridge No. 17.05, over the Passaic River, should be kept clean.

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The remaining bridges are maintained in good condition.

It is recommended that proper shims be provided under bearings of Bridge No. 13.22 and that tops of trusses of Bridge No. 17.65 be kept clean.

Rockaway Branch.

It is a single-track line, 3.66 miles long, forming a loop in the main line between Denville Junction and East Dover Junction. It is laid with 80 pound and 90 pound rail having 30", six-hole angle bars, and 75 pound rail having 26", four-hole angle bars. Ties are chestnut and oak. Ballast is gravel and cinders. Automatic electric block signals are installed.

At Rockaway a new station is being built replacing the old frame building. The track is maintained in good condition.

Bridges.

The recommendations made last year to renew defective ties on Bridges Nos. 33.80 and 34.22 have been complied with.

The bridges on this branch are maintained in good condition.

Cut-Off Line.

It is a double-track line popularly known as the cut-off line in New Jersey, and extends from Port Morris Junction to Slateford Junction in Pennsylvania, 1.09 miles beyond the State line at the Delaware River. It is 28.53 miles long, laid with 101 pound and 91 pound rail, all treated ties having tie plates and screw spikes, and all stone ballast, 22,132.60 tons having been used since last inspection. The line is equipped with automatic electric block signals and is maintained in first-class condition. Tie and rail renewals are reported by the company as follows:

Ties.

	<i>Treated.</i>	<i>Chestnut.</i>	<i>Total.</i>
Repairs, Main Track,	68	...	68
New sidings and switches, .....	..	134	134
Total,	68	134	202

Rail.

	<i>101 lb.</i>	<i>91 lb.</i>	<i>Usable.</i>	<i>Total.</i>
Repairs, Main Track,	3.99	.45	.89	5.33
New sidings and switches, .....	...	...	7.33	7.33
Total,	3.99	.45	8.22	12.66

Bridges.

The bridges on this line are in first-class condition.

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Warren Railroad.

A number of poor ties were noted on Bridges No. 68.41 and No. 79.11, which should be renewed.

The masonry of Bridge No. 68.69 should be pointed.

The remaining bridges are maintained in good condition.

It is RECOMMENDED that the poor ties be renewed on Bridges No. 68.41 and No. 79.11, and that masonry of Bridge No. 68.69 be pointed during the current year.

ERIE RAILROAD.

Main Line.

This line extends in New Jersey from Jersey City to State line, one mile west of Mahwah, a distance of thirty miles.

There are four tracks from Jersey City to Rutherford Junction, excepting over the Hackensack Bridge, where there are two. Two from Rutherford Junction to Ridgewood Junction; from Ridgewood Junction to State line there are four. All tracks are ballasted with stone, with the exception of the two passenger tracks between Hackensack bridge and Croxton, which are gravel and cinders. All tracks are laid with 100 pound rail, with the exception of the two freight tracks west of Waldwick, which are laid with 90 pound rail.

New 100 pound rail has been unloaded from Harrison Street, Passaic, to about one-half mile west of Charlton Hill.

A new passenger station at Mahwah, of stucco design, has been built since last inspection.

Hall automatic signals, three positions, lower quadrant, are in use west of Hackensack bridge, while east of the bridge and in Jersey City Yard union automatic signals are used.

Hackensack and Passaic drawbridges are interlocked with signals and derails.

This line has been well maintained and is in good condition.

Bridges.

Sufficient tie renewals have been made during the year to maintain the decks of the bridges in good condition. The replacing of wooden bearings with steel plates and shoes are being carried out.

Bridge No. 7.14, over Berry's Creek, has been replaced with a reinforced concrete culvert and is in good condition.

Bridge No. 10.22. Renew defective ties, as programmed by company, and tighten lower lateral rods in west approach span.

Bridges Nos. 16.20, 18.34 and 23.07. These bridges should be cleaned and painted. This work is on the company's program to be done during the current year.

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Bridge No. 17.34. Men were at work reinforcing the floor system of this structure.

Bridge No. 25.44. Men were at work cutting out old bridge seats which are to be replaced with reinforced concrete; also renewing defective ties and guards, in accordance with recommendations made in special report of April 17, 1915.

Bridge No. 28.52. This bridge is to be replaced with reinforced concrete pipe this year. The pipe is now stored at the bridge site.

The remaining bridges are maintained in fair to good condition, the steel-work in general being kept cleaned and painted.

Northern Railroad Division.

This division extends in New Jersey from Croxton to the New York State line east of Tappan, a distance of twenty-one and five-tenths miles.

It is double track, used for passenger and freight, and is laid with 90 and 80 pound rail on passenger tracks, and 80 and 70 pound rail on freight tracks. Ballast is stone, gravel and cinders. New 90 pound rail has been unloaded along the track from Granton Junction to Leonia.

The N. Y. S. & W. R. R. tracks are used from Croxton to Granton Junction, two for passenger and two for freight.

Crossing signs are being repainted.

Signals are electric automatic upper quadrant.

This line has been maintained in good, safe condition.

Bridges.

The repair work outlined under each bridge is on the company's program for renewals this year, so that no recommendations are necessary. The work outlined should be done during the year to maintain the bridges in good condition.

The bridge seats of Bridges No. 12.51 and No. 14.83 should be cleaned, and all the steel structure supported by masonry abutments should be kept clean at the bearings.

Bridge No. 14.83. Tie renewals were made last year as outlined in the company's program.

Bridges No. 18.44 and No. 20.38. A few defective ties which were noted should be removed.

Bridge No. 22.43. The masonry abutments need slight pointing and a few defective ties should be renewed.

The remaining bridges are maintained in good condition.

New Jersey and New York Railroad.

This line extends in New Jersey from the New Jersey and New York Junction to State line west of Montvale, a distance of 18.0 miles.

It is double track from New Jersey and New York Junction to Ardell, a distance of 10.0 miles; the balance is single track. The track is laid with 80 pound rail, and ballasted with stone and gravel. The line is used for passenger and freight traffic.

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Hall automatic signals are in use between New Jersey and New York Junction and Ardell; from this point to the State line union automatic signals are used.

This line has been well maintained and is in good, safe condition.

Bridges.

Bridges are kept in good condition.

Bridge No. 14.83. A temporary relief bent is still maintained in good condition. Defective ties are to be renewed and masonry pointed. This work is on the company's program for attention this year.

Bridge No. 15.16. The work of filling this bridge, which was replaced with a 30 inch diameter cast iron pipe, has been completed.

Newark Branch.

This branch extends from Greenwood Lake Junction to Paterson Junction, a distance of 16.0 miles. There are four miles of double track; the balance is single. The track is laid with 80 and 90 pound rail, in good condition. Signals are manual block.

The track has been well maintained and is in good condition.

Bridges.

Tie renewals have been made to Bridges No. 7.93 and No. 12.34, as outlined in the company's program for renewals during 1914.

Bridge No. 8.04 is still in service but restricted to slow order and H-4 class engines. But one track is used at a time. This structure was reinforced last year, as recommended in special report of November 30th, 1914, and is in safe condition.

The remaining bridges are in fair to good condition.

Bergen County Branch.

This branch extends from Rutherford Junction to Ridgewood Junction, a distance of 10.0 miles. It is double track, used for passenger and freight, and laid with 100 pound rail in good condition. Ballast is stone. Hall automatic signals, lower quadrant, are in use.

This branch has been well maintained and is in good, safe condition.

Bridges.

Tie renewals have been made on bridges, as outlined in annual bridge inspection report of 1914. According to the company's program, tie renewals are to be made this year on Bridges Nos. 11.12, 11.38 and 13.88. On this last bridge, which is over the N. Y. S. & W. R. R., the stone masonry needs slight pointing.

Bridge No. 14.15. The bridge seats are to be rebuilt this year as outlined in the company's program for renewals.

The remaining bridges are maintained in good condition.

Recommendation.

Point masonry on Bridge No. 13.88.

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Dundee Branch.

This branch extends from Garfield to Passaic, a distance of 2.0 miles. It is single track, laid with 90, 80, 74 and 63 pound rail, and is ballasted with cinders. The line is used for freight only. Tie renewals are being made in sufficient number to keep track in safe condition.

Bridges.

Recommendations made last year have been carried out. Bridge No. 1.03, a trestle of fourteen spans, is being filled.

The other bridges are in fair condition and safe for the traffic, which is all low speed freight movements.

ERIE RAILROAD.

Main Line—New York and Greenwood Lake Division.

This line extends from Croxton to Sterling Forest, a distance of 43.0 miles.

It is double track from Croxton to Great Notch, a distance of 16.0 miles, and single track from there to Sterling Forest. The line is used for passenger and freight, and laid with 90 and 80 pound rail.

From Forest Hill to Soho, a distance of 2.0 miles, and from M. P. 11.5 to Montclair Heights, a distance of 4.5 miles, new 90 pound rail has been unloaded along the track.

Hall automatic signals are used between Croxton and Hackensack Bridge, and west of this point signals are manual block.

The three drawbridges at Hackensack, Passaic and Mountain View, are protected by derails connected with home and distant signals.

The two railroad grade crossings, one at Mountain View, where the tracks of the D., L. & W. R. R. are crossed, and the other at Pompton Junction, where the N. Y., S. & W. R. R. tracks are crossed, are both protected by interlocking signals and derails.

This branch generally has been well maintained and is in safe condition.

Bridges.

The recommendations made last year have been carried out. Renewals of ties, timber guards and planking have been made as programmed by the company for the year of 1914. Additional renewals of ties, timber guards and planking, also the cleaning and painting of bridges, are on the company's program for work to be done during 1915.

Bridge No. 10.01. It was recommended in annual bridge inspection report of 1914 to overhaul and strengthen this structure. This has been complied with in a satisfactory manner.

Bridge No. 19.34 has been replaced with a steel span, and is in good condition except that the ties should be renewed as programmed in company's report.

Bridge No. 20.08. Extensive repairs were made to this trestle bridge last year and the work has been satisfactorily done.

Bridge No. 23.10. Repairs were made to this bridge last year and the structure is now in fair condition.

Bridge No. 23.18. The renewal of this bridge is now under way. Two piers have been constructed, concreting for the west abutment has been practically completed up to the bridge seat, and the excavation of east abutment has been started. Steelwork is stored at the bridge site.

Bridge No. 27.85. The east bent of this structure, which was in poor condition, has been repaired and is now safe for the traffic over this branch.

Bridge No. 30.77. Men were at work taking the slackness out of counters.

Bridge No. 32.94. This bridge has been replaced with a steel bridge on steel bents and concrete abutments.

Bridges No. 35.69 and No. 35.72. These two bridges are to have the crib back walls renewed with concrete.

Bridges No. 41.23 and No. 41.93. Extensive repairs are to be made to these two bridges.

The remaining bridges are in fair to good condition.

Orange Branch.

This branch extends from Forest Hill to West Orange, a distance of 4.0 miles. It is single track, used for passenger and freight, is laid with 80 pound rail, and ballasted with cinders and gravel. A number of poor ties were noted between Forest Hill and Silver Lake, and also west of Orange. New 90 pound rail has been distributed along the track between Forest Hill and Silver Lake.

Derails were noted on all sidings. Signals are manual block. This branch generally is being maintained in safe condition.

Bridges.

Considerable repair work has been done on this line, the recommendation of last year concerning Bridge No. 10.12 has been carried out, and the condition of the bridges shows marked improvement. At the present time they are all in fair to good condition.

Caldwell Branch.

This branch extends from Great Notch to Essex Fells, a distance of 6.6 miles. It is single track, used for passenger and freight, and is laid with 80 pound rail. A number of poor ties were noted, especially west of Caldwell. The track is ballasted with cinders and gravel. Manual block signals are in use.

Recommendation.

Place at least 1,600 ties in track during the current year, in order to keep same in good, safe condition.

Bridges.

The bridges at Essex Fells, Cedar Grove and Peckman's Brook are in such condition that they must soon be renewed. The other bridges are in good condition. No. 22.06, at Esssx Fells, has had material delivered at site for rebuilding. The old bridge is in poor condition but will last until replaced

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by the new bridge, provided the work is done this year. No. 18.30, at Cedar Grove, still exists in its old condition with timber bents projecting into the highway. Twenty-four ties and three wooden guards are poor, and mud sills on east end are low. With defective timber renewed and proper surfacing the bridge will be in fair condition.

Bridge No. 18.20, over Peckman's Brook, has been reported on many times. Speed is limited to ten miles per hour over it. Much of the timber is soft and action under trains is poor. A further inspection and report will be made on this bridge.

It is RECOMMENDED that defective ties and guards be renewed on Bridge No. 18.30, and that mud sills on east end be raised and stringers brought to good bearing.

Ringwood Branch.

This branch extends from Ringwood Junction to Ringwood, a distance of 3.0 miles. The track is ballasted with gravel and cinders, and laid with 74 pound rail. The line is used for passenger and freight, speed being restricted to twenty miles per hour.

This branch is in safe condition for the light traffic.

Bridges.

Extensive repairs have been made by the railroad company to the wooden trestles on this branch. The bridges are now in fair to good condition.

LEHIGH & HUDSON RIVER RAILROAD.

This road extends in New Jersey from the New York State line near Verona to the Pennsylvania Railroad right of way at Belvidere, including the "Y" tracks at Belvidere, a total distance of 43.59 miles.

It is single track laid with 29.21 miles of 80 pound Bessemer rail, and 19.38 miles of 100 pound Open Hearth rail. 6.76 miles of new 100 pound rail has been laid replacing the 80 pound. The track is ballasted with gravel and cinders in good quantity.

Approximately 35,000 new ties have been placed since last inspection, about one-half of which were treated.

Train movements are governed by telegraph orders and automatic block signals. The steam grade crossing with the N. Y., S. & W. R. R. at Franklin Junction is protected by automatic signals interlocked, as are also the grade crossings with the D., L. & W. R. R. at Andover Junction, and with the N. Y., S. & W. R. R. at Sparta Junction.

This line has been maintained in good condition.

Bridges.

Bridges have been renumbered according to their location by mile-posts.

Extensive repairs have been made to the bridges during the past year. The repair work outlined under each bridge should be done during the year

to maintain them in condition to safely carry traffic. Except as noted below the bridges are in fair to good condition.

The three box drains east of Mulford have not been replaced with cast iron pipe, but they are maintained in good condition.

Old Bridge No. 134 has been filled in, and old Bridge No. 117, west of Sparta Junction, has been repaired in a satisfactory manner.

Bridge No. 247 is a half through plate girder bridge. The steelwork needs painting.

Bridge No. 252, a pile trestle. Men were at work making extensive repairs, including the renewal of pile bents.

Bridge No. 256, a pile trestle. Two intermediate bents are to be driven during the year, shortening the two long spans in this trestle within safe limits.

Bridge No. 273, a pile trestle. One defective tie at extreme north end should be renewed.

Bridge No. 281. The cap at the south end, which is in poor condition at bearing on the pile, should be renewed; or if decay only penetrates a short distance, then the cap can be taken care of by proper blocking.

Bridge No. 299. This bridge had an entire new deck placed on it last year.

Bridge No. 314. The stone masonry abutments which are in poor condition should be repaired.

Bridge No. 338. New wooden guards and timber bulkheads were renewed the early part of this year.

Bridge No. 348. An additional 8" x 16" wooden stringer is to be placed under each rail.

Bridge No. 364. Masonry abutments need pointing.

Bridge No. 533. The masonry abutments which are poor should be either rebuilt or properly repaired.

Bridge No. 566. This bridge had extensive repairs made to the pile bents, stringers and decking last year.

Bridge No. 568. A new deck and general repairs were made to the trestle last year.

Bridges No. 590, 595, 607 and 611. Extensive repairs were made to these structures last year.

Bridge No. 613. The cap at the south end has only about six inches bearing on the pile. This condition should be remedied by bringing pile directly under cap or driving a new pile and giving it proper bearing.

Bridges No. 644 and 645. The stone masonry abutments which are poor should be properly repaired.

Bridge No. 650. The masonry of the south abutment is working loose and should be repaired in a similar manner to the north abutment, which was faced with concrete anchored to the old masonry, and is giving good service.

Bridge No. 677. Shim plates should be installed under all stringer bearings that do not take proper bearing.

Bridge No. 717. The south abutment is in poor condition, and should be repaired like the north abutment of Bridge No. 650.

It is RECOMMENDED that the work outlined above be carried out during the current year.

LEHIGH & NEW ENGLAND RAILROAD.

This line extends from Liberty Corners to Swartswood Junction, and from Haines Junction to Delaware River, a total distance of 23.7 miles.

This line is single track laid with 90, 80 and 60 pound rail. From the Delaware River to Hainesburg Junction it is laid with 90 pound rail. New 80 pound rail has been distributed to replace all 60 pound in main track; this work is being delayed, however, on account of an insufficient supply of bolts.

About 10,000 new ties have been placed in track since date of last inspection. All treated ties have tie-plates. Ballast is cinder and gravel, in good quantity.

The steam grade crossing with the D., L. & W. R. R. at Augusta is protected with home semaphore signals interlocked. Automatic flagman lamps and bells have been installed at two grade crossings, one at Augusta and the other at Sussex Junction.

All right-of-way fencing is being renewed.

This line has been maintained in a good, safe condition.

Bridges.

The recommendations made last year have all been carried out in a satisfactory manner.

Extensive repairs and rebuilding of the bridges are programmed by the railroad company, the work to be done during the current year.

Bridge No. 61.03. The southeast wing wall, which is cracked, has had bimonthly inspections made, and no movement has been detected. It was agreed to have this opening properly grouted.

Bridges Nos. 7, 15, 19, 21 and 27 are to be replaced with plate girder spans designed for Cooper's E-50 loading.

The remaining bridges are in fair to good condition, the steelwork being kept clean and painted.

LEHIGH VALLEY RAILROAD.

Main Line.

This line extends from Phillipsburg to Mile Post 13.14 in New Jersey, a distance of 63.0 miles. It is double track, used for passenger and freight traffic, and is laid with 100 pound and 110 pound rail. Ties are yellow pine, treated, on stone ballast.

There are eight miles of No. 3 and No. 4 track between Potters and New Market, seven miles of No. 3 and No. 4 track from Port Reading Tower west of Flagtown one mile, and 15 miles of No. 3 track from Three Bridges to Bellewood Park, and eight miles of No. 4 track from West Portal to Greensbridge. Signals are Hall electric automatic, with mechanical automatic signals at towers and derails.

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2,453.468 gross tons of new 100 pound rail, and 243.718 gross tons of new 110 pound rail have been placed in track during the year. Approximately 122,000 ties and 1,147 cubic feet of stone ballast have also been placed in track since last inspection.

This track has been well maintained and is in first-class condition.

Bridges.

Bridge 24B, Van Court's overhead crossing. This is a wooden overhead highway bridge which has been recently repaired. The north end bent is out of plumb, but the railroad company will have this bent properly braced.

Bridge 29, over Dismal Brook. Work is well under way remodeling the old stone abutments.

Bridge 32A, over Bound Brook. The east abutment has been renewed with concrete.

Bridge 43B, over highway. This bridge is to have a solid floor, the work being authorized for this year.

Bridge 56, stone arch culvert. The parapet wall on south end of arch is to be raised in order to properly take care of fill.

Bridge 58, overhead highway. A number of bad timbers were noted in this structure, but the railroad company will renew all defective timbers.

Bridge 65A, overhead highway. Extensive repairs are being made to this structure.

Bridge 66, stone arch culvert. Attention will be given to this arch, the work to include the rebuilding of end and new wing wall.

Bridge 67, stone box culvert. This structure is to be entirely rebuilt, but immediate attention should be given as the stones are working loose. The railroad company will make the necessary temporary repairs to make this structure safe until it is rebuilt.

Bridge 70, double stone arch over Musconetcong Creek. There are two large cracks in the barrel of the arches. The arches have been in this condition for a number of years, and test wedges have been driven in the cracks in order to detect any movement, but none has been discovered. It is expected to repair these arches during the current year.

The remaining bridges are being maintained in first-class condition, masonry being pointed, steelwork kept well painted, and ties on bridges being renewed.

This line extends from M. P. 13.14 to Jersey City, a distance of 13.14 miles. The line is double track. East of Oak Island it is used for freight only, the remainder for passenger and freight. Track is laid with 100 pound rail in stone ballast, except the portion east of Oak Island, which is laid with 80 and 90 pound rail in cinder ballast. Signals are electric automatic.

This line has been well maintained and is in good condition.

Bridges.

Bridges Nos. 9, 9a and 9b are still maintained as pile trestles, in good condition.

Bridge No. 6, over Newark Bay, is a through truss drawbridge with pile trestle approaches. The draw span has been repaired and painted. It is

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expected that an extra line of stringers will be placed under each rail on the extreme east end of the east trestle approach, thus making three stringers under each rail throughout the entire trestle approaches.

Bridge No. 12, an overhead wooden highway bridge just west of West Elizabeth, is being entirely rebuilt with wooden trusses and stringers and steel needle beams.

A number of the steel bridges have been painted and the stone masonry pointed; also the decks of a number of bridges have been renewed.

A number of guard-rail splices need bolts, but this will be attended to by the company.

The remaining bridges are maintained in good condition.

In Jersey City there are six wooden float bridges; some of them are being overhauled and strengthened. These bridges are maintained in good condition.

Irvington Branch.

This branch extends from West Elizabeth to Irvington, a distance of 2.91 miles. It is single track, used for freight, and laid with 80 and 90 pound rail. Ballast is cinders. The line and surface are good. Train movement is by train orders.

This branch has been maintained in good condition.

Bridges.

The bridges are all maintained in good condition.

Perth Amboy Branch.

This double-track line extends from the Main Line at South Plainfield to Perth Amboy, a distance of 10.17 miles. It is used for passenger and freight. Rail is 90, 80 and 76 pound, in good condition. Tie renewals have been made in sufficient quantity to keep track in safe condition. Line and surface are good. Ballast is stone and cinders. Automatic electric signals are in use over the entire line.

The branch generally is in good condition.

Bridges.

Recommendations made in report of October 10th, 1914, have all been carried out in a satisfactory manner.

Bridges P-24, P-25 and P-25a have been rebuilt with solid floor structures.

Bridge P-20. New wing walls are to be constructed during the current year. The overhead trolley bridge at Crows Mill Road is in bad condition. This bridge is to be replaced with a modern structure by December 1st, 1915, the work to be done by the Public Service Railway Co.

Bridge P-19. A new King Post truss is being constructed at the north end of this structure so as to provide side clearance for the proposed siding track.

Bridge P-17a. The south end of the stone arch should be extended so as to provide a proper and safe bed for the track.

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Extensive repairs have been made to the structures on this branch, and when pointing of masonry is done and minor repairs are made, the bridges will all be in good condition.

Recommendation.

Bridge P-17a. Extend the south end of the stone arch so as to provide a proper and safe bed for the track.

Raritan Branch.

This is a single-track branch, 5.2 miles long, used for freight only, and laid with 90% of 90 pound rail and the balance 76 and 68 pound. Ballast is cinders in good condition, with good shoulder. Line and surface of track are fair to good. Movement is by telephone orders and hand signals.

Bridges.

The recommendation made in report of October 10th, 1914, has not been complied with, and it is again repeated: to scrape and paint ironwork on Bridge P. E. 20. The channel at P. E. 21 is sufficiently clean.

Bridge P. E. 20-B has been filled in and Bridges P. E. 21-A and 24 have been replaced with pipe.

The remaining bridges are maintained in good condition.

Flemington Branch.

This single-track line, extending from Flemington Junction to Flemington, a distance of 1.8 miles, was inspected on October 27th, 1915. It is used for passenger and freight. Rail is 67 pound and 66 pound. Tie renewals have been made in sufficient quantity to keep track in good condition. No fixed signals are maintained on this line, movement being by schedule and telegraph orders.

This branch is maintained in good condition for the traffic.

Bridges.

Recommendation made in report of October 10th, 1914, has been complied with.

The bridges are all maintained in good condition.

Clinton Branch.

This branch is single track, extending from Landsdown to Clinton, 2.06 miles. It is used for passenger and freight. Rail is 90 pound, 80 pound, and 67 pound, in good condition. Line and surface of track are fair to good. Movement is by schedule and telegraph orders.

This branch is maintained in good condition for the traffic.

Bridges.

Bridge CL57 is an iron truss structure. Some of the hangers are loose which indicates that one bar must be doing all the work. This defect could be remedied by spreading the hangers.

The remaining bridges are maintained in good condition.

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Recommendation.

Adjust hangers in Bridge CL57 so as to equalize stresses in same.

Pittstown Branch.

This line extends from Landsdown to Pittstown, a distance of 4.0 miles. It is single track, used for passenger and freight, and laid with 2 miles of 90 pound and the balance 76 pound and 68 pound rail, in fair to good condition. Tie renewals are being made in sufficient quantity to keep track in good, safe condition.

Trains are operated by schedule and train orders. At Landsdown tower mechanical automatic signals are in use.

Bridges.

Bridge P-159. The old stone abutments have been replaced with concrete abutments.

The bridges are all maintained in good condition.

Musconetcong Branch.

This single-track line, extending from Musconetcong Junction to M. P. 73 on the line, a distance of 3.2 miles, is laid with 90, 76 and 66 pound rail. It is used only for freight. Ties are in fair to good condition. Line and surface of tracks are fair to good. There are no fixed signals on this branch, operation being by telephone orders.

This branch has been maintained in good condition.

Bridges.

The bridges on this branch are all maintained in good condition.

Bridges—Edgewater Branch.

The bridges on this branch are all in fair condition.

Bridges—Grand Street Yard.

Bridge No. J. T. 3 is a wooden lift bridge over Morris Canal. The running rails on the lift span are poor at ends and should be renewed. On the north approach span the rail joints are very loose and such joints should be tightened.

Bridge J. T. 3A, over Mill Creek, is to be entirely rebuilt. Bridge J. T. 3B, over Mill Creek—defective ties on approaches should be renewed and the ends surfaced.

Recommendations.

Renew rails on lift span and tighten rail joints on approach at Bridge J. T. 3. Surface ends and renew defective ties on approaches to Bridge J. T. 3B.

Bridges—Jersey City Terminal.

There are two bridges on this branch, both in fair condition.

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Bridges—Newark and Passaic Branch.

The bridges on this branch are maintained in good condition.

National Docks and N. J. Junction Branch.

The new steel bridge over Bright Street has been completed. Dumping of all kinds of debris is being done around the base of columns. The railroad company has taken this matter up with the city for the purpose of stopping same.

The bridges are all maintained in good condition.

National Stores Branch.

Bridge N. D. S. 3 is a wooden overhead highway bridge. A few defective truss members are to be renewed this year. The remaining bridges are maintained in good condition.

There are two wooden float bridges on this branch which are not used at the present time but are maintained in good condition.

National Docks Branch.

This branch extends from National Docks Junction to Constable Hook, a distance of 6.09 miles, and has branches to Pennsylvania R. R. at Waldo Junction, and to the National Docks. It also connects with the New Jersey Junction R. R. The branch is double track, used for freight only, and is laid with 80 and 90 pound rail. Ballast is stone and cinders. 1,500 feet of new 90 pound rail have been placed in track since last inspection. Yard movement is in force.

This branch has been well maintained and is in good condition.

Bridges.

The bridges on this branch are kept in good condition. Painting has been done and tie renewals made where required.

The new steel bridges over York and Bright Streets, Jersey City, and the new steel viaduct from Bright Street to New Jersey Junction have been completed. The filling of the old wooden trestles between New Jersey Junction and Academy Street has been practically completed.

New back walls are being constructed to hold the new fill at Bridges N. D. 1, 1 B, 1 D and 1 F.

Around the base of columns of the new Bright Street bridge dumping of all kinds of debris is being done. The railroad company has taken this matter up with the city for the purpose of stopping same.

A new vertical wooden lift bridge has been constructed over the Morris Canal at the National Storage Junction, but has not been placed in service. Guard-rail splices should be properly bolted where bolts are missing on all bridges on this branch.

Recommendation.

Properly bolt guard-rail splices where bolts are missing.

MORRISTOWN & ERIE RAILROAD.

This line extends from Morristown to Essex Fells, a distance of 10.9 miles. It is laid with 80 and 60 pound rail. Ties are in fair condition. Ballast is gravel and cinders. The line and surface of track are fair.

This road has been maintained in safe condition for the traffic.

Bridges.

The Whippany River bridge in Morristown has had steel stringers substituted for the old wooden ones and general repairs made so that it is now in good condition.

On the bridge over highway east of Whippany six poor ties were noted and the wooden stringers are growing soft. Defective timber should be renewed.

Ties and wooden blocks under girders are poor on deck plate girder bridge over highway, the first bridge west of Passaic River.

On the Passaic River bridge two bents are low on west end and track is in poor surface. Stringers should be surfaced up and track tamped up at ends.

A small drainage opening east of highway east of Passaic River is in poor condition. Three stringers are badly rotted and should be renewed.

On the deck plate girder span west of Essex Fells ties are fair to poor. Defective ones should be renewed.

The cribbing under bridge over stream on siding leading to feed mill west of Whippany has settled about four and one-half inches. Three inches of shimming has been put in but there is still one and one-half inches to bearing. This condition should be rectified preferably by rebuilding the cribwork so as to provide good bearings for the stringers.

A trestle on spur to Caledonia Paper Mills has been replaced with two iron pipes. The other trestle on this spur contains six ties which are in poor condition and five elevation blocks which are split. These should be renewed. Otherwise this bridge is in fair condition.

Considerable improvement is noted in the bridges of this line, those not mentioned being maintained in safe condition, but it would be in the interest of economy to standardize the construction as much as possible and make repairs and renewals wherever feasible with material of a more enduring nature than wood.

Recommendations.

Renew defective timber on bridge over highway east of Whippany.

Renew defective ties and blocking on plate girder bridge west of Passaic River.

Surface stringers and track on Passaic River bridge.

Renew defective stringers on drainage opening east of Passaic River bridge.

Renew defective ties on plate girder bridge east of Passaic River.

Put cribwork in good condition on bridge leading to feed mill west of Whippany.

Renew defective ties and elevation blocks on Caledonia Paper Mills siding.

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Malapardis Branch.

Bridges.

Repairs have been made to the one trestle on this branch; four spans have been filled in with gravel and cinders, and the bridge is in fair condition and safe for the limited traffic over it.

MOUNT HOPE MINERAL RAILROAD.

This line extends from Wharton to Mount Hope, a distance of 3.54 miles. It is single track, used for passenger and freight, and laid with 70 pound rail. A number of poor ties were noted which should be renewed.

Recommendation.

Place at least 1,000 ties in track this year.

NEW YORK & LONG BRANCH RAILROAD.

Perth Amboy to Bay Head Junction.

This road extends from Perth Amboy to Bay Head Junction, 38.4 miles. It is all double track, laid with 10.06 miles 100 pound; 60.8 miles 90 pound; 3.59 miles 80 pound, and 1.73 miles 76 pound rail, all having six-bolt angle bars. The track is ballasted with 23 miles of stone and the balance with gravel and cinders, the rail and ballast conditions being the same as a year ago.

All cuts and fills are of full width, properly sloped and in good condition. The drainage of the roadbed is good except through Asbury Park, where work has been started to raise the track slightly and provide for proper drainage. The line and surface of track are good throughout.

Tie renewals have been made in sufficient quantity to maintain track in good condition, 15,000 creosoted ties and 5,000 oak ties having been placed in track since last inspection, and 17,000 more creosoted ties are ordered which will be placed in track this winter and spring. Screw spikes and Wolhaupter tie-plates are being used on all new creosoted ties.

Seven hundred and fifty tons of 100 pound American Railway Association A-section rail have been ordered to replace the 80 and 76 pound rail now in track. When this is done, the entire line will have nothing lighter than 90 pound rail in service.

Cast iron whistle and ring boards have been substituted for the wooden ones over the entire line. New tell-tales of the screen and rope pattern, with wooden standards, have been erected at all low bridges.

The station at Matawan is being altered and outbuildings moved back so as to provide for improved transit facilities, and a steam heating plant

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is being installed in the station. The station at Allenhurst has been extended in brick, and much improved. There are sixteen frame stations, five stone, and four brick stations on the line.

The road is protected with automatic electric block signals throughout.

Bridges.

All bridges on the line have been numbered according to their mile post from the north end of the Raritan River bridge.

The renewals have been made in trestle approach south of the Manasquan draw.

The steel viaduct over the Navesink River, and the half through plate girder bridge over Front Street, both in Red Bank, have been completed.

A new steel bridge with solid floor has been built over Hendrickson's Road, which is known as Bridge No. 11.06.

The track south of the drawspan of the Raritan River bridge has been surfaced and realigned. The settlement of the piers has been taken care of by installing proper sized shim plates. New guard rails, weighing 80 pounds, have been put on the bridge, replacing the old 62.5 pound guard rails. The running rails, 300 feet each side of and on the drawspan, have been replaced with 100 pound rails.

Bridge 0.93, carrying P. R. R. tracks over the N. Y. & L. B. R. R. The concrete protection for the I-beam floor is in poor condition, the concrete and even the expanded metal reinforcing having fallen from the floor. This bridge should be repaired in the best possible way, care being exercised in doing the work.

Bridge No. 3.87, a pile trestle at Black Creek. It is expected to replace this trestle with two spans of 50-ft. deck plate girders in 1916.

Bridge No. 19.21, Parker's Creek. The ties on this structure are in poor condition and should be repaired at the very earliest date—not later than December 1st, 1915. Large cracks have appeared in the back wall, but are not considered serious.

Bridge No. 20.81. Large cracks have also appeared in the back wall of this structure, but are not considered serious.

Bridge No. 22.65. The masonry of this structure should be pointed and grouted, if found necessary, under the two cracked bridge seat stones of the north abutment.

Bridge No. 24.16. Bearings of this bridge should be properly grouted, and some attention should be given to slight pointing of masonry.

Bridge No. 35.37. The timber bulkhead at south end of the bridge should be repaired.

Bridge No. 35.71, over Debbie's Creek. This is a pile trestle bridge, which is to be replaced with a deck plate girder bridge, the contract for this work having been let.

A thorough detailed inspection shall be made of the pile trestle bridges over Shark River and Manasquan River, and a report filed.

It is RECOMMENDED that the repair work as outlined above be carried out this year.

NEW YORK, SUSQUEHANNA & WESTERN RAILROAD.

Main Line.

This line extends from Granton Junction to Delaware River, east of Water Gap Station, a distance of 90.0 miles.

It is double track from Granton Junction to Riverside, a distance of 13.0 miles, the balance being single track.

Renewals of new 80 pound rail are being made from mile post 78.69 to 86.69, a distance of 8.0 miles.

Fifty per cent. of the ties requisitioned for 1915 have already been placed in track.

Trains are run by manual block signals from Granton Junction to Beaver Lake; from there to the State line telegraph orders are in force.

Recommendation.

Place at least 1,500 ties in track west of Warrington this year.

Bridges.

The recommendation made last year to place adequate longitudinal bracing in Bridge No. 92.51 has been complied with in a satisfactory manner.

A number of the steel bridges have been painted, defective ties and wooden guards renewed, and bearings repaired during the past year.

The work to be done as outlined in the company's program for this year consists in painting a number of bridges and renewing defective ties and wooden guards.

Bridge No. 3.51 has been reinforced in a satisfactory manner so as to permit the heavy loading to safely pass over it.

Bridge No. 9.90. This bridge is to be renewed with a reinforced concrete culvert.

Bridge No. 13.31, over the Hackensack River. Men are now at work reinforcing this structure.

Bridge No. 13.95, over N. J. & N. Y. Branch. The iron truss span bridge has been replaced with a double-track half through plate girder span. No repairs have been done to the stone masonry abutments, but work of building bridge seats will be done this year.

Bridge No. 32.79. A few defective ties on this bridge should be renewed. The ties on this bridge are subject to bending stresses and should be kept in good condition.

Bridge No. 37.84. The stringer bearing on east abutment is poor, but attention will be given to this immediately.

Bridge No. 43.30. This bridge was rebuilt with steel girders last year.

Bridge No. 87.60 is a temporary structure which the company expects to rebuild during the current year.

Bridge No. 90.09. This bridge is being replaced with a reinforced concrete culvert. The masonry abutments have been completed for some time. It is expected to complete this bridge during the summer.

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The remaining bridges are in fair to good condition, and slow order is maintained over the light bridges.

Edgewater Branch.

This branch extends from Little Ferry Junction to Edgewater, a distance of three miles. Fifty-two hundred feet of it is tunneled under the Palisades. This branch is used for freight, is laid with 80 and 71 pound rail, and is ballasted with cinders. Sufficient tie renewals are being made to keep track in safe condition. Three interlocking towers, one at Little Ferry Junction and one at each end of the tunnel, control the train movements on the branch.

Bridges—Undercliffe Branch.

The bridges on this branch have apparently not received very much attention during the last year. While they are not at present unsafe, they have been allowed to deteriorate so far that considerable work is necessary in order to put them in good condition.

No. 10.25. A cracked seat stone on the north pier was carefully examined. No movement is apparent, but the masonry should be pointed.

No. 10.80 was designed to open for passage of boats. It has not been opened for many years, and the operating struts and machinery have rusted so badly as to be useless for their purpose. The main girders are becoming rusty in places and should be painted, and the masonry needs pointing.

No. 11.07. Masonry is in need of pointing, and the bearing under the east end of the north girder only touches at one corner. The east end of the south girder is up $\frac{1}{4}$ " from bearing. The ends of the girders should be brought to proper bearing.

No. 11.22. At the west end of the westbound track the rails are shimmed up $\frac{3}{4}$ " on the ties. These shims should be removed and the stringers surfaced up so that the rails will bear directly on the ties. The approaches to the bridge should be brought to good surface also. A number of broken stones are in the abutments. Two bridge seat stones in west abutments are broken and pointing is out of joints. The masonry should be thoroughly pointed. Metal work should be scraped and painted, as recommended last year.

No. 11.80, an overhead bridge carrying the Hackensack Plank Road, has its floor in poor condition and ironwork rusty. The floor is badly worn and eight short planks are rotten. The poor planks should be renewed and ironwork painted.

A drain at the New York Edison Company's plant has one poor cap. The bottom under the ends is soft; a deflection of $1\frac{1}{2}$ " was noted under an engine. This small opening might with economy be replaced with a cast iron pipe. The north bent should be renewed.

A drain at Spencer Kellogg & Son's plant is in poor condition; five poor ties were noted and the drain is foul. The stringers should be raised about 10 inches, poor ties renewed and drain cleaned out.

One bridge, No. 12.81, carrying River Road, is in fair to good condition.

It is RECOMMENDED that the repair work above noted be done during the current year.

Lodi Branch.

This branch extends from Lodi Junction to Lodi, a distance of two miles. It is single track, used for passenger and freight, laid with 80 and 71 pound rail, and is ballasted with cinders. About seventy-five per cent. of the ties requisitioned for 1915 have been placed in track, although at the time of inspection a number of poor ties were noted. The line and surface of track are fair. Derails were noted on all sidings. No signals are in operation on this branch.

Recommendation.

Place at least 500 ties in track by September 1st, 1915.

Bridges.

There is but one bridge on this branch, a small timber trestle, which is maintained in fair condition.

Passaic Branch.

This branch extends from Passaic Junction to Passaic, a distance of 3.0 miles. It is single track, laid with 71 pound rail, and is used for freight only. A number of poor ties were noted, but renewals are being made in sufficient number to keep track in safe condition.

Bridges.

The three wooden trestles on this branch are in fair condition and safe for the low speed freight traffic.

Middletown Branch.

This branch extends from Beaver Lake to State Line, a distance of 20.0 miles, and is used for passenger and freight. It is single track, laid for sixteen miles with 80 pound rail, and the balance 70 pound. The track is ballasted with cinders and gravel. Trains are run by telegraph orders.

The Lehigh and Hudson River R. R. grade crossing at Franklin Furnace is protected from tower by interlocking home and distant signals.

This branch has been maintained in safe condition.

Recommendation.

That the annual percentage of ties be placed in track as early as practicable.

Bridges.

The bridges are kept clean and are all in fair to good condition.

Bridges No. 60.24 and No. 60.91. The wooden bearings under main girders are to be renewed this year. These two bridges are light but have been strengthened by the placing of a temporary pile bent located about midway between the stone abutments.

Bridge No. 63.86. The wooden sills on top of the stone piers have been securely anchored to the masonry, thus making a more rigid and safer structure.

The bridges are safe for the traffic over this branch.

Delaware Branch.

This branch extends from Columbia Junction to Delaware, a distance of three miles. It is single track, laid with 75 pound rails, and ballasted with cinders. Drainage of roadbed is properly taken care of. 400 ties are required in order to keep the track in fair condition. The line and surface of track near Delaware consists of sharp curves and heavy grades. Many of the track bolts are loose and should be tightened. Travel on this branch is light, trains being operated at low speed, and according to train orders.

Recommendation.

Place at least 400 ties in track during the year, and tighten track bolts.

Bridges.

There is only one bridge on this branch, the other openings consisting of pipe and stone box culverts.

All are in fair condition.

Columbia Branch.

This branch extends from Columbia to Delaware, a distance of 3.45 miles. It is single track, used for passenger and freight, and laid with 70 pound rail. Ballast is cinders and gravel. A number of poor ties were noted which should be renewed.

Trains are run by telegraph orders.

Recommendation.

That the annual percentage of ties be placed in track as soon as practicable.

Macopin Lake Branch.

This branch extends from Charlottesburg to Macopin Lake, a distance of 1.56 miles. It is single track, laid with 60 pound rail, and ballasted with cinders and gravel. This branch is used for freight traffic only. Line and surface are good.

Although a number of poor ties were noted the track generally is being maintained in a safe condition.

Bridges.

There is but one bridge on this branch, a wooden stringer bridge of 17 feet 6 inches clear span, with stone and concrete abutments. It is in fair condition.

PEMBERTON & HIGHTSTOWN RAILROAD.

This line extends from Hightstown to Lewistown, a distance of 22.7 miles. It is single track, used for passenger and freight, and is laid with 50 and 60 pound rail. Ballast is sand, gravel and cinders. A number of poor ties were noted especially south of New Egypt.

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Recommendation.

Place at least 4,000 ties in track by October 1st, 1915, to keep track in good, safe condition.

Bridges.

The recommendations made in annual bridge inspection report of 1914 have all been complied with.

The bridges on this line are in fair to good condition, except for some minor renewals which are required, as noted below.

Bridge No. 3. Three wooden braces which are in bad condition should be replaced with sound timber.

Bridge No. 4. The wooden cap of north bent is badly rotted and should be renewed.

Bridge No. 8. One poor batter post in second bent from south end of the bridge should be replaced.

Bridges No. 15, No. 16 and No. 17. A number of defective ties and guards should be renewed.

It is RECOMMENDED that the work as outlined above be done during the current year.

PENNSYLVANIA RAILROAD.

New York Division—Main Line.

A four-track railroad, 56.75 miles long, extending from Jersey City to the Pennsylvania State line at Delaware River west of Trenton. The changes from South Elizabeth to one mile east of Colonia, comprising the raising of tracks and dividing the grades at crossings, are now nearing completion. They extend over a distance of five miles and are six-track. All six tracks have been completed and four of them are in service. The other two are temporarily used for construction purposes. The station at Rahway is nearly finished.

The track is laid with 0.5 per cent. of 85 pound rail, 86 per cent. of 100 pound rail, and 13.5 per cent. of 125 pound rail. Stone ballast is used throughout. Tie plates and cut spikes are being used everywhere. Automatic block signals protect the entire line, about 80 per cent. of them being electro-pneumatic and the balance electric. In addition to the signals on that part of the line used by the Hudson and Manhattan trains between Jersey City and Newark, automatic train stops are used. A change of alignment is contemplated through the City of Elizabeth, but the actual work of construction has not yet been started in the field. The entire line is in first-class condition.

Bridges.

Bridges are being well maintained. No. 235, in Jersey City, is being rebuilt on the eastbound passenger and outbound engine tracks. A crib wall along Academy Street, Jersey City, and extending westward of the New Jersey Junction Railroad, is in poor condition. The company is about to

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begin the work of replacing this with a concrete toe wall and sloped bank. This will require the abandonment of one yard track.

The bridges through Elizabeth are old. When the change of line through here is made, these bridges will all be replaced with new ones up to the requirement of modern loading.

Through the new Rahway station, which is on a curve, guard rails are laid across the bridges. The ends are not far apart now, and it would add to the safety of operation if these guard rails were connected and extended the full length of the station platforms.

On No. 3 track on Bridges 31.43 and 31.49, in New Brunswick, the guard timbers were noted to be in poor condition. The overhead highway bridge east of Plainsboro is being rebuilt, and a new undergrade one at Bayway Avenue is under construction, four tracks of which are completed. The remaining two tracks will soon be done.

Recommendations.

Extend guard rails continuously in front of the platforms of the new Rahway station.

Renew defective guards on No. 3 track on Bridges 31.43 and 31.49 in New Brunswick.

Passaic Branch.

This branch is a double track, low speed freight line. It extends from Waverly through East Newark to connection with the main line near the Meadow Shops, a distance of 4.0 miles. It is ballasted with cinders and laid with 100 pound rail. Tie plates are being used on all soft ties, working up to placing them on all ties. The track is in good condition and tie renewals are sufficient. Signals are automatic electric, arranged to signal for both directions on each track.

At several of the bridge approaches a better shoulder should be maintained up to the back wall of the bridge. Those particularly noted were No. 1.90, at west end; No. 2.52, at east end, and No. 2.71.

Bridges.

Bridges are maintained in good condition except for the shoulder on approaches, as noted above. Inside guard rails are considered unnecessary on these bridges due to the low speed freight movement.

Recommendation.

Maintain good shoulder at all bridge approaches up to the bridge back walls.

New York Bay Railroad.

This double-track freight line extends from Waverly to a point near the east end of the Newark Bay bridge, a distance of 4.7 miles, from which point to New York Bay it is under the Manhattan Division. Across Newark Bay the trestle and draw are used jointly by the Lehigh Valley Railroad.

The track is laid with 14 per cent. 85 pound rail and 86 per cent. 100 pound rail. Ballast is cinders. Signals are manual block. Low speed movement

is maintained over the entire line. The track is in good condition for the traffic.

Bridges.

The old part of the Newark Bay trestle, west of the drawbridge, is undergoing extensive repairs. East of the draw the trestle is new, having been rebuilt after the fire of 1913. Concrete pipe is on hand for replacing one of the timber drainage openings on the Newark Meadows. The other small openings are to be treated in a similar manner. All bridges are maintained in good condition.

West Newark Branch.

This is a freight branch serving various freight industries in Newark, extending from West Newark Junction to 18th Avenue, Newark, a distance of about 1.8 miles. It is double track from West Newark Junction to Elizabeth Avenue, and from Runyon Street to Waverly Yard. The remainder of the line is single track. It is ballasted with cinders and is laid with 14 per cent. 70 pound rail, 31 per cent. 85 pound rail and 55 per cent. 100 pound rail. There are no signals, the line being entirely within yard limits. The branch is maintained in fair to good condition.

There are no bridges on the branch.

Princeton Branch.

This branch extends from Princeton Junction to Princeton, 3.2 miles, and it is normally single track. A long siding is laid, however, so that at times when great crowds gather at Princeton the line may be operated as double track. The track is laid with 85 per cent. 85 pound rail, and 15 per cent. 100 pound rail, and ballasted with cinders. Signals are manual block except when double track is used, at which time the signals are changed to automatic electric. Ties are distributed along the line for renewals. When they are in place the line will be in good condition.

Bridges.

Repairs are being made to the one bridge on the branch which will put it in good condition.

Millstone Branch.

This is a single-track line, extending from Millstone Junction to East Millstone, a distance of 7.2 miles. The ballast is cinders. The track is laid with 75 per cent. of 85 pound rail and 25 per cent. of 100 pound. Signals are manual block. Rail has been relaid on the western end of the branch and track conditions greatly improved. The track is now in good condition for the traffic.

There are no bridges on this branch.

Kingston and Rocky Hill Branch.

The two branches are continuous and extend for 7.2 miles. The ballast is cinders. From Monmouth Junction to Kingston the track is laid with 7 per cent. of 75 pound rail, 71 per cent. of 85 pound rail, and 22 per cent. of 100

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pound rail. From Kingston to Rocky Hill the rail is 44 per cent. 70 pound rail, 2 per cent. 75 pound rail, 34 per cent. 85 pound rail, and 20 per cent. of 100 pound rail. Signals are manual block. The track is kept in fair condition for the traffic, speed being limited to thirty miles per hour for the entire line and further reduced to 10 miles per hour around the many sharp curves.

Bridges.

Only one bridge remains on the branch. Recommendations made last year concerning it have been attended to, and it is now in good condition.

Perth Amboy and Woodbridge Branch

This is a double track line, extending from Perth Amboy Junction to connection with the Central Railroad of New Jersey near QW tower, and single track from there into the old station at Perth Amboy, a total of 6.4 miles. The rail is 75 per cent. 100 pound and 25 per cent. 85 pound. The double-track portion of the line is ballasted with stone and the single-track portion with cinders. Automatic electric block signals are used from Perth Amboy Junction to QW tower. The remainder of the line into Perth Amboy is manual block. The entire line is in good condition.

Bridges.

The work of dividing the grades at Perth Amboy Junction is completed so that no grade crossings exist. Bridge No. 0.48, over Sucker Brook, is being raised to conform to the new grade line. No. 2.07 is temporarily shored up to make it safe for the E-6 engines. The other bridges on the line are in good condition.

Bonhampton Branch.

This single-track branch extends from Metuchen to Bonhampton, about 1.7 miles and is used only as a freight siding. The track is laid with 10 per cent. 70 pound, and 90 per cent. 100 pound rail, and ballasted with cinders. There are no signals. The track is maintained in fair condition for the traffic.

Bridges.

The two bridges on the branch are in good condition.

Chester Street Branch.

It is a double-track line for rapid transit passenger service on the upper deck and a single-track freight branch underneath. The upper line is protected by automatic electro-pneumatic block signals. The track is laid with 83 per cent. 85 pound rail and 17 per cent. 100 pound rail. Ballast is stone and cinder. No signals are on the lower or freight line except at the draw-bridge, only one engine and crew working on this branch at a time.

The track and bridges are all in good condition.

Belvidere-Delaware Branch.

The line extends from Manunka Chunk to Trenton, a distance of 66.6 miles. It is single track, laid with 100, 88 and 85 pound rail, and is ballasted with stone, slag gravel and cinders. In 1914, 9.6 miles of 100 pound, 2.5 miles of 88 pound, and 56.3 miles of 85 pound rail were laid. Ties are in fair to good condition, with about 40 per cent. of the requisition for ties for 1915 already in track.

Derails are connected to all switches leading from the main track, and trains are operated by telegraph block signals. The two canal drawbridges in Trenton are protected by interlocking signals and smash boards.

Recommendation.

Make necessary tie renewals, replacing all ties which are in poor condition, before October 31st, 1915.

Bridges.

Every structure recommended for repairs last year has received attention. Recommendations have all been carried out except for Bridges Nos. 50 and 83, which have had repairs of a temporary nature made to them so that safety is assured until they can be reached in the program for permanent repair for heavy loading. The small culvert east of Bridge No. 57 has been treated in a similar manner. In the following list the work done on each bridge is noted in detail:

Overhead highway bridge between Bridges Nos. 95 and 94, at mile post 65.9. The old wooden structure was destroyed by fire in 1914. It has recently been rebuilt with a half through plate girder span having wooden floor. The approaches and bents supporting plate girders at both ends are constructed of wood. The bridge is now in good condition.

Bridge No. 94. The steelwork of this bridge is rusted and should be scraped and painted.

Bridge No. 93 is a half through plate girder bridge on stone abutments and sidewalk columns. It is expected that this structure will be renewed during the current year.

Bridge No. 92, over a stream and two roads. The steel spans over the river are temporarily supported at the center of each span on pile bents, all of them being in good condition.

Bridge No. 89 is a concrete slab which was built in 1914.

Bridge No. 88, a stone arch, was lined with reinforced concrete in 1914.

Overhead bridge at Foul Rift Road east of Bridge No. 85 has had the abutments toward the river pointed, as recommended, and is now in good condition.

Bridge No. 83, over road at Roxbury. It was recommended last year that this structure be rebuilt. This recommendation has not been complied with, but temporary relieving bents have been placed in front of each abutment, making the bridge safe for the traffic until the stone abutments are rebuilt.

Bridge No. 82. It was recommended last year to either rebuild this arch or line it with reinforced concrete in 1915. The arch has been pointed and

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reinforced with timber placed at the ends of the arch and tied together with two steel rods. The pointing is in good condition and no cracks could be detected. This repair is sufficient to maintain it in safe condition until it is lined as recommended.

Bridge No. 81. It was recommended last year to either rebuild this bridge with a reinforced concrete slab or deck girders in 1915. The arch has been pointed, as recommended, and reinforced similar to Bridge No. 82. The repair work is sufficient to make it safe until it is rebuilt.

Bridge No. 79. Some slight pointing should be done to barrel of arch.

Bridge No. 78. It was recommended last year that this arch be lined with reinforced concrete in 1915. The arch has been pointed, as recommended, and reinforced similar to Bridge No. 82. It is temporarily in safe condition.

Bridge No. 75. Some slight pointing should be done to this arch.

Bridge No. 74. Recommendation made last year to substitute plate and angle diaphragms for the present sway frames, riveting the diaphragms securely to the stiffener angles of the main girders, has been complied with in a satisfactory manner.

Bridge No. 73. This stone arch was lined last year with reinforced concrete.

Bridge No. 72. This stone arch was lined last year with reinforced concrete.

Bridge No. 68 is a coal trestle in the main track at Phillipsburg. Material is ordered for making repairs to this structure, which include renewing a few defective stringers and caps.

Bridge No. 66, opposite Andover Furnace. This bridge is being filled.

Bridge No. 65. A temporary relief bent is still maintained under this bridge. It is expected to fill this bridge in during the current year.

Culvert north of Carpenterville, mentioned last year as east of Bridge No. 59. It was recommended to line this arch with reinforced concrete. Instead, the arch has been pointed and reinforced with timber placed at the ends and tied together with two steel rods. The arch is in safe condition temporarily.

Bridge No. 58. Some slight pointing should be done to stone pier.

The stone culvert over stream south of Bridge No. 58 was pointed and reinforced with timber placed at the ends and tied together with two steel rods, all in fair condition. It is expected that this arch will be lined with reinforced concrete during the current year.

Bridge No. 57. The recommendation made last year to place riprap in front of toe of apron has been complied with.

Bridge No. 56. Recommendation made last year to point masonry has been complied with.

Bridge No. 55. Defective ties and guards should be renewed.

Bridge No. 54. Defective ties and guards should be renewed.

Bridge No. 53. Some slight pointing should be done to the arch.

Bridge No. 50. The recommendation made last year was to line arch with reinforced concrete. Instead the arch has been pointed and reinforced with timber placed at the ends and tied together with two steel rods. This arch is in safe condition temporarily.

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Bridge No. 48, a stone arch, is in need of some slight pointing.

Bridge No. 47½. A recommendation was made last year to rebuild this entire bridge. The structure was filled in this spring.

Bridge No. 47¼, a stone arch, was lined last year.

Bridge No. 38, a stone arch, was lined last year.

Bridge No. 35, a stone arch, is in need of some slight pointing.

Bridge No. 32. The recommendation made last year to point masonry has been carried out. The wing walls are in bad condition, part of them having fallen down, and should be rebuilt.

Bridge No. 30. The recommendation made last year to point masonry has been complied with.

Bridge No. 26. Slight pointing should be done to both stone abutments.

Stone arch south of No. 24, over stream, needs pointing. This stream empties into a stone arch under the canal. The opening of canal arch is filled up with mud to the ring of the arch. The canal company should relieve the situation by cleaning away all obstructions.

Bridge No. 23, over canal feeder. Stone abutments need slight pointing.

Timber trestle and half through plate girder bridge over canal feeder to Crushed Stone Company siding. Defective timber should be renewed.

Bridge No. 20, over spillway. It is expected that this structure will be replaced with 20 lines of 36" concrete pipe in 1916. The structure is safe till next year, but if bridge is not replaced, the masonry piers should be pointed.

Bridge No. 15, over spillway. Defective ties should be renewed.

Bridge No. 12, a stone arch, was reinforced with concrete in 1914. The concrete is spalling in a few places owing to the fact that it was put in during freezing weather. This condition should be remedied by patching.

Bridge No. 10 is a stone arch over stream, and is carried under the canal. The canal portion of the arch is in need of pointing.

Bridge No. 9, over spillway. This structure has just been completed with 20 lines of 36" diameter concrete pipe and one 72" diameter concrete pipe, all in good condition.

Bridge No. 8 is a concrete arch over stream. This is a new structure, having been built in 1914, and is in good condition.

Bridge No. 7, over spillway. The recommendations made last year to renew defective ties and guards have been carried out. The stone piers are in need of a little pointing.

Bridge No. 6, over stream. This arch is continuous under canal and water is leaking through. Pointing is needed to put this in fair condition for canal portion only.

Bridge No. 5, over stream. The recommendation made last year to point masonry has been carried out. This arch extends under canal, and water is leaking through. Canal portion of arch should be pointed.

Bridge No. 4, over spillway. Rebuilding of this structure was completed this month. It consists of fourteen 36" diameter concrete pipes, all in good condition. It was recommended for repairs last year.

Overhead bridge at Calhoun Street. The recommendation made last year to point masonry has been complied with. Steelwork is in need of painting.

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Bridge No. 1, over canal. This structure is in fair condition except blocking on south approach, which needs to be shimmed.

The remaining bridges are in fair to good condition.

It is RECOMMENDED that the work outlined above be done during the current year.

Flemington Branch.

This branch extends from Lambertville to Flemington, a distance of 11.5 miles. It is a single track, used for passenger and freight, and is laid with 100, 88, 85 and 70 pound rail. Ballast is cinders. Ties are in fair to good condition. The recommendation made last year to lay 250 ties per mile has been complied with.

Signals are telegraph block, and speed is limited to 40 miles per hour.

The track is being maintained in a safe condition.

Bridges.

The recommendations made last year have all been carried out.

On Bridges Nos. 2, 4, 6 and 11 a number of defective ties should be renewed.

Bridge No. 18, over stream and road. Masonry piers under the steel bents have been renewed with concrete.

Bridge No. 19. Some light pointing should be done which will put the abutments in good shape.

Bridge No. 21. The I-beams which are rusted should be scraped and painted.

Bridge No. 23. The lower flanges of the main girders which are rusted should be scraped and painted.

The remaining bridges on this branch are in fair to good condition for the light traffic over the branch. The steelwork in general is being kept clean and painted.

It is RECOMMENDED that the work outlined above be done during the current year.

Bridges—Small Freight Branches.

Martin's Creek Branch.

The deck plate girder bridge over the Delaware River is the only bridge on this branch. The portion of it over the river is in good condition, but the approach trestle on east end needs some tie and timber renewals.

Recommendation.

Renew defective ties and timber in framed bents in east approach.

Phillipsburg Branch.

The branch contains two bridges both of which are in fair condition. Recommendations made following last year's inspection have been carried out. Bridge No. 2, a deck plate girder over road, is supported temporarily on pile bents placed in front of each abutment, making it safe for the traffic.

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Millham Branch.

The recommendation made last year for pointing masonry on Bridge No. 1 has been complied with. Relief bents are still in place and in good condition under the center of the span, in order to provide additional security for the heaviest engines. The bridge is a two-span deck plate girder on stone abutments and pier, and is in fair condition.

Enterprise Branch.

The one bridge on this branch is an A-frame drawbridge in fair condition. Ties on this draw are to be renewed.

Trenton Branch.

Bridge No. 4 is a deck plate girder on stone abutments. A relief bent is still maintained under the girder to make the bridge safe for the heaviest engines. The masonry is in need of some light pointing, and some of the ties are defective.

Recommendation.

Point masonry and renew defective ties on Bridge No. 4.

South Trenton Branch.

Bridge No. 5 is a stone arch carrying the railroad and canal, immediately alongside, over Assunpink Creek. The overflow water from the canal leaks through this arch, and the arch is in need of pointing. This condition should be looked into by the company and measures taken to prevent damage from excessive leaking.

Recommendation.

Point masonry of Bridge No. 5 and remedy condition so that leaks may be stopped.

Main Line—Trenton Division.

This branch extends from Fishhouse to South Amboy, a distance of 56.6 miles. It is double track, except from Bordentown to Old Bridge and through Burlington, which is single track. The track is ballasted with cinders, and laid with 100, 90 and 85 pound rail. Forty per cent. of 1915 ties, as well as 50 per cent. of tie plates, are in place.

Signals are telegraph block. Cooper's Creek and Delanco drawbridges are protected by interlocking signals and smash board.

At Riverside there is a new concrete platform being laid with roof over part of it for the accommodation of passengers.

This branch is maintained in good condition.

Bridges.

Recommendations made as a result of last year's annual bridge inspection have been complied with, except in the case of Bridge No. 8, which is noted below.

Bridge No. 7. Some pointing is needed on stone pier.

Bridge No. 8. The recommendations made last year have been partly complied with. The masonry was pointed, but the southwest wall plate under main girder has not been reset. This is to be attended to very soon by the railroad company.

Bridge No. 9. The recommendations made last year to point masonry and repair back walls have been complied with, and the work has been satisfactorily done.

Bridges No. 15 and 17 are in need of some slight pointing.

Overhead highway bridge at Prince Street, Bordentown, is a wooden structure, the timber stringers of which are poor at bearings on abutments. The sills under timber bents are also poor. The defective timber in this bridge should be renewed.

Bridge No. 20 was rebuilt with a reinforced concrete slab on concrete abutments in 1914.

Bridge No. 22 is in fair to poor condition. This bridge is to be rebuilt at once, the machinery, tools and materials having already been delivered at the site.

Bridge No. 25. The defective ties in this bridge have been renewed.

Bridge No. 29, at Jamesburg, is still being carried on relief bents and is in safe condition.

Bridge No. 39. The girders still rest on timber bents at the center, but bents are in good condition.

The remaining bridges on the line are in fair to good condition.

It is RECOMMENDED that the work outlined above be done during the current year.

Burlington Branch.

This branch extends from Burlington to Mount Holly, a distance of 7.3 miles. It is single track, laid with 70 and 60 pound rail, and is ballasted with gravel and cinders. This branch is used for both passenger and freight traffic. Ties are in fair condition, and line and surface are fair. The track is being maintained in safe condition.

Recommendations.

Place at least 1,250 ties in track this year.

Bridges.

There are three bridges on this branch:

No. 1. A number of ties and guards on trestle approach are in poor condition and should be renewed.

No. 2, a pile trestle bridge. This structure is in fair condition but some necessary repairs are to be made during the current year. It is expected that this structure will be replaced with a reinforced concrete slab in 1916.

No. 3. A number of ties and defective timbers in bents of the trestle approach are to be renewed during the current year.

It is RECOMMENDED that defective ties and timber in Bridges Nos. 1 and 3 be renewed during the current year.

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Kinkora Branch.

This branch extends from Kinkora to Lewistown, a distance of 10.7 miles. It is single track, used for passenger and freight, and is laid with 100, 85, and 80 and 70 pound rail. Ballast is cinder. Fifty per cent. of 1915 ties are in track; curves have tie plates.

The track is being maintained in safe condition for the traffic.

Bridges.

The bridges on the branch are in fair condition, and traffic is very light.

Bridge No. 6 is still maintained in fair condition. It is expected that this structure will be renewed in 1916.

No recommendations.

Bordentown Branch.

This branch extends from Trenton to Bordentown, a distance of 6.1 miles. It is single track, used for passenger and freight, and is laid with one mile of 100 pound rail, the balance being 85 pound. Ballast is cinders. The line and surface of track are good. Fifty per cent. of ties requisitioned for 1915 have already been placed in track.

Signals are telegraph block. Derails were noted on all sidings. The track generally is being maintained in good condition.

Bridges.

Recommendations made last year have been complied with.

Bridge No. 2. Intermediate bents were placed in this bridge last year, making all bays in trestle approaches 6 feet 0 inches long.

Bridge No. 1. This bridge carries one main line track and one wye track. The cross frames between girders under wye track consist of but one member each. It is expected that an additional angle will be installed so that frames will properly brace the flanges of the girder. A masonry plate is required under east girder at south end of wye track, as the flanges of the girder rest directly on the masonry. Otherwise the bridges are in good condition.

It is RECOMMENDED that the work outlined above be done during the current year.

Jamesburg Branch.

This branch extends from Jamesburg Junction to Monmouth Junction, a distance of 6.0 miles. It is double track, used for both passenger and freight, and is laid with 100, 90 and 85 pound rail. Ballast is cinders. Ties are good. The line and surface of track are fair to good. Telegraph block signals are in operation.

This line is maintained in good condition.

Bridges.

There are three bridges on this branch which are in fair to good condition except the highway bridge at Washington Road, the posts of this structure being bad at the bottom. These posts should be renewed.

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Recommendation.

Renew four wooden posts of highway bridge at Washington Road.

Freehold and Jamesburg Branch.

This branch extends from Jamesburg to Sea Girt, a distance of 27.5 miles. It is single track, used for passenger and freight, and is laid with 85 pound rail in good condition. Ties are in good condition. The line and surface of track are good. The track is ballasted with cinders. Telegraph block signals are in operation.

Bridges.

Bridge No. 4 appears to be light. It is expected that this bridge will be strengthened or be rebuilt. The masonry needs slight pointing.

Bridge No. 5. This bridge is similar to Bridge No. 4. It is also expected to either strengthen or rebuild it.

Bridge No. 10. Renew defective ties and grout bearing under southwest bearing of main girder.

Bridge No. 16 was replaced last year with a reinforced concrete slab.

The remaining bridges on this branch are in fair to good condition.

It is RECOMMENDED that the work outlined above be done during the current year.

Camden and Burlington County Railroad.

This road extends from Pemberton to Camden, a distance of 22.5 miles. It is single track, used for both passenger and freight, and is laid with 100, 90 and 85 pound rail. Ballast is gravel and cinders.

Sufficient tie renewals have been made to keep the track in good, safe condition.

Bridges.

All the bridges are in fair to good condition except as noted below.

Bridge No. 1/2, over Delaware River R. R. Where the web of main girder had rusted through, it has been reinforced with steel plates, as recommended in special report of October 19th, 1914. The bridge is now in good condition.

Bridge No. 3. Under the main girder, a bearing plate which is skewed around should be reset. The back wall should be cut away to allow proper clearance between the end of girders and face of back wall.

Bridge No. 4. A few defective ties were noted which should be renewed, and back wall should be cut away to allow proper clearance between the end of girders and face of back wall.

Bridge No. 5. Steelwork needs painting.

Bridge No. 6. The top flange of the thorough plate girder span needs painting.

Bridge No. 7. Defective piles should be renewed. A new deck was put on this bridge last year.

Overhead wooden highway bridge between Pemberton and Lewistown. Two caps and two sills which are in poor condition should be renewed in order to put the bridge in fair condition.

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It is RECOMMENDED that the work outlined above be done during the current year.

Medford Branch.

The branch extends from Medford to Mount Holly, a distance of 6.1 miles.

This branch is single track, used for passenger and freight, and is laid with 70 pound rail. Ballast is cinder and sand. A number of poor ties were noted, although the track is reasonably safe for the traffic and speed, the latter being restricted to thirty miles per hour. Telegraph block signals are in use.

Recommendation.

Place at least 1,200 ties in track this year.

Bridges.

There are two bridges on this branch, both of which are in good condition.

Vincentown Branch.

This branch extends from Ewansville to Vincentown, a distance of 2.8 miles. It is single track, used for passenger and freight, and is laid with 70 and 60 pound rail. The surfacing of track needs attention, as it is rough in places; also a number of poor ties were noted. Telegraph block signals are in operation.

Recommendations.

Place at least 600 ties in track this year.

Bring track to good surface.

Philadelphia and Long Branch Railroad.

This road extends from Bay Head to Birmingham, a distance of 46.1 miles. It is single track, used for passenger and freight, and is laid with 90, 85, and 70 pound rail. Ballast is gravel and cinders.

The track has been maintained in good condition.

Bridges.

The recommendation made last year for pointing abutments of Bridge No. 12 was complied with, and this bridge is now in good condition.

Bridge No. 8, over Hilliard's Creek, is being replaced with a reinforced concrete slab on concrete abutments. Foundations for abutments are about completed.

Bridge No. 13, over Barnegat Bay. This bridge is too long to have a detailed inspection made at this time; but a number of poor ties and guards were noted. Some caps appeared to be getting soft. This bridge will be inspected later when a special report will be made on its condition.

Bridge No. 14 has been replaced with a 36" diameter cast iron pipe.

Bridge No. 24 is all filled in, except the opening for the channel. The wooden trestle over this opening is in fair condition and safe for the traffic. As noted last year, this trestle is to be replaced with a three-span reinforced concrete bridge.

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Recommendation.

Renew defective timber in Bridge No. 13.

Brown's Mills Branch.

This branch extends from Brown's Mills Junction to Brown's-Mills-in-the-Pines, a distance of 1.8 miles. It is single track, used for passenger and freight, and is laid with 70 pound rail. The switches at ends of branch have 85 pound rail. Ties are in fair condition, although a number of poor ones were noted. The track is ballasted with cinders and sand. Line and surface are fair. Speed is restricted to 30 miles per hour.

This road is being maintained in safe condition for the traffic and restricted speed.

Recommendation.

Place at least 300 ties in track this year.

Island Heights Branch.

This branch extends from Island Heights Junction to Island Heights, a distance of 1.2 miles. It is single track, used for passenger and freight, and is laid with 70 pound rail, which is in good condition. Ballast is gravel. The one drawbridge on this branch is protected by interlocking signals and smash boards.

The track is maintained in good condition.

Bridges.

The one bridge on this branch, that over Toms River, has been repaired and is now in fair to good condition. Speed limit is still maintained at fifteen miles over the trestle approaches, and ten miles over the drawbridge.

Millham Branch.

This branch extends through Coal Port Yard to Millham, a distance of 3.3 miles. It is single track, used only for freight, and is laid with 100, 85 and 75 pound rail. Ballast is cinders.

This branch is maintained in safe condition for the traffic.

Enterprise Branch.

The branch extends from Trenton (coal port) to East Trenton, a distance of 1.73 miles. It is single track, used for freight only, and laid with 85, 70 and 60 pound rail. The track is ballasted with gravel, and the line and surface is fair. Ties are in fair to good condition.

This branch has been maintained in good, safe condition.

South Trenton Branch.

This branch extends from Trenton (coal port) to Hamilton Avenue, a distance of 0.67 mile. It is double track from State Street to Hamilton

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Avenue, and the balance single track. The track is ballasted with gravel and cinders, and laid with 100 and 85 pound rail.

This branch has been maintained in good condition.

PHILADELPHIA & BEACH HAVEN RAILROAD.

This road extends from Manahawken to Beach Haven, a distance of 12.0 miles. It is single track, used for passenger and freight, and is laid with 100, 85 and 70 pound rail. The line and surface of track are fair. Ballast is cinder and gravel. Tie renewals have been made in sufficient quantity to keep track safe.

Manual block signals are in use during the summer season and telegraph block in winter. Speed is restricted to 45 miles per hour.

Bridges.

There are seven bridges between Manahawken and Barnegat City Junction, which are maintained in fair condition.

Recommendation made last year to tighten bolts carrying ties on Bridge No. 6 has been complied with.

There are no bridges between Barnegat City Junction and Beach Haven. The two wooden trestles were filled in last year.

PHILADELPHIA & READING RAILROAD.

Delaware & Bound Brook Railroad.

This road extends in New Jersey from Delaware River to Bound Brook Junction, a distance of 21 miles. It is double track, with a number of center sidings, and is used for passenger and freight. Two additional tracks, Nos. 3 and 4, now extend from Skillman to Belle Mead. The track is ballasted with stone, and laid with 100 pound rail. Line and surface are fair to good, except Track No. 3, which is in poor surface, and over which speed is restricted to 25 miles per hour; men were at work here at the time of inspection renewing ballast and surfacing track.

Hall automatic signals are in use.

Bridges.

The bridges generally are in fair to good condition. The repair work outlined under each bridge should be done during the year to maintain them in good condition to safely carry traffic:

Bridge No. 30, a deck plate girder bridge over the Belvidere Division and the Raritan Canal feeder. It was recommended last year that the deck of span over the canal feeder be renewed, but this has not been carried out as yet. A second recommendation is, therefore, made that this decking be renewed by June 1st, 1915.

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Bridge No. 31, a stone arch over stream. It was recommended last year that the parapet and wing walls be rebuilt, and the barrel of arch pointed. This work has been completed in a satisfactory manner.

Bridge No. 34, a deck plate girder bridge. It was recommended last year that defective timber in deck should be renewed. As this has not been done, the recommendation is, therefore, repeated. Also stone masonry should be pointed.

Bridge No. 35, an overhead wooden bridge, is in fair condition, except that sill on west side of railroad should be renewed.

Ties have been renewed on the overhead trolley bridge east of Pennington. The steelwork, however, is very badly in need of paint.

Bridge No. 39, a deck plate girder bridge over road, is in fair condition. The tie rod in west track which is missing should be replaced.

Bridge No. 40, a stone arch over stream, needs slight pointing.

The small cattle pass at tower south of Glenmore consists of I-beams on stone abutments. The west abutment is bulging, and wall should be rebuilt.

No. 42, a deck plate girder bridge over public road, is in fair condition, except that defective ties should be renewed, steelwork should be painted, and masonry pointed.

No. 47, a deck plate girder bridge over road. Recommendations made last year have been complied with. This bridge is in fair condition. Masonry in places should be pointed.

Bridge No. 48, an overhead pony truss bridge, which was rebuilt last year, is in good condition.

Bridge No. 50, an overhead pony truss bridge of stone masonry. The recommendations made last year have been complied with, the lateral rods in steel bents having been replaced with angle bracing, thus providing greater rigidity in the structure; also the masonry piers under columns have been made larger. This bridge is now in good condition.

Bridge No. 53, a pony truss overhead highway bridge. The recommendations made last year have been complied with. The lateral rods in steel bents should be adjusted; otherwise the bridge is in fair condition.

No. 56, a deck plate girder bridge over stream, is in good condition. Recommendations made last year have been complied with. An entire new lateral system has been installed, and additional stiffeners placed on girders, all of which materially helps to decrease the vibration which was causing the joints in masonry abutments to open up.

Bridge No. 57, an I-beam structure over cattle pass. A wooden bent has been provided under the west end of this structure to temporarily relieve the west abutment, which is in poor condition. The east abutment should be pointed. The bridge is temporarily safe for the traffic over it.

Bridge No. 58, an overhead wooden highway bridge, is in fair condition. Cribbing at west end of bridge should be renewed, as it is in poor condition.

Bridge No. 59, an overhead wooden highway bridge, is in fair condition. Cribbing at east end of bridge should be renewed.

Bridge No. 60, a deck plate girder bridge over stream. Recommendations made last year have been complied with. A new lateral system was installed, and new decking, which is now at the site, will be placed in the bridge very

shortly. The east abutment, which is of stone, is in fair condition. Stone masonry should be properly grouted and pointed during the current year.

Bridge No. 61, an overhead wooden highway bridge, is in fair condition. The cribbing at both ends of bridge, also sill and post in west bent, are in bad condition, and should be renewed.

No. 62, a deck plate girder bridge over stream, is in fair condition. Back walls should be cut out at east end so as to provide clearance between the ends of girder and face of back wall, thus making proper allowance for expansion.

No. 63, an overhead steel highway bridge, is in good condition, except that lateral rods in steel bents should be adjusted.

No. 64, an overhead wooden highway bridge, is in fair condition. The east bent of this structure should be renewed.

No. 65, a deck plate girder bridge over road. The recommendations made last year have not been complied with, namely, that masonry be pointed and that loose bearing stones under girders be renewed. These recommendations are therefore repeated.

No. 66, a deck plate girder bridge over stream. It was recommended last year that bearings under main girders be repaired. This bridge is now being reinforced with a new lateral system and additional stiffeners on main girders, and work of repairing bearings will be done at the same time.

No. 68, a wooden overhead highway bridge, is in fair condition. The sill in west bent should be removed, as it is in very bad condition.

No. 69, a through steel truss bridge of four spans. Steelwork is in good condition. A number of counter-rods in the trusses, and the lower lateral rods, are loose. These should be tightened up without delay.

The remaining bridges on the branch are in fair to good condition. Steelwork is being kept clean and well painted.

It is RECOMMENDED that the work as outlined above be done during the current year, except ties on Bridge No. 30, which should be renewed before June 1st, 1915.

Trenton Branch.

This branch extends from Trenton Junction to Trenton, a distance of 3.7 miles. It is single track, laid with 80 pound rail, ballasted with cinders, and is used for passenger and freight traffic. Line and surface of track are good. Hall automatic signals are in operation.

The track has been maintained in good condition.

Bridges.

There are no bridges on this branch, the only openings consisting of cast iron pipe and stone box culverts, all of which are in fair to good condition.

Port Reading Branch.

This branch extends from Port Reading Junction to Port Reading, a distance of 19.6 miles, and is used only for freight. It is single track, ballasted with cinders, and for thirteen miles it is laid with 90 pound rail, the balance being 80 pound. Ties are in fair to good condition, and on a number of

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the curves tie plates are in place. There are no signals, train order operation being in force. Steam grade crossings are interlocked and derailed.

This branch has been maintained in good, safe condition for the traffic.

Bridges.

The repair work outlined under each bridge should be done during the year to maintain them in good condition to safely carry traffic:

No. 1 is a steel truss bridge, with deck plate girder approach spans, over stream. An entire new deck was placed on the siding track last year which enables this track to be used for traffic. Steelwork of this bridge should be painted; otherwise it is in good condition.

No. 2, a steel truss span over stream. The northwest pedestal stone under truss shoe, which was cracked, has been repaired and is now in good condition. Stringer connections have also been renewed.

No. 3, a through steel truss span over creek. The northeast and northwest pedestal stones under truss shoe are cracked. The company is to repair these pedestals at the earliest opportunity. The steelwork of this bridge should be painted; otherwise it is in fair condition.

No. 4, a through pin-connected truss bridge over stream, is in fair condition. The northwest pedestal stone under truss shoe, which is cracked, should be repaired; also defective ties should be renewed and steelwork painted.

Bridge No. 7, a deck plate girder bridge over stream. The recommendation of last year for renewal of defective guard rails has not been complied with. The recommendation is therefore repeated.

Bridge No. 15 is a through pin-connected truss span over the Lehigh Valley Railroad. Recommendations made last year have been complied with. The bridge is now in fair condition.

Bridge No. 17, a half through plate girder bridge over public road. Defective ties should be renewed.

No. 20, a deck plate girder bridge over public road. Recommendations made last year have been complied with.

No. 27, a deck plate girder bridge over creek, with timber trestle approaches, is in fair condition. Defective ties and blocking at west end of bridge should be renewed.

The remaining bridges on the branch are in fair to good condition. Steelwork is being kept clean and well painted.

It is RECOMMENDED that the work as outlined above be done during the current year.

RAHWAY VALLEY RAILROAD.

This road extends from Aldene, where connection is made with the Central Railroad of New Jersey, to Summit, a distance of 7.6 miles, all single track. Through a branch of about 0.75 mile, connection is made with the Lehigh Valley railroad at Roselle Park.

The main line is laid with 60 pound rail between Aldene and Kenilworth, and 70 pound rail between Kenilworth and Summit. It is ballasted with gravel and cinders.

While the requisite number of ties were placed in track last year, there are still a great many unsound, and should be removed. I RECOMMEND that not less than 4,000 ties be placed in main track this year, and that ditches and cuts be cleaned so that track may have the proper drainage. This track is safe for the traffic at a maximum speed of 25 miles per hour.

Bridges.

Recommendations made in last year's report have been partly carried out. All are being complied with, and will be completed early this spring.

The steel bridge over Park Avenue, Summit, has been painted. The steel guard rails on Morris Avenue bridge in Summit are not properly spiked to ties, and this should be rectified.

Cinder filling of the Summit trestle is nearly completed, and the concrete abutments which were contemplated for the two-plate girder spans over Russell and Ashwood Avenues in this trestle have been partly constructed. At Ashwood Avenue the west abutment is already built, and form work for east abutment is in place. After concrete work is finished at Ashwood Avenue, work will be started at Russell Avenue.

The bridge over Shunpike Road consists of a half through plate girder span under the main track and a deck plate girder span under the siding leading to stone quarry. Steelwork should be properly painted. There are no guard rails on either span of this bridge, but guard rails should be provided on main track span.

The Van Winkle's Brook Bridge is now in safe condition, the east abutment having been rebuilt and west abutment reinforced. The steelwork of this bridge should be painted.

The steel span over the Rahway River has been painted.

Two of the three timber drains between Kenilworth and Aldene have been replaced by cast iron and terra cotta pipe. It is intended to replace the remaining timber drain with cast iron and terra cotta pipe this spring.

Recommendations.

Properly spike guard rails on Morris Avenue bridge.

Provide guard rails on main track, and paint steelwork on bridge over Shunpike Road.

RARITAN RIVER RAILROAD.

Main Line.

This road extends from New Brunswick to South Amboy, a distance of 12.3 miles. It is single track, laid with eighty pound rail, ballasted with gravel and cinders. The track is maintained in good condition, 3,000 ties having been placed in main track, as recommended, and approximately 2,000

feet of 80 pound rail has been relaid. There are no signals on this road, trains being operated by means of train orders. Train movements are protected at South River drawbridge by means of smash boards, which are controlled by the interlocking arrangement of the drawbridge.

An additional main line track is being constructed from Sayreville Junction to the east end of South River bridge, a distance of 2 miles. It is laid with 80 pound rail and ballasted with gravel. All rail on important sidings is being replaced with 80 pound rail.

A new brick station has been constructed at Parlin, replacing the old wooden structure, and a new wooden station has been built at a station known as Gillespie.

The grade crossing at South River is protected by gates, and the road crossings at Parlin and Pine Avenues, South Amboy, are to be protected by gates. There are two crossings in New Brunswick, and one at Broadway, South Amboy, which are protected by flagmen and signs; also the grade crossing at Roberts is protected by a bell and signs. All other crossings have sign protection, but standard crossing sign has not been used.

This line is used for both passenger and freight service.

Bridges.

The railroad bridges on this line are kept in good condition except that a few defective ties should be renewed on the bridge across the Camden and Amboy Railroad and the bridge across Lawrence Brook. The railroad company will make the necessary tie renewals.

The old wooden highway bridge carrying Washington Street, South Amboy, across the railroad has been renewed with a modern structure consisting of steel and concrete.

The iron span over Crossman's Industrial Railroad is to be renewed shortly with a modern steel plate girder structure, the material now being on hand at South Amboy.

The wooden overhead highway carrying New Brunswick turnpike will be replaced next year with a modern steel and concrete structure. One bad post and sill were noted and the railroad company will make the necessary temporary repairs to make this structure safe till renewal is started.

South River Branch.

This branch extends from South River to one and one-quarter miles south. It is single track, laid with 60 pound rail, and ballasted with gravel and cinders. 400 ties have been placed in the track, as recommended last year, and work is being done to maintain track in safe condition for the light traffic over it, viz., two trains per day. It is used for freight purposes only.

There are no bridges on this branch.

Sayreville Branch.

This branch extends from the main line to Sayre & Fisher's brick plant in Sayreville, a distance of approximately one and one-half miles.

It is single track, laid with 80 pound rail, and ballasted with gravel. The

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track is maintained in safe condition for the traffic over it. It is used for freight purposes only.

There are no bridges on this branch.

Serviss Branch.

This branch extends from Serviss Junction to within a half mile of South River, a distance of 4.0 miles. It is single track, laid with $1\frac{1}{2}$ miles of 60 pound rail and $2\frac{1}{2}$ miles of 80 pound rail, ballasted with gravel and cinders. Since last inspection $1\frac{1}{2}$ miles of track consisting of 80 pound rail have been laid and 4,000 ties have been placed in the track. The track is being maintained in good condition. It is used for freight purposes only.

There are no signals on this branch, the trains being operated by means of train orders.

There is one important grade crossing on this branch which is protected by a bell and sign. All other crossings are protected by signs, but the standard crossing sign has not been used.

Bridges.

There is only one bridge on this branch, at Lyle's, which is in fair condition and safe for the traffic over it.

TUCKERTON RAILROAD.

This line extends from Whitings to Tuckerton, a distance of 29.0 miles. It is single track, used for passenger and freight, and is laid with 85 pound and 80 pounds rail from Whitings to Manahawken, and 60 pound rail from Manahawken to Tuckerton. Ballast is cinders and gravel. Ties are in fair to good condition. Between Whitings and Manahawken manual block signals are in use during the summer season.

Tie renewals for 1915 have been made in sufficient number to keep track in good, safe condition for the traffic.

Bridges.

The recommendation made in annual bridge inspection report of 1914 regarding Bridge No. 22.6 has been complied with.

There are twelve wooden trestles on this line all of which are in fair to good condition except for bridge at West Creek School House. There is one bad stringer in this bridge which should be renewed.

Recommendation.

Bridge at West Creek School House—Renew defective stringer.

WEST SHORE RAILROAD.

Main Line.

The part of the line in New Jersey extends from the terminal in Weehawken to the New York State line south of Tappan, a distance of 19.0 miles. It is all double track, laid with 105 and 100 pound rail, in stone ballast, all having six-bolt angle bar splices. All the 80 pound rail which was in track last year has been removed and replaced with 105 pound rail, which included a distance of about 11 miles.

Tie renewals are being made at the rate of about 12½ per cent. each year. Tie plates are used on all curves and on all new creosoted ties and quite liberally elsewhere. All curves of one degree and over are double spiked. The track is in first class condition in every way.

Aside from the frame terminal in Weehawken there are twelve stations on the part of the line in New Jersey, ten of them being frame buildings, one stone, and one brick.

The roof of the Weehawken Tunnel is now examined each week for loose rock.

The line has automatic electric block signals throughout its whole length.

Bridges.

The recommendations made in the annual bridge inspection report for 1914 have all been carried out.

Extensive repairs have been made to the drawbridge over Peckman's Creek. The running rails at the end of drawspan, which have square ends and which cause excessive pounding during the passage of trains, are to be replaced with mitre rails laid in a steel trough. This change will greatly reduce the pounding mentioned above.

The bridge seats of Bridge No. 4, over the N. R. R. of N. J., should be kept clean.

Bridge No. 3, at stone crusher. A temporary timber bent in good condition has been placed along the face of east abutment. It is understood that this bent was installed for the purpose of renewing bearings or rebuilding the masonry.

The remaining bridges are in good condition.

New Jersey Junction Railroad.

This branch line runs from the West Shore terminal in Weehawken to a connection with the National Docks Branch of the Lehigh Valley R. R. and the Harsimus Branch of the Pennsylvania R. R., in Jersey City, a distance of about 4.0 miles. The connection to the Pennsylvania R. R. is called the Harsimus Branch of the New Jersey Junction R. R., and is all single track.

The New Jersey Junction R. R. is double track, laid with 80 pound rail in cinder and gravel ballast. It is used for nothing but freight trains at the present time. The track is kept in good line and surface, and safe for the slow speed operation to which it is subjected.

Bridges.

Recommendation made last year to renew defective ties on Bridge J-3 will be carried out. The steelwork of this bridge is to be entirely renewed and the masonry abutments repaired. Men are now at work on this bridge.

Bridge J-4. Men are at work reinforcing the steelwork of this bridge and work will soon be started to rebuild the masonry abutments.

Bridge J-2, carrying Newark Avenue over the West Shore R. R. This bridge is being rebuilt with a modern structure, about 50 per cent. of the steelwork having been set and bolted. The Public Service Railway operate cars across this structure, traffic being maintained on one track.

The remaining bridges are in good condition.

WEST JERSEY AND SEASHORE RAILROAD.

Main Line—Atlantic City Division.

This is a double-track line extending from Camden to Atlantic City, a distance of 61.1 miles. It is laid with 100 pound rail, ballasted with stone, and is in first-class condition throughout.

From Camden to Haddonfield, and from Ancora to Atlantic City, the signals are electro-pneumatic; between Haddonfield and Ancora they are electric block.

Through Camden the work of track elevation is continuing and will probably be completed in 1916. This work includes dividing the grades from the point where the Van Hook Street cut-off leaves the Main Line southward nearly to the city line, and when completed the grades will be divided at twelve streets. Two temporary tracks are still in service and are maintained in good condition for the traffic over them.

Bridges.

The bridges on this branch are maintained in good condition, extensive repairs having been made to the masonry and bearings under steel girder bridges.

Bridge No. 104, over Gibbsboro Road. The plate girders of this bridge are light but have been temporarily reinforced by the placing of timber bents under the bridge. This structure is to be replaced with a reinforced concrete slab which is seasoning near the bridge site.

Bridge No. 107-D, over C. R. R. of N. J. The center girder of this bridge is light and is being replaced with a heavy plate girder.

The overhead highway bridge at Ancora Station has had a new footwalk built on the east side. Stairways have been constructed leading from both the east and westbound platforms up to the sidewalk of the bridge, and an inter-track fence has been erected which prevents passengers from crossing the track. This same construction is to be carried out at Kirkwood Station.

The work of eliminating the twelve grade crossings in Camden is nearly completed.

Medford Branch.

This is a single-track line, extending from Haddonfield to Medford, a distance of 11.9 miles. It is laid with 60 pound rail, ballasted with sand, gravel and cinders. The maximum speed on the branch is 40 miles per hour and traffic is light, having but eight passenger trains per day. Manual block signals are in use.

The branch is in good condition for the traffic.

Bridges.

There is only one bridge on this branch, that over Cooper's Creek, which is maintained in safe condition for the traffic over it. Two extra bents were installed this year for the purpose of stiffening the bridge transversely during the passing of a train.

A 10-mile speed limit still exists for trains over this structure.

Van Hook Street Cut-off.

This is a double-track line in Camden, 0.98 mile long, connecting the Atlantic City and Cape May Divisions. The track is laid with 100 pound rail in cinder ballast. Electro-pneumatic block signals are in use. There are no stations on this branch.

The track is in good line and surface and generally in good condition.

Bridges.

The bridges on this line are all maintained in good condition.

Cape May Division—Main Line.

This line extends from Camden to Cape May, 82.4 miles. It is double track from Camden to Newfield; single from Newfield to Mount Pleasant; double from Mount Pleasant to Sea Isle Junction, and single from Sea Isle Junction to Cape May. It is laid with 100 pound rail, ballasted with stone for a distance of 34.0 miles, the remainder of the distance being gravel and cinders. Through Camden and Gloucester overhead wires are used, and from there on to Millville the cars are operated by third rail.

Manual block signals are in use from Newfield to Cape May; automatic electro-pneumatic from Newfield to Camden.

Bridges.

Recommendation made in annual report of 1914, to point masonry on overhead bridge north of Sewell, has been carried out.

Bridge No. 2, over Newton Creek. Extensive repairs have been made to bents, stringers and deck. This bridge is now in good condition.

The overhead bridge at Hunter Street, Woodbury, which was closed to vehicular traffic, has been rebuilt with steel girders encased in concrete. This structure is in first-class condition.

Three new pile bents have been installed in Bridge No. 15 at Cape May.

The remaining bridges are maintained in good condition.

Pennsgrove Branch.

This is a single-track line from Woodbury to Pennsgrove, a distance of 21.7 miles. It is laid with one mile of 100 pound rail, 1.3 miles of 70 pound rail, the balance being 85 pound. Ballast is cinders.

The track has been raised through the meadows between Bridgeport and Prospect and put in much better condition. The line at present is being cleaned up, which work should be completed next week.

Tie renewals are being made in sufficient quantity for safety, and track is maintained in good condition.

Manual block signals are in use.

Bridges.

The bridges on this branch are all maintained in good condition, extensive repairs having been made to the timber trestle bridges.

Bridge No. 207, over Raccoon Creek. This bridge was to have been replaced with a new steel drawspan, but due to a fire which destroyed the south end of the structure and the urgent need for its use, it was rebuilt with timber. The material for the steel drawspan is stored at the bridge site, and will be installed when the material in the present bridge becomes poor. A slow order is in force over all drawbridges.

The bridges on the Pennsgrove Extension have been filled in except a small portion of bridge No. 213.

Salem Branch.

This line is single track, extending from Woodbury to Salem, a distance of 28.7 miles. It is laid with 85 pound rail, ballasted with gravel and cinders. Signals are manual block.

Ditches and drainage are good. The line generally is maintained in good condition.

Bridges.

The bridges on this branch are maintained in fair to good condition.

Bridge No. 20, over Raccoon Creek, has been rebuilt as a half through plate girder span on concrete abutments, this replacing a wooden trestle.

The timber trestle bridge carrying Harrisonville Pike over the railroad between Point Airy and Woodstown rests on brick abutments at the ends. The west abutment is cracked and should be repaired by grouting and pointing. Frequent inspections are made to determine the condition of this masonry.

Bridge No. 28, over Fenwick Creek. Plate girder span has been installed over the main channel of the creek, which puts this structure in good condition.

Quinton Branch.

This is a single-track line, from Alloway Junction to Quinton, 4.3 miles long. It is laid with one-half mile of 100 pound rail, the balance being 70 pound, in cinder and gravel ballast. Signals are manual block.

This branch is maintained in good condition for the traffic.

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Bridges.

The two bridges on this branch are in fair condition and safe for traffic.

Riddleton Branch.

This is a single-track line from Riddleton Junction to Elmer, a distance of 10.3 miles. It is laid with 70 pound rail in cinder and gravel ballast. Signals are manual block.

The track is maintained in good condition for the traffic.

Bridges.

It was recommended in annual report of 1914 to point and fill the holes and rough places in face of concrete walls, and put iron bearing plates under the I-beams in place of the present wooden shims. This recommendation has been complied with, the work having been satisfactorily done. This is the only bridge on this branch.

Bridgeton Branch.

This is a single-track line from Glassboro to Bridgeton, 20.7 miles. The track is laid with three miles of 100 pound rail, four miles of 85 pound, one mile of 70 pound, and the balance 60 pound rail.

The track is in good line and surface. Ditches and cuts are clean and maintained in good condition.

Bridges.

Bridge No. 38, over Cedar Stream. The pile trestle bridge has been replaced with concrete pipe.

Bridge No. 39, over Mill Creek, in Bridgeton, is to be replaced with a concrete slab, as mentioned in report of May 6th, 1914. The material is all at the bridge site and it is expected that this structure will be complete during the current year.

The remaining bridges are maintained in good condition.

Maurice River Branch.

This is a single-track line, extending from Manumuskin to Maurice River, 9.8 miles. The track is laid with 85 pound rail, and ballasted with gravel and cinders. It has been put in good condition and is well maintained. Signals are manual block.

Bridges.

The two small wooden trestle bridges on this branch are in good condition.

Ocean City Branch.

This branch is single track, extending from Sea Isle Junction to Ocean City, 16.4 miles. It is laid with four miles of 100 pound, two miles of 85 pound, six miles of 70 pound and the balance 60 pound rail. Gravel and cinders are used for ballast.

Repairs have been made since the washouts of last winter and considerable material distributed along the line. It is maintained with good shoulder to

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prevent as far as possible damage from storms. At the present time the track is in good line and surface and maintained in good condition for the traffic.

Manual block signals are in use.

Bridges.

The bridges on this branch are maintained in good condition. Extensive repairs have been made to all timber trestle bridges, and when tie renewals are made on Bridge No. 69.44, over Corson Inlet, all bridges will be in good condition. These tie renewals are to be made this year.

A slow order is in force over all drawbridges.

Stone Harbor Branch.

This branch is single track, extending from Sea Isle City to Stone Harbor, 8.0 miles. It is laid with two miles of 100 pound, 0.5 mile of 85 pound, and the balance 60 pound rail. Ballast is gravel and cinders.

Considerable work has been done during the past year to bring this track in good condition, and at the present time it is safe for the traffic.

Signals are manual block.

Bridges.

There is one bridge on this branch over Townsend Inlet, which is in good condition.

Soundings are taken along the bridge at every tide so that the company may be kept informed of the changing conditions of the bottom, to the end that measures may be taken in time to prevent injury to the bridge.

Wildwood Branch.

This branch extends from Wildwood Junction to Wildwood, a distance of 7.6 miles, two miles of which are double track and the balance single. It is laid with 100 pound rail throughout, and ballasted with gravel and cinders. The track is in good line and surface and maintained in good condition.

Manual block signals are used.

Bridges.

Repairs have been made to Bridges Nos. 73/83 (old No. 54) and No. 74/37 (old No. 55), and they are now in good condition.

It is expected that an extra line of stringers will be placed in Bridge No. 75/15 (old No. 56), over Grassy Sound, and material is on hand for making extensive repairs to Bridge No. 75/87.

Newfield Branch.

This is a double-track line, from Newfield to Atlantic City, 34.2 miles. Trains are operated by electricity (third rail). The track is laid with 85 pound rail in cinder ballast, and is in first-class condition throughout. Steam freight trains also use this branch.

Signals are manual block from Newfield to Pleasantville, and automatic electric from Pleasantville to Atlantic City.

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Bridges.

Repairs have been made to the bridges over the meadows and drawbridge over Beach Thoroughfare. Extensive repairs are being made on the trestle approaches to the Beach Thoroughfare bridge.

Bridge No. 62, a pile trestle bridge, is to be replaced with pipe during the current year.

The remaining bridges are maintained in good condition.

Camden Terminal Division.

This line extends from a point east of Fishhouse to and including the terminal station in Camden, a total length of 5.0 miles. It is a double-track line with cinder ballast. The track is laid with 100 pound and 85 pound rail, in about equal proportions.

Signals are automatic electro-pneumatic in Camden, and manual block beyond.

The track is in good condition.

Bridges.

The bridges on this branch are maintained in good condition. The overhead bridge at Pavonia Station has been rebuilt with a four-span half through plate girder bridge on concrete piers and abutments. The work has been satisfactorily done.

Chelsea Branch.

The two small wooden bridges on this branch have been replaced with pipe.

WHARTON & NORTHERN RAILROAD.

Main Line.

This line extends from Wharton to Green Pond Junction, a distance of 15.0 miles. It is single track, used for passenger and freight, and laid with 0.50 mile 90 pound, 3.00 miles 85 pound, 1.25 miles 80 pound, and the balance 60 pound rail. The track is ballasted with stone and cinders. Ties are in fair to good condition, sufficient renewals having been made to keep track in good, safe condition.

The narrow shoulder on high fill west of Wharton Station is being widened, about one-half of the work having been completed.

Recommendation.

Place at least 6,400 ties in track this year, and complete widening shoulder on high fill west of Wharton Station.

Bridges.

The bridges are generally in fair condition. The company is repairing timber work on Wharton trestle. On the two steel bridges in Wharton the

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paint is scaling off, otherwise these bridges are in good condition. On the steel bridge over the D., L. & W. R. R. paint is scaling in places and should receive attention. The Rockaway River bridge is in good condition.

The overhead highway bridge at Green Lake is of very light construction; stringers are in fair to poor condition. All defective timber should be renewed.

Bridges Nos. 42 and 43 over drainage and small stream should be overhauled and put in good condition. The stringers on both bridges should be renewed and also the mud sills on No. 42.

Recommendation.

Paint both steel bridges in Wharton and spot in paint where necessary on bridge over D., L. & W. R. R.

Put bridge over railroad at Green Lake in good condition by renewing all timber.

Overhaul small Bridges Nos. 42 and 43, renewing stringers on both bridges and mud sills on No. 42.

Morris County Branch.

This line extends from Wharton Junction to Morris County Junction, on the C. R. R. of N. J., a distance of 1.25 miles. It is used only for freight, and is laid with 0.25 of a mile 90 pound rail, and the balance 70 pound. Ties are in fair to good condition. The track is ballasted with stone and cinders. The branch generally has been maintained in good, safe condition.

Recommendation.

Place at least 200 ties in track this year.

Bridges.

The one bridge on this branch is in good condition.

Oreland Branch.

This branch extends from Oreland Junction to Hibernia Mine, a distance of 4.0 miles. It is single track, used for passenger and freight, and laid with 60 pound rail. Ballast is stone and cinders. Trains are run by telephone orders.

A number of poor ties were noted, which should be renewed.

Recommendation.

Place at least 400 ties in track this year.

Bridges.

All the bridges on this branch are small and are maintained in good condition.

WILDWOOD & DELAWARE BAY SHORT LINE RAILROAD.

The line extends from Wildwood Junction to Wildwood, a distance of four and four-tenths miles.

It is single track, used for both passenger and freight, and is laid with 101 pound and 91 pound rail. Ballast is cinders. The line and surface of track are good. Trains are operated according to train orders and schedule.

Bridges.

Recommendations made in last annual inspection report have been carried out. There are three bridges on the line, all wooden trestles, containing steel spans over channel.

Bridge at Grassy Sound has a Scherzer Rolling Lift drawbridge over the inland waterway, which is in good condition except that attention should be given to the surfacing of mitre rails; also that an extra set should be kept on hand for emergency purposes.

On the first bridge east of Wildwood Junction the north stringer at the extreme east end should be renewed; also blocking should be renewed. Guard rails should be spiked more often.

Pile trestle bridge just west of Wildwood.—Lateral bracing of the two steel spans should be properly bolted, the end blocking under wood stringers renewed, and inside guard rails spiked more often.

Recommendations.

Surface mitre rails and provide extra set of same for Grassy Sound bridge. Renew stringer and blocking, and spike inside guard rails on first bridge east of Wildwood Junction. Properly bolt lateral bracing, renew blocking, and spike inside guard rails on bridge just west of Wildwood.

These recommendations to be carried out by June 1st, 1915.

Inspections of Utilities Other Than Steam Railroads.

The following are from reports of inspectors on inspections of street railway, gas, electric light and water utilities:

ATLANTIC CITY & SHORE RAILROAD.

Atlantic City to Ocean City—Bridge Inspection.

The company has ordered all the material necessary for making maintenance renewals for the bridges for the current year, and this material has been delivered on the ground and distributed at the various bridge sites. The actual work of placing this material in the structures is to begin within a few days and will be completed in about three months.

The metal bridges have all been scraped and painted and are in good condition. It is the company's intention to paint the metal work of these bridges one coat each year, and at the same time instructions have been given to the painters to note and report every defect they come across.

The track on trestle at the south end of the bridge over the West Jersey and Seashore and Atlantic City Railroads is badly out of surface and line. This condition will be taken care of very soon and general surfacing done to the entire trestle.

All the recommendations made last year have been carried out, and the bridges are in safe condition for the traffic. On the bridges between Somers Point and Ocean City steam locomotives are no longer permitted to run, thus preventing the overstressed condition of the stringers under these engines, which was previously reported.

Some filling has been done to the trestles along the line, as noted below:

At High Trestle.—125 feet filled at north end.

Beach Thoroughfare, Ocean City.—The west end has been shortened 100 feet, and on all the bridges between Ocean City and Somers Point new bulkheads have been built and properly back filled. These bridges could still be shortened for a considerable part of their length by filling in at their ends the same as those on the highway immediately alongside. If this were done, a considerable quantity of good material would be released for repair work along other parts of the line, as previously reported, and there would be considerably less track to maintain on trestles.

The three drawbridges on the line are all in good condition.

Following is a list of the material which has been delivered for the bridges:

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Meadows Trestle and Beach Thoroughfare at Atlantic City.

8" x 16" stringers: 1 12'; 12 14'; 1 14' 4"
1 16'; 1 24'; 1 26'
1 27'; 15 28'; 2 28' 3"
2 28' 4"; 3 28' 6"
12" x 14" caps: 1 30'; 3 12'; 23 24'
10" x 12" sills: 1 35' 8"; 1 34'; 1 16' 6"
12" x 12" posts: 1 7' 6"; 1 26'
4" x 10" bracing: 2 16'
3" x 10" bracing: 1 16'
7" x 9" bridge ties: 386 9'; 65 10'
6" x 8" guards: 94 12'

Bridges between Somers Point and Ocean City.

8" x 16" stringers: 28 stringers about 28' 10" long
12" x 14" caps: 14 14'
8" x 9" ties: 143 10'

Atlantic City to Longport—Bridge Inspection.

The pile trestle, built as a result of a break in the roadway, has been filled in and a bulkhead built along the shore where the washout occurred. The old trestle material has been left in and under the fill.

This was the only bridge on this branch.

ATLANTIC CITY GAS CO.

The company has not installed any additional apparatus at the plant during the past year, and the maximum daily output during the year 1914 was 2,824,000 cubic feet. The maximum daily output during the year 1913 was 2,871,000 on August 19th, so that the relation between the generating capacity and the maximum demand remains the same as shown in the report to the Board dated April 3d, 1914, in connection with a general inspection made by the Gas Inspector on March 26th, 1914.

The total gas sent out during the last three years is as follows:

661,075,900 cubic feet during year 1912.
627,493,700 cubic feet during year 1913.
657,526,495 cubic feet during year 1914.

An examination of company's records on March 26th, 1914, showed that the rules adopted by the Board as establishing standards and regulations to be followed by gas companies were being complied with.

An examination of the meter test summaries filed with the Board during the past year, in accordance with Rule III, would indicate that the company does not understand fully the method of making out these reports. The reports showing results of meter tests during the months of January, February and March are marked "Tests of Repaired Meters before again being

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placed in Service," but appear to be the result of tests of meters removed from service. It is requested that during the coming year the company follow the instructions given at the bottom of the forms provided by the Board for reporting tests of consumers' meters. A separate sheet should be used for reporting tests of the following classes of meters:

- (1) Tests of *new meters* before installation.
- (2) Test of *repaired meters* before again being placed in service.
- (3) Tests of *meters removed* from service.

Rule X prescribes that the company provide a standard calorimeter outfit with which periodic tests upon the gas should be made. The company has installed at its plant a calorimeter which is of a somewhat obsolete type, and it is suggested that a more efficient calorimeter be installed, as results obtained with present outfit are probably lower than the actual heating value of gas sent out.

ATLANTIC COAST ELECTRIC LIGHT CO.

Test of Electric Standards.

The electric standards used by this company were tested by comparison with the Board's standard on August 25th and 26th, with the following results:

Test of Wall Standards.

Manufacturer—General Electric Company.

Type—I.

Number—3050955.

Amperes—75.

Volts—110.

Cycles—60.

<i>Amperes.</i>	<i>Per Cent. Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
75	100	99.0	— 1.0
60	80	99.5	— 0.5
40	53	100.2	+ 0.2
20	27	99.8	— 0.2
7.5	10	98.0	— 2.0

Manufacturer—General Electric.

Type—I.

Number—1546529.

Amperes—10.

Volts—110.

Cycles—60.

<i>Amperes.</i>	<i>Per Cent. Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
10	100	99.7	— 0.3
7.5	75	99.9	— 0.1
5	50	99.4	— 0.6
2.5	25	99.7	— 0.3
0.1	10	99.0	— 1.0

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These meters were sealed with the Board's seal, and are hereby accepted as the wall standards of this utility, to be used only in checking the portable standard watt-hour meters.

Tests of Portable Standard Watt-Hour Meters.

Manufacturer—General Electric Co.

Type—IB3Y.

Cycles—60.

Amperes—1, 5, 10, 50, 100.

Volts—110 and 220.

Number—1603427.

<i>Coil.</i>	<i>Amperes.</i>	<i>Per Cent. Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
100	100	100	100.8	+ 0.8
100	50	50	101.3	+ 1.3
100	10	10	100.8	+ 0.8
50	50	100	100.2	+ 0.2
50	25	50	100.3	+ 0.3
50	5	10	100.3	+ 0.3
10	10	100	99.4	— 0.6
10	5	50	99.2	— 0.8
10	2.5	25	97.9	— 2.1
10	1	10	97.8	— 2.2
5	5	100	99.2	— 0.8
5	2.5	50	99.5	— 0.5
5	1.25	25	100.0	0
5	0.5	10	100.0	0
1	1.0	100	99.4	— 0.6
1	0.5	50	99.4	— 0.6

Manufacturer—Westinghouse Electric.

Type—

Number—151807.

Cycles—60.

Amperes—1, 10, 20, 40, 80.

Volts—100, 200.

Number—194862.

<i>Coil.</i>	<i>Amperes.</i>	<i>Per Cent. Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
80	80	100	101.5	+ 1.5
40	40	100	101.1	+ 1.1
20	20	100	100.6	+ 0.6
10	10	100	100.9	+ 0.9
10	5	50	100.8	+ 0.8
10	2.5	25	100.7	+ 0.7
10	1	10	100.9	+ 0.9
1	1	100	101.3	+ 1.3

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These instruments are hereby accepted as the portable standard watt-hour meters to be used in testing customers' meters, provided the above corrections are used.

A copy of the above tests should be kept with each of the respective instruments.

ATLANTIC CITY ELECTRIC CO.

Test of Wall Standard.

The wall standard used by this company was tested by the Board's Inspector, and found to have an average error of about 2 per cent. This meter was accepted at the time, until the Board's portable standard was checked by the Bureau of Standards at Washington, D. C. The tests made to-day showed the instrument to be approximately of the same accuracy as it was last April, namely, 2.4 per cent fast on 100 per cent. load, 1.7 per cent. fast on 50 per cent. load, and 3 per cent. fast on 4 per cent. load. This wall standard is installed on a slate switchboard, and load is obtained through a rheostat, which is an improvement over the phantom load that was used last year.

Following is the record of the meter after adjustments have been made:

Voltage of testing circuit approximately 113.

Standard used—General Electric Co., No. 2205972.

Manufacturer of wall standard—Fort Wayne Electric Company.

Type—K-3.

Serial Number—816213.

Amperes—25.

Volts—110.

Cycles—60.

<i>Per Cent. of Full Load.</i>	<i>Amperes.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
100	25	99.8	— .2
60	15	99.3	— .7
40	10	99.4	— .6
20	5	99.5	— .5
10	2.5	99.5	— .5
4	1	100.3	+ .3

Copy of this test should be kept with the wall standard in the meter shop. The meter was sealed with the Board's seal, and is hereby accepted as the wall standard of this utility, to be used in checking the portable rotating standards.

ATLANTIC COUNTY ELECTRIC CO.

An inspection of the meter department of this company was made and the question of constants on customers' meters was taken up. The officials of the company gave the Board's Inspector to understand that the constants they had been using would be discontinued, and the meters adjusted properly.

When an inspection was made to-day, it was found that about forty meters still had odd constants, such as $\frac{9}{10}$, $\frac{8}{10}$, $1\frac{1}{10}$, etc., applying to the rate charged. In other words, if a certain man had a constant of $\frac{2}{3}$ on his meter, he was billed at $\frac{2}{3}$ of the 15c. rate, or 10c. per K. W. hr. It does not seem that these meters would always be found with an error, such as would always come within these constants, and also within the 4 per cent. limit allowed by the Board. It is understood that there are a few meters that have constants like $\frac{1}{2}$ or $\frac{2}{3}$ marked on the face of the dial, but these constants should not be applied to the rate, but to the meter reading.

There may be no discrimination in regard to these rates charged to various customers, but it would be practically impossible for anyone to check up such a system, without actually testing all meters on the lines.

It is therefore RECOMMENDED that these constants be eliminated immediately, except from those meters which have these constants marked on the face of the dial by the manufacturer.

ATLANTIC COUNTY ELECTRIC CO.

Test of Electric Standards.

The wall standard used by this utility is installed on a switchboard in the meter shop, which is located in the rear portion of the commercial office at 129 Philadelphia Avenue. The connections to the meter are such that in order to test a customer's meter, all the current must go through the wall standard. This, of course, is bad practice, and should be changed as suggested by the Board's Inspector.

The wall standard was tested, and left as found, no adjustments being deemed necessary. The following is a record of the test:

Voltage of testing circuit—Approximately 112.

Standard used—General Electric Co., Number 2205972.

Manufacture of wall standard—Westinghouse General Electric Co.

Type—O. A.

Serial Number—1658441.

Amperes—5.

Volts—100.

Cycles—60.

<i>Per Cent. of Full Load.</i>	<i>Amperes.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
10	.5	100.4	+ .4
20	1	100.6	+ .6
40	2	100.8	+ .8
60	3	101.0	+ 1.
80	4	101.0	+ 1.
100	5	100.7	+ .7

A copy of this test should be kept with the instrument in the meter shop.

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The meter was sealed with the Board's seal, and is hereby accepted as the wall standard of this utility, to be used only for checking the portable rotating standard.

The portable rotating standard used by this company was tested, and the following is the record of the test:

Manufacturer—General Electric Company.

Type—I. B. 4.

Serial Number—1800883.

Amperes—1, 10, 20.

Volts—110, 220.

Cycles—60.

Voltage of testing circuit—Approximately 112.

Coil.	<i>Per Cent. of Rated Capacity.</i>	<i>Amp.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
1	50	.5	101.1	+ 1.1
1	100	1	100.3	+ .3
10	10	1	100.2	+ .2
10	20	2	100.3	+ .3
10	30	3	100.3	+ .3
10	40	4	100.4	+ .4
10	50	5	100.5	+ .5
10	75	7.5	100.5	+ .5
10	100	10	99.9	— .1
20	50	10	100.0	0

A copy of this test should be kept with the instruments. This instrument is hereby accepted as the portable rotating standard of this utility, to be used in checking customers' meters.

The above corrections should be applied when tests are made. The corrections on points in testing should be determined by plotting the curve of the 10 ampere coil and by drawing curves parallel to this curve for the other coils, using the correction found on each coil as a point in that curve.

ATLANTIC COAST ELECTRIC RAILWAY CO.

This company operates a distance of 36.06 miles, along the public streets and private right of way from Pleasure Bay to Sea Girt, with two loops operating in Asbury Park.

While the territory in general is most densely populated in the summer time, there are sufficient inhabitants all the year round to allow comparatively fair riding during the entire year. The inspection showed that the road in general was in good condition, the company having done considerable work during the past year. This included the replacement of some 6,000 ties and numerous track repairs. In this connection it was noticed that the track on

Page Avenue, from the car barn north for a distance of possibly three-quarters of a mile, is out of line and surface and should be rehabilitated.

The company has also lowered the grade of the track between Wreck Pond and Bellevue Boulevard, cutting down the roadway at least 3 feet, and making a much easier operation.

There have been at least 100 pole renewals, and the recommendation of the Board regarding the numbering of poles has been carried out.

The overhead has been thoroughly rehabilitated and various replacements of trolley wire have been made over the entire length of the line.

During the last few months, two additional feeders have been run from the power at Allenhurst to Sea Girt, this giving additional power and making the maintenance of proper headway possible.

In general, the road is in satisfactory condition.

It is RECOMMENDED that the track on Page Avenue, Allenhurst, between the car barn and Richmond Avenue, be put into proper line and surface.

BOONTON GAS LIGHT AND IMPROVEMENT CO.

This is a carburetted water gas plant, supplying the town of Boonton, under the low pressure distribution system. No additions to the plant, or changes in the method of operation of the plant, have been made since the last inspection, and the output of the plant is practically the same, so that the relation between the capacity of the plant and the demand is covered in a report to the Board dated January 5th, 1914.

The company proposes to install a siding from the Lackawanna Railroad, and this work will be started in the near future. This siding will reduce very materially the cost of handling coal and supplies at the plant, as the company now has to cart the coal from local yards to the plant by horse and wagon.

The examination of the company's records at the time of the last inspection, August 27th, 1914, showed that the rules adopted by the Board on October 17th, 1911, as establishing standards and regulations to be followed by gas companies, had been complied with, with the following exceptions:

Rule II.—No record was kept of the length of time during which a meter was allowed to remain in service, without testing it for accuracy.

Rule III.—No record was kept of the tests made of meters, other than meters which are tested upon complaint of the consumer.

Rule IV.—The company had not provided itself with a standard meter prover.

Rule VII.—No slips were left with prepayment meter customers.

Rule XVI.—No method had been adopted by the company to inform its customers as to the reading of meters.

In a report to the Board in connection with this inspection, it was recommended that the company be relieved of complying with the recommendations of a previous report, as to the installation of a standard meter prover, and a recording pressure gauge, until January 1st, 1915.

Examination of the company's records on August 6th indicates that the

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company has gone over all meters which have been in service for a period of over six years, as prescribed by Rule II.

The company has provided a slip which is left with prepayment meter consumers when collections are made from the meter, as prescribed by Rule VII.

Instructions as to the reading of meters are printed on the monthly bills rendered the consumers who purchase gas through the regular type of meter, and also on the prepayment slips which are left with the consumers using the prepayment type of meters.

In connection with the installation of a standard meter prover and a portable recording pressure gauge, it is recommended, in view of the financial conditions of the company, that it be relieved of purchasing these instruments until January 1st, 1916.

With the exception of the installation of these instruments it now appears that the company is complying with all the rules adopted by the Board.

BRIDGETON AND MILLVILLE TRACTION CO.

An inspection has been made of the Bridgeton and Millville Traction Company, operating between Millville and Bridgeton, and Bridgeton and Bivalve, with lines in the city of Bridgeton.

It was found that the road in general was in good condition, considerable work having been done during the year 1914-1915, and approximately 8,000 tie renewals made. There has also been approximately 120 poles renewed during the same period. In connection with the poles, it was noted that they had been numbered in accordance with the recommendation of the Board.

It is intended to place approximately 3,000 ties before the first of the year 1916, and this will put the road in good operating condition.

The company is at the present time operating 36.34 miles of track, and has available ten single-truck cars and eight double-truck cars. These are in good condition and are kept reasonably clean, but as there are smoking compartments in these cars, it is thought that the company owes it to the traveling public in general to disinfect its cars in some suitable manner.

Inspection was also made of the sanding apparatus of the various cars, and it was found that the apparatus was defective in a number of cases.

None of the cars are equipped with either fenders or wheel guards, and it would appear necessary that these cars be so equipped.

It is recommended that the company take immediate steps to provide for the proper disinfecting of the cars at least once a week. This recommendation to be in effect not later than November 15th, 1915.

That sanding apparatus on all cars be overhauled and put into proper working condition, and that systematic inspection be instituted to see that a supply of dry sand be kept on cars at all times. This recommendation to be completed by January 1st, 1916.

That the company take steps to provide all cars with proper fenders or wheel guards. This to take effect before April 1st, 1916.

BRIDGETON GAS LIGHT CO.

This is a coal gas plant supplying the city of Bridgeton under the low pressure distribution system.

No additions have been made to the plant equipment nor in the operation of the plant during the past year. The maximum daily output during the year 1913 was 263,000 cubic feet on September 27th, and the maximum daily output during the year 1914 was 278,000 cubic feet on December 24th, so that the relation between the generating capacity of the plant and the maximum demand has not changed during the past year, and is covered in a report to the Board dated November 21st, 1913, in connection with an inspection made by the Gas Inspector on November 19th, 1913.

An examination of the company's records on November 19th, 1913, showed that the rules adopted by the Board as establishing standards and regulations to be followed by gas companies had been complied with, with the following exceptions:

Rule II. Some consumers' meters had been in service for a period of over six years without testing them for accuracy.

Rule XVI. The company had not informed its customers as to the reading of meters.

At the time of this inspection the company had just received from the manufacturer a calorimeter, as required by Rule 10, and were constructing a water tank and providing for the installation of the calorimeter. In a report to the Board dated November 21st, 1913, it was recommended that the company provide itself with at least one other recording pressure gauge.

Investigation made by the Gas Inspector on January 21st, 1915, shows that the company has tested during the year 1914, 1,095 meters, and that the total meters in service on January 1st, 1915, was 3,072, indicating that the company has taken steps to provide for the removal and testing of all meters in compliance with Rule II.

The company has complied with Rule XVI by printing on the back of their regular bills instructions as to the reading of meters. Apparently no instructions have been given to customers using prepayment meters. The company states, however, that in cases of complaints in connection with the amount of bills rendered, instructions have been given to customers as to the reading of meters and as to the operation of prepayment meters, and that during the coming year steps will be taken to instruct prepayment meter consumers as to the reading of meters.

The company has completed the water tank for its calorimeter and has installed the calorimeter outfit in its office on Water Street, where periodic tests are made of the heating value of the gas. The results of these tests have been filed with the Board, and would indicate that the heating value of the gas supplied to the city of Bridgeton is within the requirements of Rule IX.

The company has also provided itself with a recording gauge, as recommended in the last report to the Board, and the records obtained from this gauge, which has been installed at various points on the company's

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distribution system, would indicate that the pressure conditions in Bridgeton are within the requirements of the Board's rules.

Summing up, it would appear that the company has now complied with all the rules adopted by the Board.

ELECTRIC LIGHTING PLANT—BROWN'S-MILLS-IN-THE-PINES.

An inspection of the power plant was made by the Board's Inspector. It was found that the governor on the water wheel which drives the electric generator was not working, and an attempt was made to adjust it. The automatic stop cam was worn so that no matter what position it was placed in it would not prevent the governor from shutting the water wheel down completely. In adjusting the governor so as to make it operate properly, it was found that it could be adjusted so that it would run smoothly, but would not respond quickly enough to changes in the load. The operator stated that this governor had not been in operation for two years, and that the trouble experienced with it was that it would either open up the gates and cause the machine to race, or else it would shut the plant down completely. A day before the Board's Inspector was there, a mechanic who installed this apparatus was at the plant, and was also unable to adjust this governor properly.

It was noticed, while the governor was in operation, that the Balata belt driving the governor apparatus had been water-soaked at one time, and was much thicker at this portion, and every time it passed over the main shaft of the water wheel it would cause the balls on the governor to open up, which would tend to make the machine shut down. While this would not cause the machine to shut down each time, it gave it that tendency, which would sooner or later so put the pressure on the friction discs so as to shut the plant down.

The volt meter on the switchboard was tested, and found to indicate correctly.

BURLINGTON COUNTY TRANSIT CO.

A general inspection has been made of the tracks, overhead and equipment of the Burlington County Transit Company, operating between Burlington and Mount Holly and Mount Holly and Moorestown, a total distance of 14.8 miles.

It was noted that considerable work has been done by the company during the past year, approximately 6,000 ties having been laid, and some special work installed. There has also been about 1,000 feet of new overhead trolley erected adjacent to the Mount Holly fair grounds.

The company is operating eleven double-truck closed cars, and these were found to be properly cleaned and in good condition, although the sanding

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apparatus on several of the cars was not in working order, and no sand was found in the hoppers of several of the cars.

Although considerable work has been done on the track in the past year, it is far from being in good condition. There should be at least 2,000 tie renewals between Burlington and Mount Holly, and as many more between Mount Holly and Moorestown. It is also important that the track be brought up to proper line and surface.

It was noted that the company has complied with the Board's order relative to the marking of poles.

It is therefore RECOMMENDED that the company take immediate steps to put the sanding apparatus on all cars into proper working condition, and that systematic inspection be instituted to see that a sufficient amount of dry sand be carried on the cars at all times. It is also RECOMMENDED that at least 2,000 tie renewals be made between Burlington and Mount Holly, and a like number between Mount Holly and Moorestown. This work to be started forthwith and finished not later than May 1st, 1916.

CAPE MAY LIGHT AND POWER CO.

General Inspection of Power Plant and Pole Lines.

A general inspection of the pole lines of the above company was made by the Board's Inspector on the above date, and it was found that recommendations made in a previous report had been satisfactorily complied with. The construction of the pole lines is now in excellent condition, with the exception of a few places, where poles are to be removed after the Eastern Telephone and Telegraph Company removes its wires from the poles.

A great many cross arms have been installed, even in places where no specific recommendations were made by the Board's Inspector. It was stated that the whole street lighting circuit on the Wildwood Road had been rebuilt, but this was not inspected. The conditions at Cape May Point are not as well taken care of as in the other localities supplied with service, but it was stated that there are men working in that district at the present time.

Some months ago attention of the company was called to its meter department in reference to testing meters and filing the reports of these tests with the Board. The company is now installing in its local office on Washington Street the old meter-testing switchboard that was in the meter shop at the power house, and is getting ready to take care of the meters which will be removed from service this fall.

In April of this year complaint was made by the town about the street lighting. At that time the Board's Inspector tested the switchboard ammeter and marked on five of them the correct reading at 6.6 amperes. On the night of September 16th it was found that two of these meters showed the correct registration at 6.6 amperes, but two of the others were reading below this amount and one reading above it.

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The power plant itself is in better condition than it was last spring, and has a neater appearance. The steam leaks which were noticed in the spring have been repaired, but there are now several others which are equally as bad, and have not been attended to, one of which is on a gauge cock of the end boiler. The steam is constantly blowing out of this gauge cock, and, in case the water level in the boiler raises above this point, a stream of boiling water would be forced out. This condition is considered dangerous to the firemen or others working near the boilers.

There has been considerable trouble during the past summer due to lightning, which might be avoided in the future by the installation of more modern lightning arrestors.

CITY GAS LIGHT CO.

This is a carburetted water gas plant supplying Ocean City under the low pressure system.

There have been no additions to the equipment of this plant nor any change in the operation of the plant since the previous inspection on August 6th, 1914, and the relation between the capacity of the plant and the demand is covered in a report to the Board dated April 3d, 1914.

An examination of the company's records made by the Gas Inspector on August 6th, 1914, showed that the rules adopted by the Board on October 17th, 1911, as establishing standards and regulations to be followed by gas companies, had been complied with, with the exception of Rule XVI.

An examination of the company's records made by the Gas Inspector on January 23d, 1915, shows that the company has been complying with all of the rules adopted by the Board with the exception of that part of Rule XVI, which requires that each company shall adopt some method to inform its customers as to the reading of meters. The company has printed on its regular bills a description of the method of reading meters but apparently no instructions are given to consumers using prepayment meters.

As stated in the report to the Board dated August 25th, 1914, in connection with a general inspection made by the Gas Inspector on August 6th, 1914, the company has purchased a standard calorimeter outfit, but at that time no tests were being made of the heating value of the gas. The inspection on January 23d, 1915, shows that the company is not making periodic tests of the heating value of the gas as required by Rule X, and it is recommended that during the coming year the company make periodic tests of the heating value of the gas and that a record of these tests be kept on file in the office of the company.

It is requested that the company file with the Board each month a summary showing the results obtained during the month.

CLEMENTON TOWNSHIP UNITED ELECTRIC IMPROVEMENT CO.

Inspection of Meter Department.

Inspection of the above company's electric meter department was made by the Board's Inspector, and investigation was made in reference to the company's compliance with the rules of the Board.

It was found that the company has not complied with Rule VII, which requires that a record be kept of time of starting up and shutting down power station equipment, together with the indication of the several switch-board instruments at frequent intervals, and the maintenance of a record of all interruptions of service. The only record the company keeps is of the time of starting up and shutting down its equipment, and this is merely jotted down on a daily calendar.

Rule VIII is not complied with, which requires the company to keep a record of complaints.

The company has not complied with Rule XXII, which requires that electric meters shall be tested before installation or within thirty days after being set.

Rule XXIV is not complied with, which requires a record of all tests on meters and the filing with the Board a summary of such tests. It was found that when tests are made by the company they are merely recorded on odd slips of paper and do not contain the required information. The system of filing a summary of tests was explained, so that same may be submitted correctly.

It is RECOMMENDED that the company comply with the rules of the Board, and special attention is directed to the following:

Rule VII, in reference to record of plant operation; Rule VIII, in reference to records of complaints; Rule XXII, in reference to the testing of meters before installation or within thirty days after being set; Rule XXIV, concerning meter records.

Tests of Electric Standards.

The following is a report on the test of wall standard installed on the wall of the office adjoining the engine room in the power plant at Laurel Springs:

Test of Wall Standard.

Manufacturer—Westinghouse Electric and Manufacturing Company.

Type—O. A.

Number—1349050.

Amperes—5.

Volts—100.

Cycles—60.

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<i>Amperes.</i>	<i>Per Cent. of Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
0.5	10	99.2	— 0.8
1	20	99.0	— 1.0
2	40	100.4	+ 0.4
3	60	100.6	+ 0.6
4	80	99.8	— 0.2
5	100	99.5	— 0.5

Record of this test should be kept with the instrument. This instrument was sealed with the Board's seal, and is hereby accepted as a wall standard of this utility, to be used only in checking the portable rotating standard.

Test was made on the portable rotating standard, and is as follows:

Test of Portable Rotating Standard.

Manufacturer—Westinghouse Electric and Manufacturing Company.

Type—54884-B.

Number—154562.

Amperes—5, 10, 20, 40.

Volts—100 and 200.

Cycles—60.

Voltage of Testing Circuit—116.

<i>Amperes.</i>	<i>Coil.</i>	<i>Per Cent. Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
0.5	5	10	101.8	+ 1.8
1	5	20	101.6	+ 1.6
2	5	40	102.1	+ 2.1
3	5	60	101.8	+ 1.8
4	5	80	101.6	+ 1.6
5	5	100	101.6	+ 1.6
5	10	50	101.9	+ 1.9
5	20	25	101.5	+ 1.5
5	40	12.5	101.2	+ 1.2

A copy of this test should be kept at all times with the standard. Although this standard has an error between $1\frac{1}{2}$ and 2 per cent. throughout, it is hereby accepted as a portable rotating standard of this utility for testing customers' meters, provided the above errors are allowed for. To determine errors on points not tested, a curve should be drawn for the five ampere coil, using the above figures, and plotting curves parallel to same at a distance from same in proportion to the difference in error at the same per cent. of rated capacity.

COMMONWEALTH WATER & LIGHT CO.

Test of Electric Standards.

A room on the second floor of this company's local office at Beechwood Road and Bank Street is used as a meter shop. This shop is well adapted

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for this purpose and equipped with an excellent phantom load which allows a variation in load from 0.25 amperes to approximately 60 amperes.

The wall standards are mounted on the test board and used to check the portable standards.

The wall standards were tested by comparison with the Board's standard, and at the same time the portable rotating standard was also tested. The voltage of the testing circuit was approximately 118. The following are the results of the tests:

Large capacity wall standard.

Manufacturer—General Electric Co.

Type—I.

Serial Number—1491574.

Amperes—50.

Volts—110.

Cycles—60.

<i>Amperes.</i>	<i>Per Cent. of Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
2.5	5	101.0	+ 1.0
5.0	10	101.4	+ 1.4
7.5	15	101.2	+ 1.2
10.0	20	101.2	+ 1.2
20.	40	101.2	+ 1.2
40.	80	101.1	+ 1.1
50	100	100.9	+ 0.9

Small Capacity Wall Standard.

Manufacturer—General Electric Co.

Type—I.

Serial Number—2162109.

Amperes—3.

Volts—110.

Cycles—60.

<i>Amperes.</i>	<i>Per Cent. of Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
0.5	17	101.1	+ 1.1
1.0	33	100.9	+ 0.9
1.5	50	100.7	+ 0.7
2.0	66	100.0	0
3.0	100	99.8	— 0.2

A copy of these tests should be kept in the meter shop.

These wall standards were sealed with the Board's seal and are hereby accepted as the wall standards of this utility to be used only in checking the portable standards.

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Test of Portable Rotating Standard.

Manufacturer—Westinghouse Electric and Manufacturing Co.

Type—54884-A.

Serial Number—124045.

Cycles—60.

Amperes—5, 10, 20 and 40.

Volts—100 and 200.

<i>Coil.</i>	<i>Amperes.</i>	<i>Per Cent. Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	5	100	100.9	+ 0.9
10	1.0	10	101.0	+ 1.0
10	2.5	25	101.2	+ 1.2
10	5.0	50	101.2	+ 1.2
10	7.5	75	100.9	+ 0.9
10	10.	100	100.5	+ 0.5
20	20.	100	100.2	+ 0.2
40	40.	100	100.8	+ 0.8
40	50.	125	100.2	+ 0.2

A copy of this test should be kept with the instrument.

This standard is hereby accepted as the portable rotating standard to be used in testing customers' meters. To obtain the accuracy of points not tested, a curve may be drawn for the 10 ampere coil and curves for the other coils drawn parallel to same a distance from same in proportion to the difference in error at the same per cent. of load.

COAST GAS CO.

This is a carburetted water gas plant, supplying certain towns and boroughs in Monmouth County, under the low pressure distribution system. Gas is also sold to the Lakewood Gas Company, and to the Shore Gas Company, being delivered to the Lakewood holder, in a high pressure main, whence the gas is distributed to the customers of the Lakewood Gas Company under holder (low) pressure. The gas is delivered to the Shore Gas Company from the Belmar holder, under low pressure, and the amount of gas sold is determined by a summation of the gas used, as indicated by consumers' meters. The gas sold by the Lakewood Gas Company is metered before it enters the Lakewood holder.

No additions have been made to the generating apparatus at the Belmar works since the last inspection, made by the Gas Inspector on March 10th, 1915. The maximum daily output at this plant usually occurs during the month of August, so that the maximum send-out of the plant for the year 1915, has probably not yet been reached. From the present send-out, however, it is not expected that this year's maximum send-out will vary greatly from the previous year, and the relation between the capacity of the plant, and

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the demand during the year 1914, also a description of the territory supplied by this company, is covered in a former report to the Board, dated May 19th, 1914.

An examination of the company's records would indicate that the rules adopted by the Board, as establishing standards and regulations to be followed by gas companies, are being complied with by this company.

Calorimeter tests made by the Board's Inspector on July 22d, 1915, gave an average total heating value of 602 B. t. u.

Rule IX prescribes a monthly average total heating value of not less than 600 B. t. u., with a minimum which shall never fall below 550 B. t. u.

CONSOLIDATED GAS CO. OF NEW JERSEY.

This is a carburetted water gas plant, supplying a portion of Monmouth County, under the low and intermediate pressure distribution system. No additions have been made to the generating apparatus since the last inspection. The maximum daily output of this plant usually occurs during the month of August, so that the daily maximum for the year 1915, has probably not been reached. From the present send-out, however, it is not expected that this year's maximum send-out will vary greatly from the previous year, and the relation between the capacity of the plant, and the demand during the year 1914, also a description of the territory supplied by this company, is given in a report to the Board, dated May 29th, 1914.

Examination of the company's records would indicate that the rules adopted by the Board on October 17th, 1911, as establishing standards and regulations to be followed by gas utilities, are being complied with by this company.

CONSOLIDATED GAS CO. OF NEW JERSEY.

Test of Rotating Standard Wattmeter.

This company has two portable rotating standard wattmeters for the testing of customers' meters. One of these standards was tested by comparison with the Board's standard, the result of which is as follows:

Kind of Instrument—Portable Rotating Standard Wattmeter.

Maker—Westinghouse Electric & Mfg. Co., No. 230059.

Amperes—5, 10, 20 and 40.

Volts—100 and 200.

Cycles—60.

Standard used—General Electric Co., No. 2205972. 110 V. coil.

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<i>Coil.</i>	<i>Per Cent. of Rated Capacity.</i>	<i>Amp.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	100	5.0	100.0	0
5	50	2.5	100.5	+ 0.5
5	20	1.0	100.3	+ 0.3
10	150	15.0	98.9	- 1.1
10	100	10.0	99.8	- 0.2
10	75	7.5	100.1	+ 0.1
10	50	5.	100.1	+ 0.1
10	25	2.5	100.2	+ 0.2
20	100	20.0	100.0	0
40	100	40.0	99.6	- 0.4

This standard is hereby accepted as the portable rotating standard of this utility. A copy of the above corrections should be kept with the standard and applied when tests are made. The corrections on points not tested should be determined by plotting the curves of the smaller coils and by drawing curves parallel to these curves for the other coils, using the correction found on each coil as point in that curve.

The other 60-cycle portable rotating standard used by this utility is one made by the General Electric Company. Its serial number is 1576479, and it has a capacity of 1, 10 and 20 amperes at 110 and 220 volts. It is RECOMMENDED that this instrument be checked by the Westinghouse standard, using the above corrections.

Test of Electric Wall Standard.

The wall standard adopted by this utility is installed in the cellar of the commercial office, Broadway, Long Branch, which is used as a meter shop. The standard is installed on a post which supports the floor of the office, and is about twelve feet from the test board. The test board is made of wood, and is old and in poor condition. It was stated by an official of the company that the location of the meter room would be changed within a few months to a better location.

The result of the test on the wall standard is as follows:

Kind of Instrument—Integrating Watthour Meter with diamond jewel.

Maker—General Electric Co.

Type—I.

Serial Number—722800.

Amperes—10.

Volts—110.

Cycles—60.

Standard used—General Electric Co.

Serial Number 2205972

<i>Per Cent. of Full Load.</i>	<i>Amps.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
10	1.0	100.1	+ 0.1
50	5.0	100.2	+ 0.2
75	7.5	100.3	+ 0.3
100	10.0	99.9	- 0.1

This meter was found to be 1.6 per cent. fast on both 10 per cent. and 100 per cent. loads, and was adjusted to the above accuracy. It is hereby accepted as the wall standard of this utility to be used to check the portable standards used. A copy of the above test should be kept with the wall standard.

It is RECOMMENDED that the location of the proposed meter room be a room which is well-heated and ventilated, and the wall standard be installed on a slate switchboard so designed that the meter is only in service when the portable standards are checked. The switchboard should have connections for variable loads for the testing of customers' meters.

CRANFORD GAS LIGHT CO.

This company supplies Kenilworth Borough, Cranford Township, Garwood Borough, Westfield Township, Fanwood Township and Clark Township.

The company does not operate a gas plant but purchases gas from the Elizabethtown Gas Light Company, which is delivered from the Elizabeth works to the distributing mains of the Cranford company by both high and low pressure transmission mains, the pressure being reduced when the gas passes from the high pressure transmission mains to the low pressure distribution mains of the Cranford company by means of district governors. With the exception of some customers in Clark Township who are served directly from the high pressure mains (the pressure being reduced by means of high pressure service regulators) the gas is distributed under the low pressure distribution system. The total gas purchased from the Elizabethtown company is measured by summing up the total gas used by the customers of the Cranford company as indicated by the readings of consumers' meters.

During the past year the company has erected at Westfield a storage holder which has a capacity of 750,000 cubic feet. Gas is delivered to this holder from the Elizabeth works by a high pressure main, and the holder provides a storage for gas which insures the customers of the Cranford company against an interruption in service, which might otherwise occur in the event of a break in the high pressure transmission lines from Elizabeth.

An examination of the company's records made by the Board's Inspector on January 22d, 1914, showed that the rules adopted by the Board as establishing standards and regulations to be followed by gas utilities, were being complied with, with the exception of that part of Rule XVI which provides that instructions be given to customers as to the reading of meters. The

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company had complied with this rule by printing on the regular monthly bills instructions as to the reading of meters, and neglected to instruct their customers using gas through the prepayment type of meter as to the proper way of reading the meter.

Investigation made on February 17th, 1915, shows that the company is observing all the rules adopted by the Board, and has complied with Rule XVI by printing on the back of the slip, which is left with consumers using meters of the prepayment type, instructions as to the reading of meters.

DOVER, ROCKAWAY & PORT ORAM GAS CO.

This is a carburetted water gas plant, supplying the town of Dover under the low pressure distribution system, and the borough of Wharton under the intermediate pressure system, the pressure being reduced at the consumer's meter by means of individual pressure service regulators.

There have been no additions to the generating equipment of the plant, nor any changes in the method of operating the plant, since the last inspection on August 19th, 1914. The output of the plant is practically the same, and the relation between the capacity of the plant and the demand, is practically the same as at the time the last inspection was made, and is covered in a report to the Board dated January 5th, 1914.

An examination of the company's records on August 19th, 1914, showed that the rules adopted by the Board as establishing standards and regulations to be followed by gas companies were being complied with, with the exception of Rule X, which provides that the company install a standard calorimeter, and make tests of the heating value of the gas.

The company petitioned the Board to be relieved of complying with this rule owing to its financial condition, and the petition was granted by the Board, the company to be relieved of installing a calorimeter until January 1st, 1915.

Examination of the company's records on August 6th shows that the company is now complying with the rules adopted by the Board, with the exception of Rule III, which provides that the company file with the Board each month a summary showing the results of the meters tested. No reports have been filed since June, 1914.

In connection with the installation of a calorimeter outfit, it is RECOMMENDED that the company, owing to its financial condition, be relieved of complying with the installation of a standard calorimeter, as prescribed by Rule X, for a period of one year, ending January 1st, 1916.

EASTERN PENNSYLVANIA POWER CO.

Test of Wall Standard.

The wall standard of this company is hung on the wall of the meter shop, which is in a portion of the old power house on North Essex Street. This

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meter shop is well adapted for testing of electric meters, but no switchboard has been installed, and the only load available is of the portable type manufactured by the General Electric Company, and has a capacity of about 15 amperes.

The result of the test of the meter as found is as follows, and no adjustments were made.

Wall Standard.

Maker—Westinghouse Electric and Manufacturing Co.

Type—C.

Serial No.—395166.

Amperes—5.

Volts—100.

Cycles—60.

Standard used—General Electric Co. No. 2205972.

Voltage of testing circuit—Approximately 115.

<i>Per Cent. of Full Load.</i>	<i>Amperes.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
95	4.75	100.2	+ 0.2
80	4.0	100.7	+ 0.7
50	2.5	100.9	+ 0.9
15	0.75	100.5	+ 0.5

This meter is hereby accepted as the wall standard of this utility to check the rotating standard. A copy of this report should be kept in the meter room.

EASTERN PENNSYLVANIA POWER CO.

Test of Portable Rotating Standard Wattmeter.

The portable rotating standard wattmeter used by this company for the testing of customers' meters was tested by comparison with the Board's standard. The result of the test is as follows:

Portable Rotating Standard.

Maker—Westinghouse Electric and Manufacturing Co.

Type—149742 A.

Serial No. 162655.

Amperes—1, 5, 10, 20 and 40.

Volts—100 and 200.

Cycles—60.

Standard used—General Electric Co. No. 2205972.

Voltage testing circuit—Approximately 115.

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<i>Coil.</i>	<i>Per Cent. of Rated Capacity.</i>	<i>Amperes.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
1	75	0.75	101.5	+ 1.5
5	15	0.75	100.9	+ 0.9
5	50	2.5	101.5	+ 1.5
5	80	4	101.1	+ 1.1
5	95	4.75	100.8	+ 0.8
10	100	10	100.8	+ 0.8
20	50	10	101.1	+ 1.1
40	25	10	101.0	+ 1.0

This standard is hereby accepted as the portable rotating standard watt-meter of this utility. A copy of the above correction should be kept with the standard and applied when tests are made.

The correction on points in testing should be determined by plotting the curve of the 5-ampere coil and by drawing curves parallel to the curve for the other coils, using the correction found on each coil as a point in that curve.

EASTON & WASHINGTON TRACTION CO.

An inspection has been made of the track, roadway and equipment of the Easton and Washington Traction Company.

This line, which is single track with turn-outs, runs approximately eighteen miles from Port Murray to Phillipsburg, the road being operated 12.7 miles upon private right of way, and the remainder on public roads and ways.

The road was originally intended as a high-speed line across the State, but it would seem that there was not sufficient interests in this undertaking, and, as a consequence, the road has never been constructed further than Port Murray.

The original construction, the open type of standard steam railroad construction, was well built, and has had considerable maintenance since that time; and as the traffic is not heavy, limited to but two cars, the track and roadway is in good condition. The cars, which are of the large interurban type, have also been well kept up.

As far as physical condition is concerned, the road would appear to be in excellent condition.

ELECTRIC CO. OF NEW JERSEY, SALEM DISTRICT.

Test of Wall and Portable Standards.

The meter shop of this utility is located in a room partitioned off from the power house. The wall standard is mounted on the meter test board and was tested by comparison with the Board's standard and with the utility's portable standard in series with same. The results of the tests are given below. The

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switchboard is well designed having convenient connections for applying loads at either 110 or 220 volts. The load used is a large lamp bank. The voltage of the testing circuit used was approximately 110.

Wall Standard.

Maker—Westinghouse Electric and Manufacturing Co.
 Type—O. A.
 Serial Number—1467501.
 Cycles—60.
 Amperes—10.
 Volts—100.

<i>Amperes.</i>	<i>Per Cent. Load.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
0.5	10	100.0	0
2.5	25	100.6	+ 0.6
5.0	50	100.5	+ 0.5
7.5	75	100.6	+ 0.6
10.0	100	100.4	+ 0.4

This meter was sealed with the Board's seal marked N, J, P, U, C., and is hereby accepted as the wall standard of this utility, to be used to check the portable rotating standard. A copy of this test should be kept in the meter shop.

Portable Rotating Standard.

Maker—Westinghouse Electric and Manufacturing Co.
 Type—54884 B.
 Serial Number—219946.
 Cycles—60.
 Amperes—5, 10, 20 and 40.
 Volts—100 and 200.

<i>Amperes.</i>	<i>Coil.</i>	<i>Per Cent. Load.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
0.5	5	10	101.3	+ 1.3
2.5	5	50	100.7	+ 0.7
5.0	5	100	100.0	0
7.5	10	75	100.2	+ 0.2
10.0	10	100	99.8	- 0.2

The portable rotating standard is hereby acceptable for testing of customers' meters. A copy of this test should be kept with the instrument.

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ELECTRIC LIGHT, POWER & WATER CO. OF SEA ISLE CITY.

Test of Electric Standards.

The portable rotating standard used by this company was not found in the company's meter shop, and due to a change in management, the present superintendent did not know where same was located.

No wall standard was set up, and the Board's Inspector had a wall standard installed, with temporary connections, and this meter was found to be .5 of 1 per cent. fast on light load, and 1.2 per cent. fast on full load. Following is the record of the test after adjustments were made:

Approximate voltage of testing circuit, 110.

Standard used—General Electric Co., Number 2205972.

Manufacturer of wall standard—Westinghouse General Electric Co.

Type—O. A.

Serial Number—1143601.

Amperes—5.

Volts—100.

Cycles—60.

<i>Per Cent. of Full Load.</i>	<i>Amperes.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
10	.5	99.4	— .6
20	1	99.8	— .2
50	2.5	100.3	+ .3
70	3.5	100.5	+ .5
100	5	100.0	0

A copy of this test should be kept in the meter shop with the wall standard. Meter was sealed with the Board's seal and is hereby accepted as the wall standard of this utility, to be used only in checking portable rotating standard.

ELIZABETHTOWN GAS LIGHT.

This is a carburetted water gas plant, supplying the city of Elizabeth, Union Township, Linden Borough, Linden Township, Roselle Borough, and Roselle Park Borough, under the low pressure distribution system. Gas is also sold to the Cranford Gas Company, the Metuchen Gas Light Company, the Rahway Gas Light Company, and the Perth Amboy Gas Light Company, the gas being transmitted from the Elizabeth plant in high pressure mains. In Rahway, Perth Amboy, and Westfield, the gas is delivered to storage holders, and distributed to the consumers under holder pressure. In Perth Amboy and Westfield gas is also delivered directly to the low pressure mains, the pressure being reduced by means of district regulators. The gas sold

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by the Metuchen Company is delivered directly to the low pressure mains of the company, and the pressure is reduced by means of district regulators.

Coal is received from the Central Railroad of New Jersey by means of an elevated siding, from which it is unloaded by gravity, and is carried to the boilers and generators by means of an industrial railway, being carried to the charging floor of the generator house by a hydraulic elevator.

During the past year the company has increased its generating capacity by the installation of one 10-foot Gas Machinery Company carburetted water gas set. This set is erected on the site of a 6-foot set, which was dismantled. The generating capacity of the plant now consists of three 10-foot sets, which provides a normal generating capacity of 3,200,000 cubic feet per day, with a reserve capacity of 1,600,000 cubic feet, making a total generating capacity of 4,800,000 cubic feet per day.

Ample provision has been made for cooling, purifying, and measuring the gas manufactured. The storage holder capacity in the Elizabeth works is 1,031,000 cubic feet, and the relief holder capacity is 340,000 cubic feet.

Ample provision has been made for the storage of coal and gas oil, the coal being stored under a concrete trestle; and the company has erected two steel oil tanks, having a capacity of 34,650 gallons each, making a total oil storage capacity of 69,300 gallons of oil.

The maximum daily output for the year 1913 was 2,177,000 cubic feet, on September 10th. The maximum daily output of the plant for the year 1914 was 2,443,000 cubic feet, on September 24th.

The above figures would indicate that the capacity of the Elizabeth plant is ample to meet any demands which may be expected during the next few years.

An examination of the company's records on December 15th, 1913, showed that the rules adopted by the Board on October 17th, 1911, as establishing standards and regulations to be followed by gas companies has been complied with, with the exception of Rule 16, which provides that instructions be given to consumers as to the reading of meters. An examination of the company's records on February 10th, 1915, shows that the company is complying with all of the rules adopted by the Board. The company has complied with Rule 16 by printing on its regular bills and on prepayment slips which are left with consumers using prepayment meters instructions as to the reading of meters.

Tests of the heating value of the gas made by the Board's Inspector on February 16th, 1915, using the company's calorimeter, gave a total heating value of 626 Btu. The Board's rules require that the monthly average total heating value shall be 600 Btu.

ENTERPRISE GAS CO.

This is a carburetted water gas plant supplying Egg Harbor City under the low pressure distribution system.

There have been no additions to the equipment of this plant since the previous inspection made by the Gas Inspector on March 26th, 1914, and

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the relation between the capacity of the plant and the demand was covered in a report to the Board dated March 30, 1914.

In this report it was recommended that the small gas holder be arranged for use as a relief holder, and that the necessary rearrangement of piping be made so as to provide for cooling the gas before purification. This recommendation has been carried out in full, and the company states whereas it was formerly necessary to change the oxide in their purifying boxes about once per month that since this change has been made it has not been necessary to change a purifying box since the summer of 1914.

The estimated cost of changing the oxide in a purifying box in this plant is \$15, and it is therefore apparent that the cost of making this change in piping will soon warrant the expense of making the alterations, and, in addition to a more economical operation of the plant, the quality of the gas should be considerably better for reasons mentioned in the report dated March 30th, 1914.

An examination of the company's records on March 26th, 1914, showed that the following rules, adopted by the Board as establishing standards and regulations to be followed by gas companies, had not been complied with:

Rule IV. The company had not equipped itself with a standard meter prover.

Rule XII. No measurements were made of pressure and pressure variations.

Rule XVI. No method had been adopted to inform customers as to the reading of meters.

It was recommended (1) that the company purchase a recording pressure gauge so that daily records might be made of pressure and pressure variations at various points on its distribution system; (2) that the company adopt some method to inform its customers as to the reading of meters, either by printing on the bills a description of the method of reading meters or a notice to the effect that the method would be readily explained upon application; (3) that a record be kept of all complaints received in regard to service, whether the complaint is made at the office of the company or to some employee of the company outside of the office; (4) that the company be relieved from purchasing a standard meter prover as the total number of meters in service was less than 400.

Investigation shows that on January 22d, 1915, the company has complied with Rule XII by purchasing a recording pressure gauge, which was installed in its office on Philadelphia Avenue on June 10th, 1914. The charts obtained are on file in the company's office in Egg Harbor City, and an examination of these charts would indicate that the pressure conditions at that point are within the requirements of the Board's rules.

The company has complied with Rule XVI by installing a meter in its office and notifying consumers that upon application the method of reading meters will be explained. The company states that when the present supply of bills is exhausted they will print on the new bills the instructions to consumers as to the reading of meters.

A complaint record is kept in accordance with Rule XIV showing the name of the complainant, the address, the nature of the complaint and

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the remedy. It is RECOMMENDED that the company be relieved from installing a standard meter prover for a further period of one year, beginning January 1st, 1915.

Summing up, it would appear that the company has now complied with all of the rules adopted by the Board, excepting where specifically exempted.

FIVE MILE BEACH ELECTRIC RAILWAY.

An inspection has been made of the Five Mile Beach Electric Railway Company, operating between Wildwood Crest and Anglesea, a distance of 4.75 miles.

The track, overhead and paving are in excellent condition, and the cars, of which there are five of the closed type and seventeen of the open type, have been recently overhauled, and are in good workable condition.

The local traffic conditions of Wildwood are such that the company is able to operate during the winter months two closed cars, using the one-man operation. There has been no complaint of this method, and satisfactory results would appear to have been had.

FREEHOLD GAS LIGHT CO.

This is a coal gas plant supplying the Town of Freehold under the low pressure distribution system. Since the last inspection of this plant by the Board's Inspector the company has reset one of its coal gas benches and slightly increased the capacity of the bench by the installation of an additional retort, the bench now consisting of five nine-foot retorts in place of the original setting of four retorts. No other changes or additions have been made in the equipment of the plant since the date of last inspection, which is January 7th, 1914, and the maximum daily output during the year 1914 was 54,600 cubic feet on October 28th, so that although the total generating capacity has been slightly increased, the maximum daily output is slightly less than the maximum daily output during the year 1913.

The total gas made during the year 1914 was 15,561,600 cubic feet, which is slightly more than the output during the year 1913—14,662,600 cubic feet. The relation between the generating capacity of the plant and the maximum demand on the plant is, therefore, practically the same as existed when the last inspection was made, and is covered in a report to the Board dated January 10th, 1914.

Examination of the company's records on January 7th, 1914, showed that the company had complied with the rules adopted by the Board on October 17th, 1911, as establishing standards and regulations to be followed by gas companies, with the following exceptions:

Rule XII—No measurements were made of pressure and pressure variations.

Rule XIV—No record was kept of complaints in regard to service.

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Rule XVI—No instructions were given to customers using prepayment meters as to the reading of meters. It was recommended that the company purchase a recording pressure gauge, preferably of the portable type, so that measurements of pressure and pressure variations could be made at various points in Freehold, and that such records be kept on file at the company's office.

The inspection made on July 20th, 1915, shows that the company has complied with Rule XII and with the recommendations of the Board's Inspector, by installing a recording pressure gauge at its plant on Main Street. The company has at times taken pressure records with this gauge at various points in Freehold in compliance with the said recommendation.

An examination of the charts obtained are on file at the work's office, and would indicate that the pressure conditions in general are within the requirements prescribed by the Board's rules. A record is kept at the work's office showing the complaints received in regard to service, the record showing the name and address of the complainant, the date, the nature of the complaint, and the remedy, in accordance with Rule XIV.

There does not appear, however, to have been any steps taken to instruct customers using the prepayment type of meter, as to the method of reading meters. The company has not as yet provided a printed form to leave with the prepayment meter customers when the collections are made from the meter, the collector merely writing the reading of the meter and the amount of money collected, on a slip of paper which is left with the customer. The company proposes, however, to prepare a printed form for this purpose, on which may be printed instructions as to the reading of meters, or the pamphlet which the company has distributed to its customers using the regular type of meters when bills are rendered, can be left with the prepayment customer at the time the collections are made from his meter.

Summing up, it would appear that the company is now complying with all the rules adopted by the Board, with the exception of Rule XVI, which provides that instructions be given to customers as to the reading of meters, but as mentioned above, the company proposes to comply with the requirements of this rule.

FLEMINGTON ELECTRIC LIGHT, HEAT & POWER CO.

Test of Wall Standard.

A portion of the local commercial office of the above company, located at 256 Main Street, is used as a meter shop. The wall standard is installed on a wooden switchboard to which loads up to 15 amperes at 100 volts are conveniently connected. It was stated that an additional load of 10 amperes will be installed, making it an excellent testing board for a company having so few large meters.

The wall standard was tested and found to be 2.1 per cent. fast on 100 per. cent. load and 0.6 per cent. slow on ten per cent. load. Adjustments were

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made and the meter tested and sealed. The results of the test are as follows, and a copy of the same should be kept in the meter room:

Maker—Westinghouse Electric and Manufacturing Co.

Type—OA.

Serial Number—1394609.

Amperes—5.

Volts—100.

Cycles—60.

<i>Amperes.</i>	<i>Per Cent. Load.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	100	100.1	+ 0.1
4	80	100.0	0
25	50	100.0	0
.5	10	100.2	+ 0.2

This meter is hereby accepted as the wall standard of this utility against which the portable standard is to be checked.

Test of Portable Rotating Standard Watthour Meter.

The portable standard meter used by this utility was purchased in 1914 and has been used to test customers' meters. This meter was tested by comparison with the Board's standard. The result of the test is as follows:

Maker—Westinghouse Electric and Manufacturing Co.

Type Number—63417 B.

Serial Number—200763.

Amperes—5, 10, 20 and 40.

Volts—100 and 200.

Cycles—133.

<i>Coil.</i>	<i>Amperes.</i>	<i>Per Cent. Load.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	0.5	10	100.3	+ 0.3
5	1.0	20	100.9	+ 0.9
5	2.5	50	102.0	+ 2.0
5	4.	80	101.8	+ 1.8
5	5.	100	101.5	+ 1.5
10	10.	100	101.5	+ 1.5
20	15.	75	102.0	+ 2.0
40	15.	37	100.7	+ 0.7

Voltage of testing circuit—100 volts.

Standard used—Westinghouse No. 157938.

This meter is hereby accepted as the portable rotating standard of this utility for testing of customers' meters, provided the corrections as given are applied. A copy of the above test should be kept with the instrument. The corrections on other points may be determined by plotting the curve of the 5-ampere coil and by drawing curves parallel to this curve for the other coils, using the corrections as found on the other coils as points in the respective curves.

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If it is more desirable to the utility to have this standard adjusted to accuracy it should be sent to the manufacturer for adjustment, and a record of its final adjustment filed with the Board.

HACKETTSTOWN ELECTRIC LIGHT CO.

Test of Electric Standards.

The wall standard used by this company and against which the portable standard is checked, is installed on the wall of the office on Main Street. A lamp bank is used as a load in testing. The wall standard was tested on the 110 volt circuit and was found to be 3.9 per cent. fast on full load and 1.2 per cent. fast on light load. Adjustments were made and the meter was left as follows:

Maker—Westinghouse Electric and Manufacturing Co.

Number—702729.

Type—C.

Amperes—5.

Volts—100.

Cycles—133.

<i>Amperes.</i>	<i>Per Cent. of Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	100	100.8	+ 0.8
4	80	100.8	+ 0.8
2.5	50	100.6	+ 0.6
1.	20	99.5	— 0.5
0.5	10	98.5	— 1.5

A copy of this test should be kept with the instrument in the meter shop.

This meter is hereby accepted as the wall standard of this company to be used only to check the portable standard.

The portable rotating standard used by this company to test its customers' meters was tested by the National Testing Laboratories of 107 Front Street, New York City, on December 21st, 1914. A copy of this test as filed with the Board shows this meter to have a maximum error of about 0.2 per cent. on the 5-ampere coil at 100 per cent. power factor. The test made in comparison with the Board's standard, with corrections as given by the Bureau of Standards of Washington, D. C., is as follows:

Maker—Westinghouse Electric and Manufacturing Co.

Number—187856.

Type—63417-B.

Cycles—133.

Amperes—5, 10, 20 and 40.

Volts—100 and 200.

Coil.	Amperes.	Per Cent. Rated Capacity.	Per Cent. Accuracy.	Per Cent. Error.
5	5	100	102.0	+ 2.0
5	4	80	102.3	+ 2.3
5	2.5	50	102.6	+ 2.6
5	1.	20	103.3	+ 3.3
5	0.5	10	101.8	+ 1.8
10	10	100	102.4	+ 2.4
20	10	50	102.3	+ 2.3
40	10	25	101.8	+ 1.8

This instrument is hereby accepted as the portable rotating standard of this company to test and calibrate customers' meters *provided the above corrections be applied*. A copy of this test should be kept with the instrument. To determine the accuracy of points not tested a curve should be drawn for the 5-ampere coil using the above figures and curves plotted parallel to same but a distance from same in proportion to the errors as found on these coils at the same *per cent.* of rated capacity of the 5-ampere coil.

The National Electrical Laboratories has not as yet been investigated to determine whether or not same is a satisfactory laboratory for such testing, but same will be done as soon as possible.

HAMMONTON AND EGG HARBOR CITY GAS CO.

This is a carburetted water gas plant supplying the town of Hammonton under the low pressure distribution system.

There have been no additions to the equipment of this plant since the previous inspection, made by the Gas Inspector on December 3d, 1913, and the relation between the capacity of the plant and the demand was covered in a report to the Board dated December 10th, 1913.

An examination of the company's records on December 3d, 1913, showed that the following rules adopted by the Board as establishing standards and regulations to be followed by gas companies, had not been complied with:

Rule III. No record was kept of meter tests other than meters tested upon complaint.

Rule IV. The company had not equipped itself with a standard meter prover.

Rule IX. Tests made by the Board's Inspectors showed a total heating value of the gas of 573 Btu. The minimum value obtained was 568 Btu. The Board's rules prescribe a monthly total average heating value of 600 Btu. with a minimum which shall never fall below 550 Btu.

Rule XI. Pressure records obtained by the Board's Inspectors and by the company indicated pressure conditions lower than the limits allowed by this rule, with daily variations in pressure which were greater than the maximum variations allowed.

Rule XVI. No method had been adopted by the company to inform customers using prepayment meters as to the reading of meters.

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It was recommended that the company be relieved of installing a standard meter prover as prescribed by Rule IV, for a period of one year from January 1st, 1914, as the company had less than 500 meters in service at the close of the year 1912, and as its financial condition did not warrant the purchase of this apparatus.

It was further recommended that the company make a study of operating conditions at the plant with a view of assuring a monthly average total heating value of 600 Btu.

It was also recommended that the company make a study of pressure conditions with a view to meeting the requirements of Rule XVI.

Investigation on January 22d, 1915, shows that the company is now testing all meters removed from service, using a portable test meter which is periodically checked with a standard meter prover at Pleasantville. A record of the results of these tests is on file in the company's office.

During the past year the company has made certain changes in its mains on Valley Avenue and on Grape Street with a view of improving pressure conditions, and pressure records taken in this locality would indicate that the pressure conditions have been improved in this section of the town.

Daily measurements of the pressure are made at the company's office, and the charts obtained, which are on file in the company's office, would indicate that pressure conditions at this point are within the limits prescribed by Rule XI.

It is recommended, however, that a further study be made of pressure conditions at various points in Hammonton, as the records obtained during the past year do not give a very complete record of conditions throughout the distribution system.

The company has complied with Rule XVI by stamping on the back of the prepayment meter slips a notice stating that the method of reading meters will be explained upon application at the office.

The Board's Inspector had no means of testing the heating value of the gas, so it is impossible to determine whether the gas furnished is within the requirements of Rule IX.

In connection with Rule IV, which requires that a gas company provide itself with a standard meter prover, it is recommended that the company be relieved of compliance with this rule for a further period of one year from January 1st, 1915, provided that the test meter which the company uses in checking consumers' meters be checked at least once each month with a standard meter prover.

HAMMONTON ELECTRIC CO.

Test of Electric Standards.

The portable rotating standard used by this company for testing electric meters was tested in Pleasantville, N. J., and as this meter is in Pleasantville at present, no test was made.

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The wall standard used by this company is installed on a small wooden switchboard in the cellar of the office building, located at 225 Bellevue Avenue, Hammonton, N. J. This meter was tested and found to be 0.5 slow on full load and $2\frac{1}{2}$ per cent. slow on light load. These errors were adjusted, and the following is the record of the tests of accuracy of the meter as left after adjustment:

Voltage of testing circuit—Approximately 110.

Standard used—General Electric Co. No. 2205972.

Manufacturer of wall standard—Westinghouse Electric Manufacturing Co. Type—O. A.

Serial Number—1203054.

Amperes—5.

Volts—100.

Cycles—60.

<i>Per Cent. of Full Load.</i>	<i>Amperes.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
10	.5	100.0	0
20	1	99.3	— .7
40	2	99.9	— .1
60	3	100.3	+ .3
80	4	100.3	+ .3
100	5	100.4	+ .4

A copy of this test should be kept in the meter room. The meter was sealed with the Board's seal, and is hereby accepted as the wall standard of this utility, to be used only for the checking of the rotating standard.

HUNTERDON ELECTRIC & POWER CO.

Test of Electric Standards.

The meter shop of this company is in the power house. A wall standard is installed on the wall of the power house, but only temporary connections are used. The load used in testing is a portable type, with a capacity of 15 amperes at 110 volts. The wall standard was tested and found to be recording so accurately that no adjustments were made. The following is the result of a test, a copy of which should be kept in the meter shop:

Test of Wall Standard.

Maker—Westinghouse Electric and Manufacturing Co.

Type—O. A.

Serial Number—1136450.

Amperes—10.

Volts—100.

Cycles—60.

Standard used—General Electric Co. No. 2205972.

Voltage of testing circuit—110.

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<i>Amperes.</i>	<i>Per Cent. Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
1	10	100.0	0
2.5	25	100.2	+ 0.2
5	50	100.2	+ 0.2
7.5	75	99.7	- 0.3
10	100	99.2	- 0.8

This instrument was sealed with the Board's seal, and is hereby accepted as the wall standard of this utility, to be *used only* in checking the portable rotating standard. Permanent connections should be made to this meter, with the necessary switches included, so that when customers' meters are being tested no current passes through the current coil of the wall standard.

The portable rotating standard used by this utility was tested at the same time the wall standard was tested, and on the same circuit. This portable is also used by the Jersey Electric Company to test its customers' meters at Clinton, N. J. The following is the result of the test by comparison with the Board's standard, a copy of which should be kept with the instrument:

Test of Portable Rotating Standard.

Maker—Westinghouse Electric and Manufacturing Co.

Type—54884 A.

Serial Number—131531.

Cycles—60.

Amperes—5, 10, 20 and 40.

Volts—100 and 200.

<i>Coil.</i>	<i>Amperes.</i>	<i>Per Cent. Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	5	100	100.1	+ 0.1
10	1	10	100.6	+ 0.6
10	2.5	25	100.5	+ 0.5
10	5.	50	100.6	+ 0.6
10	7.5	75	100.3	+ 0.3
10	10.	100	99.9	- 0.1
20	10.	50	100.1	+ 0.1
40	10.	25	99.9	- 0.1

This instrument is hereby accepted as the portable rotating standard of this utility, to be used to check the meters of its customers, and those of the Jersey Electric Company's at Clinton, N. J.

To determine corrections on points not tested plot a curve for the 10-ampere coil and draw curves parallel to same but a distance from same in proportion to the difference in error of those coils at the same per cent. of rated capacity.

JAMESBURG ELECTRIC CO.*Test of Electric Standard.*

The portable rotating standard used by the company to test customers' meters was tested by comparison with the Board's Standard on a 110-volt circuit. The result of the test is as follows, a copy of which should *be kept with the meter*:

Maker—General Electric Co.

Type—IB 5.

Serial Number—3458445.

Amperes—1 and 10.

Volts—110.

Cycles—60.

<i>Coil.</i>	<i>Amperes.</i>	<i>Per Cent. Load.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
10	10	100	99.9	— 0.1
10	7	70	100.0	0
10	5	50	100.1	+ 0.1
10	3	30	99.7	— 0.3
10	1	10	98.0	— 2.0
1	1	100	101.0	+ 1.0
1	.66	66	101.3	+ 1.3
1	.33	33	100.8	+ 0.8

The instrument is hereby accepted as the portable rotating standard to be used in testing customers' meters, and the above corrections should be applied.

No wall standard has been installed for checking the portable standard, and for the following reasons it is not considered necessary to install one: First, because the company has only 19 meters on its lines, and, second, because the walls of the power plant and of the office in same vibrate so much that a wall standard would not retain its accuracy.

If the meter tester should at any time note any discrepancies or doubt the accuracy of the standard, the Board should be notified so that the Inspector could recheck same.

LAKEWOOD GAS CO.

Note—In this section of the report of the Board for 1914 (page 264) the send-out for the Lakewood Gas Company for the year 1913 was stated to be 22,000,000 cubic feet. This was an error, as the correct send-out for that year was 28,286,000 cubic feet.

A general inspection of the plant of the Lakewood Gas Company and an examination of the company's records made by the Gas Inspector on January 13th, 1915, showed that the following rules, adopted by the Board as establishing adequate service, had not been complied with:

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Rule III. The company has made tests of consumers' meters, but no records of the results of such tests have been filed with the Board since August 11th, 1914.

Rule X. A cabinet for the calorimeter has been supplied and a calorimeter installed, but no tests have as yet been made of the heating value of the gas delivered in Lakewood.

Rule XII. No measurements of pressure are being made in Lakewood.

Rule XVI. No method has as yet been adopted to inform customers using prepayment meters as to the reading of meters.

A letter from the Lakewood Gas Company to the Board, dated January 25th, 1915, states that the company will take immediate steps to comply with all the rules which have not been complied with in full, stating that during the next week a summary of the meter tests will be filed with the Board, and that the company is now leaving slips with the customers using prepayment meters showing the reading of the meter and the money collected. Further, that a recording pressure gauge will be located at some point in Lakewood other than at the works.

In connection with the operation of the calorimeter, it would appear, in view of the fact that daily tests are made of the heating value of the gas supplied Lakewood at its point of manufacture, Belmar, that it will be unnecessary for the company to make daily tests in Lakewood. It is RECOMMENDED, however, that calorimeter tests be made at least once during each calendar month, and that when such tests are made that at least six observations be made in determining the heating value of the gas.

LAKEWOOD WATER, LIGHT & POWER CO.

Test of Portable Rotating Standard.

The portable rotating standard wattmeter used by this utility for testing customers' meters was tested, and the result of the test is as follows:

Manufacturer—General Electric Company.

Type—I B 4.

Serial Number—2330194.

Cycles—60.

Amperes—1, 5, 10, 50 and 100.

Volts—110 and 220.

Voltage of testing circuit—Approximately 110.

Standard used—General Electric Co. No. 2205972.

<i>Amperes.</i>	<i>Coil.</i>	<i>Per Cent. Load.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
0.4	1	40	100.4	+ 0.4
1.	5	20	100.2	+ 0.2
2.5	5	50	100.2	+ 0.2
2.5	10	25	100.4	+ 0.4
5.0	10	50	100.4	+ 0.4
50.0	50	100	100.0	0
100.0	100	100	99.5	- 0.5

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A copy of the above test should be kept with the instrument.

It was impossible to get higher loads on the three small coils because the phantom load would not supply same through the two portable standards. Therefore, in order to obtain points on the curve of the 10-ampere coil above 5 amperes, it is necessary that the local meter tester determine same by checking the portable standard against the wall standard, using the corrections on the accompanying report. In order to obtain corrections for this instrument on points not given above, a curve should be plotted for each coil parallel to the one for the 10-ampere coil, and a distance from that curve proportional to the difference in error between same and 10-ampere curve at the *same per cent.* of load.

This instrument is hereby accepted as the portable rotating standard of this utility for the testing of customers' meters.

LAMBERTVILLE PUBLIC SERVICE CO.

Inspection of Power Units and Appurtenances.

An inspection of boilers, engines and appurtenances of the Lambertville Public Service Company of Lambertville, N. J., was made December 15th, 1915.

Description of Boilers.

One York Manufacturing Company horizontal return tubular boiler, 72" diameter by 18' long, containing 48 5" tubes, brick setting, cast iron fronts, grate area 36 square feet.

Boiler has two 3" spring loaded safety valves, set at 120 and 125 pounds respectively. This boiler is drafted to a brick stack 75' high; also one A. D. Gray Manufacturing Company horizontal return tubular boiler, 72" diameter by 18' long, containing 60 4½" tubes; brick setting, cast iron fronts, grate area 36 square feet, boiler having 2 3" spring loaded safety valves, set at 120 and 125 pounds. This boiler is drafted to steel stack 75' high.

The water feeding arrangement consists of two duplex steam pumps, water passing through a closed feed water heater to distributing pipes at the front of boilers, the blowing off arrangement being also at the front of boilers.

The arrangement of the feed water regulating valves and checks are such that in the event of a repair being necessary to the check valve on No. 1 boiler, it would be necessary to stop the pumps to make this repair, as no valve is between the main feed and the check of No. 1 boiler.

The check arrangements feeding No. 2 boiler are correct as far as the position of check and valves is concerned.

The blow-off pipe runs under the floor of boiler room out to the coal storage, and when the valve is open the water flows directly into the coal pile.

The brick setting of No. 2 boiler on the outside shows several cracks in the outer wall.

The brick return flue on top of boiler is in good condition.

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Considerable rubbish and scrap are lying at the rear of boilers, and also piled up in the open space along the side.

The main steam pipe on top of boilers is uncovered in several places, and steam pipes from boilers to main are now resting on pieces of pipe, carried on loosely piled bricks on side walls.

The damper regulator, located on wall in engine room, is not working properly, as the ash doors are now used to check the draft on fire, the regulator being of the hydraulic operated type, which is supposed to operate and hold the damper in any position as the use of steam demands. It is now operating either full open or full closed.

Recommendations.

For Boiler Room.

Steam mains on top of boilers to be carried on proper suspension to permit suitable expansion.

Main steam pipes covered with nonconducting material where exposed to radiation.

Steam pipe to pump at the rear of boiler room properly covered with nonconducting material.

Feed pipe rearranged so that check valve on No. 1 boiler will have valve on each side, so that repairs can be made to check valve when necessary.

Blow-off pipe rearranged so as to permit drainage outside of coal pockets.

Damper regulator put in proper working order, so that draft will be controlled at the stack.

Boiler room scrap removed and room put in orderly condition.

Engines.

These units consist of

One 14 x 20 Ball Engine Co. side crank engine, 200 revolutions per minute, inertia governor, known as No. 1.

One 13 x 12 Ball Engine Co. center crank engine, 300 revolutions per minute, inertia governor, known as No. 2.

One 13 x 12 Ball Engine Co. center crank engine, 275 revolutions per minute, throttling governor, known as No. 3.

The main steam pipe from boilers leading to engine room is 8", and branches off to No. 1 engine, there being no valve between main steam pipe and throttle valve, so that repairs to throttle valve seat would necessitate shutting off steam at the boilers.

The steam pipe to No. 2 engine has shut-off valve in the main, which would shut off both No. 2 and No. 3, and in the event of repairs to No. 2 throttle this would necessitate shutting the steam off from No. 2 and No. 3.

Engine No. 3, 13 x 12 throttling governor. It would appear from information received from the engineer that engine No. 3 about four years ago had an accident to the inertia governor that was originally on the engine. Part of this governor was broken at that time, and instead of replacing the parts they applied the throttling governor that is now used. The governor pulley wheel that was originally on the right side of engine was

placed on the left side, and a new steel rim belt wheel was put on right side. These pulleys are considerably out of true, due probably to the crank shaft being bent. The key on the left driving pulley projects out of hub, making a dangerous condition.

The stuffing box nut, on valve stem of steam chest, works loose, so that wire and weight is used to prevent nut from working off stuffing box.

Engine No. 2, 13 x 12. This engine was started up and it was noted that the pulleys ran out of true considerably, evidently due to crank shaft being bent. This engine had considerable knock in reciprocating parts. The stuffing box nut on steam chest is loose, and was prevented from working off by a spanner wrench that was strapped on nut.

Engine No. 1, 14 x 20. This engine is apparently in good condition, working smoothly and appearing to regulate good.

These engines all exhaust to a main located below the floor, and each has shut-off valve below the steam chest. The main exhaust passes through a Jacobs closed type of feed water heater and exhaust above the roof, the top of the exhaust pipe having an exhaust head to entrain the condensation.

The belts leading from engines have no guards around them, making a very dangerous condition.

At the rear of No. 1 engine there is a projecting ledge into the boiler room, with a rail guard around, and no guard at the bottom.

The exhaust pipe cover plates in the rear of engines are smooth and slippery.

Recommendations—In Engine Room.

Steam main to be rearranged and branch pipes to each engine provided with shut-off valve so that any engine branch pipe can be shut off at the main steam pipe, these pipes to be properly covered and separators applied to entrain condensation. The keys in the hubs of the pulleys on engines Nos. 2 and 3 to be properly protected with suitable covers.

The nuts on the stuffing box of steam chest to be properly secured.

The shafts of Engines Nos. 2 and 3 to be straightened if found bent.

Main belts properly guarded.

The projecting platform at the rear of engine No. 1 to be guarded with a toe board around bottom to prevent anything from falling off platform into the boiler room.

The plates covering the exhaust pipe at the rear of engines to be roughened to prevent slipping.

No. 3 engine should be equipped with an inertia cut-off governor in place of the inefficient throttling governor as now applied.

LAMBERTVILLE PUBLIC SERVICE CO.

Inspection of Plant and Distribution System.

An inspection of the above company's plant and distribution lines was made November 23d and 24th, by the Board's Inspector, and the following is a report on the condition of same:

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Brief Description of Plant.

The power station consists of a brick boiler room, about 33 x 48', is covered with a metal roof and contains two boilers and accessories.

The engine room is a sheet metal building about 42 x 48', and contains three engines and three dynamos, switchboard and accessories. Adjoining this building is a small office for the engineers. Adjoining the boiler room is an uncovered coal pocket, which has a capacity of storing about seven carloads, or about 350 tons, of coal. Coal is delivered by carload lots via a private railroad trestle.

Attention is called to the rules, regulations and recommendations of this Board for electrical supply utilities, and for all utilities owned or using poles and wires.

Rule No. 1 requires that company shall have and maintain its entire plant and system in such condition as will enable it to furnish safe, proper and adequate service.

The inspection of the boilers, engines and other steam accessories, and the recommendations for same, is covered in an accompanying report.

There are three electric generators installed, and a belt connected to the steam engines: No. 1 generator is a 115 KVA Bullock; No. 2 a 90 KW Stanley, and No. 3 a 60 KVA Bullock generator. To these generators are belted their respective exciters, which consist of one 4 KW Bullock; 1½ KW GE; and one Bullock, whose size is not given on the name plate. Two Bullock generators appear to be kept in better condition than the Stanley generator, which is covered with dust, although this generator is used more than the small Bullock generator.

The switchboard is made of white marble, supported by angle irons, and consists of three generator panels, one panel with three single phase feeder circuits and one arc group circuit, and are controlled by hand-operated oil switches; one panel is for four street lighting circuits, three of which are in use. The wiring on the rear of the switchboard is in fairly good condition, with the exception that it is very dirty, and more protection should be afforded the employees by boarding up the back of the building, as same is made of sheet metal. The company has supplied rubber mats in front of and behind the switchboard, but the one in front of the switchboard is so badly worn that it is useless.

Lightning protection is afforded by six automatic magnetic blow-out spark gap lightning arresters, installed only on the feeder circuits and mounted on a white marble panel. It was stated that these arresters afford excellent protection, but as same are in rather a dirty condition at present they are likely to fail. There are also small choke coils on the back of the switchboard, in connection with the above arresters. The arc circuits are controlled by three Helios Upton arc tubs of four-ampere capacity, with a primary voltage of 2,200.

It is RECOMMENDED that all electrical apparatus be cleaned and kept clean; that the wall at the rear of the switchboard be boarded up at least seven feet high, to entirely cover the metal parts of the building; and that a new rubber mat be laid in front of the switchboard.

Rule II. This rule is in reference to the construction of the buildings and generating plant. Nowhere in the buildings is there any fire protection apparatus; and the roofs of the boiler room and engine room leak.

It is RECOMMENDED that fire protection apparatus be installed, and that the roofs be repaired, especially over the engine room, so that the electric generators and switchboard are not damaged.

In reference to Rule III, regarding the distribution system, an inspection was made of about 60 per cent. of the entire pole line, and the following defects were noted which might be applied generally when an inspection is made by the company to remedy the present poor conditions:

On Bridge Street, opposite the garage, there are two poles together, one of which is not necessary. On McCready Alley, west of Franklin Street near Bridge Street, a guy is run to a brick building, and no strain insulator installed in the guy. A guy on the pole in Brunswick Street has no strain insulator. There is a rotten pole and rotten cross arm on South Main Street, near a small grocery store. On South Main Street is a guy to a building with no strain insulator, and near this there is a guy that is not attached to any anchor or other support. On South Main Street there are bad wiring conditions at a transformer on the pole. Similar conditions exist near the Lambertville Rubber Company's plant. On this street there are several poles which could be removed, as the wires are also supported by D. & A. T. & T. Co.'s poles, in some cases within a few feet of the electric company's poles. At the rubber works two wires from an arc circuit are attached to a building, and either the attachment or the insulator pins are rotten. On the last pole on South Main Street the wires are very slack, and a dead end guy should be installed. At Mt. Hope and South Union Streets there is a rotten cross arm with the pins out, and the wires slack. At South Union and Warren Streets suspension for an arc lamp is attached to a tree, and runs within a few inches of the telephone cable, and there is no strain insulator in the arc lamp suspension wire. There is a rotten cross arm on South Union Street between Coryell and York Streets. The wires are slack on South Union Street between York and Delaware. There are rotten cross arms on poles at the corner of North Main and Jefferson Streets, and on Main Street south of Jefferson Street. There is a rotten pole corner York and North Main; one corner Coryell and North Main; and one corner Clinton and Delaware. There is a rotten cross arm on Clinton, south of Delaware. A pole on Clinton Street, north of Delaware, needs to be straightened up, the wiring rearranged, and wooden brackets removed. There is a rotten pole at the corner of Clinton and Perry Streets, and on the guy to this pole a new strain insulator should be installed. A lag screw should be installed in the cross arm braces on the pole corner of Clinton and Buttonwood Streets. A very bad condition exists between the last location mentioned and the power plant, as there are primary and arc circuit wires which run over a row of houses and are scarcely two feet above the roofs of same. A pole should be removed on Elm Street at the coal office.

The following conditions are found generally through all parts: The poles themselves are in fairly good condition, with the few exceptions noted above.

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Arc lights are suspended without strain insulators in the suspension wires, and in many cases the lights are too close to the crown of the street. Many guys have no strain insulators when attached to buildings, other poles or anchors. Tree guards are needed to protect wires rubbing on the limbs of the trees, and where electric light wires are beneath the telephone wires, better insulation shall be maintained on the electric wires. In a number of places the wires are slack and need tightening up.

This inspection covers the principal part of the wiring in Lambertville; and an inspection was made in New Hope, Pa., which this company supplies with light and power, and in general the same conditions exist.

It is RECOMMENDED that all of the above bad conditions be taken care of as soon as possible, and special attention is called to the violation of standard practice in the case where the primary and arc circuit wires run over a row of houses. This should be taken care of immediately, together with the arc wires near the rubber works, which are attached to a building. Any other conditions which are not noted in the above list, which is contrary to standard practice, should also be remedied.

In reference to Rule IV, requiring poles to be identified by stenciling same, the company has not complied with this rule in any case.

It is RECOMMENDED that the poles be stenciled as soon as practicable, after a copy of the stencil has been filed with the Board.

In reference to Rule V, regarding pole inspection, it was learned that poles are not regularly inspected. It is RECOMMENDED that this inspection be made as soon as possible.

Regarding Rule VI, fluctuation of voltage on lighting circuits, it was learned that same could be noticed when the steam pressure was not maintained, and the Board's Inspector noticed a slight flickering in the hotel at night, but as same was not measured, it could not be determined just how much this variation was.

In reference to Rule VII, requiring a plant log to be kept, inspection showed that a very efficient log was kept.

Rule VIII, regarding the complaint records, has not been observed, and it is RECOMMENDED that a record be started.

Regarding Rules IX, X and XI, the company furnishes whatever information its customers desire, although there are no printed forms or rules adopted.

In reference to Rule XII, regarding the inspection of apparatus removed to be inspected before reinstalled, it was found that this rule was not observed. It is RECOMMENDED that no apparatus be installed until it has been tested and found to be in good condition.

In reference to Rule XIV, regarding the grounding of secondary, this rule also has not been observed. It is RECOMMENDED that a study of local conditions be made, so that in the near future this rule may be complied with.

Rule XV, regarding metering of customers' premises, has been observed; and Rule XVI, regarding the location of the meters, has also been observed.

In reference to Rule XVII, regarding the testing of watt-hour meters, same has never been followed, although it was learned that the company intended to and has already ordered a portable standard watt-hour meter.

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In reference to Rule XXI, requiring portable standard watt-hour meter or wall standard, as stated before, the company intends to obtain a rotating standard, and the necessity of having a wall standard installed was explained to the superintendent of the plant.

It is RECOMMENDED that a wall standard be installed and the Board notified when same is ready to be tested by the Board's Inspector.

Rules XXII, XXIII, XXIV and XXV have not been observed, due to lack of testing facilities, but it is RECOMMENDED that as soon as facilities are available these rules be observed.

In reference to Rule XXVII, it was stated that all meters read in KW hours as required by this rule.

In reference to Rule XXVIII, company makes no charge for replacement of a meter.

In reference to Rule XXIX, the company has not adopted any special method in explaining to the customers the method of reading meters, but if there is any dispute, they have endeavored to explain this system.

It is RECOMMENDED that a meter, or the dials of a meter, be kept in the local office to demonstrate the method of reading same.

Due to the short time the Board's Inspector was in town, the only method he had of studying the daily loads was from the daily operating reports or plant log, but from these reports it was noticed that between 7 P. M. and 8:30 P. M. the largest generator was running at its maximum rated capacity, and, according to the reports, this engine was in continuous operation twenty-four hours per day during the winter time. It was stated that the other engines and generators could not be operated in synchronism with this generator, so that the load had to be carried by one engine and one generator, and that in case of any trouble it would be necessary to shut the entire plant down or else decrease the load by cutting out some of the circuits.

It is RECOMMENDED that steps be taken to run these generators in synchronism, which may eliminate the necessity of installing any power units in the near future.

LAKEWOOD WATER, LIGHT & POWER CO.

Test of Wall Standard.

The wall standard to be used by this company is installed on the meter test board in the meter shop, located over the company's local commercial office on Madison Avenue. The test board has connections for the testing of customers' meters, and the portable rotating standard is set in the table top so that the top of the portable is flush with the top of the table. The only load used in testing is a phantom load. This load works excellently on load of 25 to 100 or more amperes, but it was impossible in checking the rotating standard to get anything over 50 per cent. of the normal rated load of the small coils.

The wall standard installed by the company was an old type of portable rotating standard, manufactured by the Fort Wayne Electric Company, Serial No. 192183, 10 ampere and 100 volts. This meter is built like a type K meter

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for customers' use except it has a dial which records revolutions. This meter was tested and adjusted, but was found to be noisy at times. At such times it would show on test to be 10 per cent. faster than when silent. The trouble was found to be in the bearings, so another meter was installed and found to be 1.2 per cent. slow on 10 amperes and 0.7 per cent. fast on 1 ampere. Adjustments were made and left as follows:

Manufacturer—General Electric Company.

Type—I.

Serial Number—2363824.

Amperes—10.

Volts—110.

Cycles—60.

Voltage of testing circuit—Approximately 110.

Standard used—General Electric Co. No. 2205972.

<i>Amperes.</i>	<i>Per Cent. Load.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
10.0	100	99.9	— 0.1
7.5	75	100.3	+ 0.3
5.0	50	100.5	+ 0.5
2.5	25	100.5	+ 0.5
1.0	10	100.3	— 0.3

A copy of the above test should be kept in the meter shop.

This meter was sealed by the Board's seal, marked N.J.P.U.C., and is hereby accepted as the wall standard of this utility against which the portable standard is to be checked.

It is RECOMMENDED that a different form of load be obtained for testing up to 20 or 25 amperes. A lamp bank or some other *non-inductive* load is suggested. These loads should be tested out to determine the number of amperes capacity, as at present the local meter tester has no stop watch to determine the loads.

MIDDLESEX AND MONMOUTH ELECTRIC LIGHT, HEAT & POWER CO.

Test of Electric Wall Standards.

The wall standards adopted by this utility are installed on a slate switchboard located in room, used as a meter shop, in the rear of the commercial office, First Street, Keyport, N. J. The switchboard is a very good design, having selective switches for obtaining various loads for testing. The loads used are banks of incandescent lamps. There are also very convenient connections for the testing of customers' meters by comparison with the portable rotating standard. The meter room is well-kept, and has the stock of spare meters hung on the walls.

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The results of the tests on the wall standards are as follows:

Voltage of testing circuit—Approximately 110.

Standard used—General Electric Co. No. 2205972.

Maker—Westinghouse Electric Manufacturing Co.

Type—C.

Serial Number—951640.

Amperes—5.

Volts—100.

Cycles—60.

<i>Per Cent. of Full Load.</i>	<i>Amperes.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
100	5.0	99.9	— 0.1
70	3.5	100.3	+ 0.3
40	2.0	100.1	+ 0.1
10	0.5	99.7	— 0.3

Maker—Westinghouse Electric Manufacturing Co.

Type—C.

Serial Number—456632.

Amperes—40.

Volts—100.

Cycles—60.

<i>Per Cent. of Full Load.</i>	<i>Amperes.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
100	40	100.4	+ 0.4
75	30	100.9	+ 0.9
50	20	100.9	+ 0.9
25	10	100.5	+ 0.5
10	4	100.4	+ 0.4

The accuracy of the 5-ampere meter was found to be 97.6 per cent. on 100 per cent. load and 98.3 per cent. on 10 per cent. load, but was adjusted and left as above.

The accuracy of the 40-ampere meter was found to be 98.7 per cent. on 100 per cent. load and 99.8 per cent. on 10 per cent. load, but was adjusted and left as above.

A copy of the above tests should be kept in the meter room with the wall standards.

MIDDLESEX AND MONMOUTH LIGHT, HEAT & POWER CO.

Test of Rotating Standard Wattmeter.

The portable rotating standard used by this company for testing of customers' meters was tested by comparison with the Board's standard. The result of the test is as follows:

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Kind of Instrument—Portable Rotating Standard Wattmeter.

Maker—Westinghouse Electric and Manufacturing Co.

Type—No. 54884.

Serial Number—65546.

Amperes—5, 10, 20 and 40.

Volts—100 and 200.

Cycles—60.

Standard used—General Electric Co. No. 2205972.

Approximate voltage of circuit—110.

<i>Coil.</i>	<i>Per Cent. of Rated Capacity.</i>	<i>Amp.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	100	5.0	99.3	—0.7
5	70	3.5	99.8	—0.2
5	40	2.0	100.2	+0.2
5	10	0.5	100.4	+0.4
10	100	10.	99.3	—0.7
20	100	20.	99.6	—0.4.
40	100	40.	99.9	—0.1
40	75	30.	100.7	+0.7

This standard is hereby accepted as the portable rotating standard of this utility. A copy of the above corrections should be kept with the standard and applied when tests are made. The corrections on points not tested should be determined by plotting the curve of the 5-ampere coil and by drawing curves parallel to this curve for the other coils, using the correction found on each coil as a point in that curve.

This standard is of an old type, requiring the insertion of metal plugs in receptacles in order to obtain the various current capacities. It is RECOMMENDED that as soon as this meter shows any change in accuracy in checking again the wall standards that a newer type standard be procured.

MILLVILLE GAS LIGHT CO.

This is a mixed coal and water gas plant supplying the city of Millville under the low pressure distribution system, and a number of boroughs and townships in the vicinity of Millville under the high pressure distribution system. In the city of Millville the pressure conditions have been improved by connections with the high pressure mains, the pressure being reduced by means of district governors.

During the past year the generating capacity of the plant has been increased by the installation of another water gas set having a capacity of 450,000 cubic feet per day. This set was installed to provide against an interruption in service in the event of an accident which would prevent the operation of the old water gas set, in which event the coal gas plant

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might be taxed to its utmost generating capacity to supply the demand. The normal generating capacity of the plant is as follows:

Coal gas plant consisting of five $\frac{3}{4}$ -depth horizontal regenerative benches of six retorts each, making a total of thirty retorts, and having a normal daily generating capacity of from 150,000 to 200,000 cubic feet. The water gas plant consists of two six-foot Gas Machinery Company carburetted water gas sets, each having a normal daily generating capacity of 450,000 cubic feet, so that the total normal daily generating capacity of the plant is from 600,000 to 650,000 cubic feet, with a reserve capacity of 450,000 cubic feet, making a total daily generating capacity of approximately 1,100,000 cubic feet.

Ample provision has been made for cooling, purifying and measuring the gas, and ample provision has been made for the storage of coal, coke and gas oil. Coal is received from the West Jersey and Seashore Railroad by means of an elevated siding, the coal being unloaded by gravity and stored under the trestle, provision having been made for the storage of approximately 700 tons. The company proposes to extend the present trestle, which will provide for double the present storage capacity. Coal is carried from the storage shed to the benches, boilers and to the water gas set by means of coal buggies, being conveyed to the charging floor of the retort house by means of a platform elevator, and to the floor of the generating house by means of a steam hoist.

The gas oil storage capacity consists of one cylindrical steel tank, having a capacity of 16,000 gallons. The gas holder capacity consists of one double lift steel tank storage holder, having a capacity of 150,000 cubic feet, and a double lift steel tank relief holder, having a capacity of 100,000 cubic feet.

The maximum daily output of the plant during the year 1913 was 384,674 cubic feet on December 25th. The minimum daily output was 193,086 cubic feet on March 24th. The total output for the year was 101,672,246 cubic feet. The maximum daily output during the year 1914 was 424,439 cubic feet on October 6th. It would appear from the above figures that the capacity of the plant is now ample to meet any demands which may be expected during the next few years.

An examination of the company's records made by the Gas Inspector on April 22d, 1914, showed that the following rules adopted by the Board as establishing standards and regulations to be followed by gas companies had not been complied with:

Rule II. There did not appear to be any definite period during which meters were allowed to remain in service without being tested.

Rule III. All meters removed from service had not been tested.

Rule X. Water entering the calorimeter was taken directly from the street mains and was not at all times at the room temperature.

An investigation made by the Gas Inspector on January 21st, 1915, would indicate that the company is now testing all meters removed from service, as prescribed by Rule III, and that steps are being taken to provide that all meters will be tested at least once in six years as prescribed by Rule II. The company has installed its calorimeter in a new testing room located over the company's office in Millville, and calorimeter tests are now being

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made under much better conditions than prevailed in the former testing room. In connection with making calorimeter tests it was noted by the Board's Inspector that the company's operator took considerable time and pains to provide for the consumption of gas at the rate of six cubic feet per hour, and also to provide for a flow of exactly four pounds of water during the time of testing; that is, during the time taken to consume .2 of a cubic foot of gas. These precautions are not necessary in obtaining accurate results, the only advantage being that by fixing the amount of water passed during the test at four pounds the computation of the results obtained are made somewhat more simple.

It is suggested that in making calorimeter tests that the company vary the rate of gas consumption in order to determine the rate which gives the highest results, as it is impossible to determine the proper rate of combustion for any gas except by experiment.

It is RECOMMENDED that the company provide a barometer, and that the results obtained be corrected to 30 inches pressure and 60 degrees gas temperature.

MILLVILLE TRACTION CO.

An inspection has been made of the lines of the Millville Traction Company, operating between Vineland and Millville, a distance of 9.3 miles, and the local lines operating in the city of Millville.

The track and roadway was found to be in good condition, the company having placed approximately 2,500 treated ties in the line within the past year, and as the company intends to place an equal amount during the coming year, it is believed that the line will be kept up in proper condition. There is, however, one exception. There is a portion of the line in Vineland which was laid on a concrete foundation, but as the cars were run over the track before the concrete had properly set, a series of low joints resulted. It is understood by the company's officials that this matter will be rectified during the coming fall.

The company is at present operating eight closed cars, which are in fair condition. These cars are, however, not equipped with either fenders or wheel guards, and it would appear that the addition of these safeguards is necessary. The cars are also in need of painting, and this rehabilitation would be a benefit in that it would prevent deterioration.

It is RECOMMENDED that the company take steps to rehabilitate that portion of the track situated on Landis Avenue, Vineland.

It is also RECOMMENDED that the company take steps to provide the cars with proper fender or wheel guard. This is to be completed by April 1st, 1916.

MINE SPRING WATER CO.

The source of the water supplied by this company is a well, situated in the northwestern part of the town and was dug about three years ago. The well is about twenty-two feet deep, sixteen feet in diameter, and lined with stone set up with cement. It is covered with a frame roof.

A five-inch suction pipe runs from the well to a Smith Vail triplex pump which is set up in a mill adjacent to the well. This pump was installed about three years ago and is belted to an overshot water wheel about ten feet wide and eighteen feet in diameter. This water wheel also operates the mill, and was installed about four years ago. There is no auxiliary power available, but same is not considered necessary, as it was learned that the two creeks which supply the water power have never been known to run dry. The mill is owned by the vice-president of the company and power is included in the rent charged.

The discharge pipe from the pump is seven-inch and connects to an eight-inch pipe which runs about 1,000 or 1,200 feet to a standpipe. This standpipe was also installed about three years ago, and is twenty-four feet high and thirty feet in diameter, with an estimated capacity of 180,000 gallons. It stands on the top of a hill about 150 feet above the elevation of the town, so that the pressure in the town is eighty-four pounds per square inch. The standpipe has no cover on, and although only twenty-four feet high, it is not considered necessary to have one, as same is overflowed regularly to remove any foreign matter that might be floating on the surface of the water.

The eight-inch cast iron pipe used as a supply to the standpipe is also used as a discharge pipe from the standpipe to the town.

The main along the chief business street is eight-inch; the most important branches are six-inch, and the rest four-inch.

There are about forty customers supplied at flat rate, and it is expected that probably ten more will be added this year.

The town has a population of 800 to 900 inhabitants; has fire protection of twenty-five hydrants installed in various parts of the town, and the operator has orders that in case of fire to start the pump, whether the standpipe is full or not.

NO RECOMMENDATIONS are considered necessary.

MONMOUTH COUNTY ELECTRIC CO.

Bridge Inspection.

Inspection of the bridges was made on July 19th and 20th, 1915, and on November 5th, 1915. On November 18th, 1915, an inspection of Bridges No. 8, No. 9 and No. 11 was made, and the attention of the Superintendent was called to the poor condition existing in Bridges No. 8, No. 9 and No. 11, and the necessity for immediate repairs.

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The heaviest car operated over this line is a single truck car weighing fully loaded twelve tons. This comparatively light load was kept in mind during the inspection.

Accompanying this report is a blue print showing the location of trolley line and bridges. The bridges are numbered consecutively for the purpose of this report starting at East Oceanic.

Bridge No. 1 is a small brick arch in good condition.

Bridge No. 2 is a brick arch in good condition.

Bridge No. 3 is a 36" C. I. pipe. This pipe should be cleaned out to allow a clear passage for the water.

Bridge No. 4 is a brick arch in good condition.

Bridge No. 5 is a brick arch in good condition.

Bridge No. 6 is a 48" diameter corrugated pipe in good condition. This pipe replaces an old iron viaduct which has been filled in.

Bridge No. 7 is a combination wood and steel bridge about 8' 0" clear span. There are I-beam stringers under east track and wooden stringers under the west track. Stringers are supported on piling. This bridge is in fair condition.

Bridge No. 8 is an I-beam bridge with a span of approximately 11' 0". There are I-beam stringers under the east track and trolley rail stringers under the west track. The stringers are supported on pile bents. The timber sheeting on bulkheads under track is getting in poor condition and should be repaired.

Bridge No. 9 is a half through plate girder span over the C. R. R. of N. J., with framed timber trestle approaches, single track. The steelwork of this bridge is getting rusty and should be scraped and painted. There are two 8" x 16" stringers per rail on 15' 0" spans and three 8" x 16" stringers per rail on the 22' 0" span. A number of stringers were very badly decayed at their bearing on caps and a few were noted to be bad near the center of the span. The Superintendent's attention was called to the weakness of these stringers and what was required per rail for the different spans. His attention was also called to the very bad condition of some sills, blocking and posts, and the necessity for immediate repairs. A few defective ties were also noted.

Bridge No. 10 is a concrete arch culvert in good condition.

Bridge No. 11 is a double barrel brick arch in very bad condition. The bricks from the ring of the arch have fallen out, large cracks appearing in many places and foundations are loose. This arch is in a dangerous condition and should be properly repaired without delay. The Superintendent's attention was also directed to the bad condition of this bridge.

Bridge No. 12 is a brick arch in good condition.

Bridge No. 13 is a rail stringer bridge on concrete masonry. The bridge is in fair condition except some provision should be made for fastening railing alongside of trolley track.

Bridge No. 14 is a half through plate girder span over the N. Y. & L. B. R. R., with framed timber and pile bent trestle approaches, double track. The steelwork is badly in need of paint and should be scraped and painted. The trestle approaches are in fair condition, a few defective ties and wooden guards being noted. This defective timber should be renewed.

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Recommendations.

- Bridge No. 3—Clean out pipe.
- Bridge No. 8—Repair defective timber in bulkheads.
- Bridge No. 9—Paint steelwork and renew defective timber.
- Bridge No. 11—Properly repair brick arches and foundations.
- Bridge No. 13—Properly secure railing alongside of trolley track.
- Bridge No. 14—Paint steelwork and repair defective ties and guard timbers.

MONMOUTH LIGHTING CO.

Test of Electric Standard.

The portable rotating standard used by the above company for testing customers' meters, was sent to the Board's laboratory at Rutgers College, where same was tested with the following results:

Test of Portable Rotating Standard.

Manufacturer—General Electric Company.
 Type—1B.
 Serial Number—1108681.
 Amperes—1, 10, 20.
 Volts—110.
 Voltage of testing circuit—117.

<i>Coil.</i>	<i>Amperes.</i>	<i>Per Cent. Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
1	0.5	50	100.1	+ 0.1
1	1.0	100	99.7	— 0.3
10	1.0	10	100.1	+ 0.1
10	2.5	25	99.9	— 0.1
10	5.0	50	99.9	— 0.1
10	7.5	75	99.9	— 0.1
10	10.0	100	99.7	— 0.3
20	10.0	50	100.3	+ 0.3
20	20.0	100	99.9	— 0.1

This standard is hereby accepted as a standard to be used for testing customers' meters. A copy of the above test should always be kept with the instrument.

The attention of the company is called to Rule XXI, concerning standards. This rule requires that each company, in addition to equipping itself with a rotating standard, "Shall fasten permanently on the wall of the meter shop, a house or switchboard type meter or meters of suitable capacity, to be used only for checking the rotating standard." This company has never set up the wall standard called for, and this should be done without further delay, when test will be made of the same and the instrument sealed by the Inspector of the Board.

MONMOUTH LIGHTING CO.

An inspection of the plant at Englishtown was made by the Board's Inspector, and it was found that practically nothing had been done since previous inspection, after which several recommendations were made. One of the officials of the company stated at that time that a new boiler would be installed, in fact that same had been purchased and that a new stack would be erected, or the old one repaired. No new boiler had been installed, and the stack is in a very poor condition. A few guy wires that hold the stack are all slack, and there is frame scaffolding around the stack almost to the top of same. The only real improvement that has been made is an iron collar or band which was bolted over the ruptured portion.

In order to increase the draft, the exhaust pipe from the larger engine runs to the stack, so that the exhaust steam goes up the stack and thereby increases the draft. It does not seem that this system would be of much use, especially in the wintertime, as this exhaust pipe extends over the roof of the power house, and is not covered. There is only a very small drip pipe on this exhaust pipe to take care of the condensation, and there is no pocket or other point to which the condensation could drain. The smoke nuisance still continues, and the residences near the plant are in a deplorable condition. When the owners complained about this condition to the company the only satisfaction they received was an abrupt answer that the plant was there before their homes were. This, however, is no excuse for the condition that now exists, because at the time the homes were built the stack was in an efficient condition.

An inspection of the records kept in the plant showed that the voltage had to be increased from 120 volts at 6 P. M. to 125 between 8 and 9 P. M.

The volt meter chart in Freehold registered at 6 P. M. 117 volts, and increased to 126 from 7 to 10 P. M., at midnight it was as high as 128. This chart, however, is not a sample of the general conditions throughout the town, as the transformer ratio supplying same is considerably higher than in any other part of the town.

It was found by test with the portable instrument that there was a difference of about 10 to 12 volts in other sections.

This company has not complied with the rules of the Board in reference to pole marking. There are a number of poles in Englishtown that have never been marked, and also in Freehold.

This company has not complied with the rules of the Board with respect to filing reports of electric meter tests, and has no portable standard in any of the towns which are supplied. It was stated that they have one in Perth Amboy where all the records are kept.

It is therefore RECOMMENDED that, first, some definite statements and plans be forwarded to the Board showing why the company has not taken care of its plant capacity, and if any prospective improvements have been started; second, that the company immediately mark its poles in an improved manner; third, that meter testing and meter test records be kept in Freehold and the Board notified when the standards are ready for testing; fourth,

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that the records of all meter tests be filed on the regulation sheets as soon as possible.

MORRIS AND SOMERSET ELECTRIC CO.

On February 19th, 1915, the Board's Inspector found that the company's General Electric standard was out of calibration, and it was stated that this instrument would be cleaned and adjusted. On June 2d the Board's Inspector tested this standard, and found same to be in excellent condition, and the following results were obtained:

Manufacturer—General Electric Company.

Type—I B-4.

Number—966599.

Amperes—1, 10 and 20.

Volts—110 and 220.

Voltage of testing circuit—112.

Cycles—60.

<i>Coil.</i>	<i>Amperes.</i>	<i>Per Cent. of Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
1	1	100	100.0	0
10	1	10	98.8	— 1.2
10	2.25	22.5	99.5	— 0.5
10	5	50	100.3	+ 0.3
10	7.5	75	100.1	+ 0.1
10	10	100	99.9	— 0.1
20	20	100	99.9	— 0.1

This standard is hereby accepted as one of the portable rotating standards to be used by this company in testing its customers' meters.

This company has another portable standard, which was tested, and the following results were obtained:

Maker—Westinghouse Electric and Manufacturing Company.

Type—54884-A.

Number—121345.

Amperes—5, 10, 20 and 40.

Volts—100 and 200.

Voltage of testing circuit—112.

Cycles—60.

<i>Coil.</i>	<i>Amperes.</i>	<i>Per Cent. of Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	5	100	100.3	+ 0.3
10	1	10	99.7	— 0.3
10	2.25	22.5	100.3	+ 0.3
10	5	50	100.5	+ 0.5
10	7.5	75	100.1	+ 0.1
10	10	100	100.0	0
20	20	100	100.1	+ 0.1
40	20	50	99.9	— 0.1

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This instrument is hereby accepted as one of the portable standards to be used by the company in testing its customers' meters.

Copies of these tests should be kept with the instruments, and in order to determine the accuracy of points not tested, curves should be drawn for the 10-ampere coils of each instrument, and curves for the other coils should be drawn parallel to the original curves but a distance from same in proportion to the difference in error *at the same percentage of rated capacity*.

Report of November 15th, 1915.

At the request of a foreman of the Electric Meter Department of the above company, the Board's Inspector tested the wall standard which was installed in the company's testing room, and it was found that same had too large an error on light load to be used as a wall standard. An attempt was made to adjust this meter to within 1 per cent. difference between light load and full load, but same was unsuccessful. A new meter was therefore installed as the wall standard for this company.

The following is the result of the test:

Test of Wall Standard.

Manufacturer—Westinghouse Electrical Manufacturing Co.
Type—OA.
Cycles—60.
Amperes—5.
Volts—100.
Serial Number—1117065.

<i>Amperes.</i>	<i>Per Cent. Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	100	99.5	— 0.5
2.5	50	100.4	+ 0.4
.5	10	100.4	+ 0.4

This instrument was sealed with the Board's seal, and is hereby accepted as the wall standard of this utility, to be used only in checking portable rotating standards. Tests were also made on one of the portable rotating standard watt-hour meters used by this company, with the following results:

Test of Portable Rotating Standard Watt-Hour Meters.

Manufacturer—Westinghouse Electrical Manufacturing Co.
Type—54884a.
Cycles—60.
Amperes—5, 10, 20 and 40.
Volts—100 and 200.
Serial Number—121345.
Tested on 110 volt circuit.

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<i>Coil.</i>	<i>Amperes.</i>	<i>Per Cent. of Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
40	40	100	99.0	— 1.0
20	20	100	99.6	— 0.4
20	15	75	100.3	+ 0.3
20	10	50	100.2	+ 0.2
20	5	25	100.1	+ 0.1
20	2	10	100.0	0
10	10	100	100.2	+ 0.2
10	5	50	100.7	+ 0.7
5	5	100	100.1	+ 0.1

This instrument is hereby accepted as the portable standard to be used in testing customers' meters.

NEW EGYPT LIGHT, HEAT, POWER & WATER CO.

Test of Electrical Instruments.

The Board's Inspector tested the indicating ammeter and volt meter used by this company for testing customers' meters. The following results were obtained by comparison with the Board's instruments:

Kind of Instrument—Combination volt ammeter.

Maker—Keystone Electrical Instrument Co.

Number—12081.

Kind of current—Direct.

Capacity Amperes—1, 5, 15, 150.

Volts—300.

<i>Volt Reading.</i>	<i>True Volts.</i>	<i>Correction.</i>	<i>Ampere Reading.</i>	<i>True Ampere.</i>	<i>Correction.</i>
0	0	0	0	0	0
218	215	— 3	.83	.83	0
223	220	— 3	.8	.8	0
228	225	— 3	1.4	1.4	0
232	230	— 2	1.38	1.38	0
107	105	— 2	1.4	1.4	0
			2	2	0
			3	3	0

The above test shows that the volt meter is approximately two and three volts high at various points on the schedule, but the ammeter is as accurate as can be read with both the 1.5 and 15-ampere external shunts. The movement of the needle on the ammeter is sluggish, and the correct reading can only be obtained by tapping the top of the instruments.

These instruments are hereby accepted as standards for testing customers' meters, provided the above corrections are made.

NEW JERSEY & PENNSYLVANIA TRACTION CO.

This line extends from Trenton to Princeton, a distance of 11.5 miles. It is single track.

The track is ballasted with stone, gravel, cinders and dirt. It is laid with 60 pound rail; on some of the curves heavier rail is being used.

The track, bridges and openings have been well maintained, and are in good condition.

Block signal which has been installed on this road, and works in connection with the overhead trolley, is giving very satisfactory service.

NEW JERSEY GAS CO.

A general inspection of the plant of the New Jersey Gas Company, located in Glassboro, was made by the Gas Inspector December 13th, 1915.

This is a carburetted water gas plant, supplying a number of townships and boroughs in the counties of Camden, Gloucester, Salem and Cumberland under the high pressure distribution system, the pressure being reduced by means of individual service regulators at the consumers' meters, and by district governors in Elmer, Wenonah, Woodbury Heights, Williamstown, Woodstown and Bridgeport. In Vineland, Swedesboro and Pennsgrove the gas from the high pressure mains is delivered to storage holders, and is then distributed under the low pressure distribution system.

There have been no additions to the generating equipment at the Glassboro plant since the last inspection was made on June 11th, 1914. The maximum daily output during the year 1914 was 845,530 cubic feet on July 5th, the minimum daily output being 321,420 cubic feet on March 13th, which compares with the maximum daily output of 767,641 cubic feet during the year 1913, and a minimum of 342,000 cubic feet. The total send-out from the plant during the year 1914 was 183,036,015, which compares with the total send-out for the year 1913 of 163,783,896. For the first ten months of the year 1915 the maximum daily send-out was 763,435 cubic feet, and the total output for the ten months 155,569,448 cubic feet, which is comparable with the output during the first ten months of 1914 of 153,997,557.

The above figures would indicate that the relation between the capacity of the plant and the demand is practically the same as at the time the last inspection was made, and is covered in a report to the Board dated June 30th, 1914.

An examination of the company's records at the time of last inspection, June 11th, 1914, showed that the rules adopted by the Board as establishing standards and regulations to be followed by gas companies were being complied with, and the inspection of December 13th would indicate that the company is still complying with the Board's rules and regulations.

NEW JERSEY NORTHERN GAS CO.

This is a carburetted water gas plant, supplying the Borough of Flemington and City of Lambertville under the low pressure distribution system, and the Township of Raritan, East Amwell Township, West Amwell Township, Boroughs of Hopewell, Pennington and Stockton, under the high pressure system. A description of the method of supplying gas to these municipalities is given in a report to the Board dated December 5th, 1913.

In a report dated January 14th, 1915, in connection with an inspection of the Flemington plant, made on January 12th, it was shown that the company had provided ample generating capacity together with the necessary condensers, scrubbers and washers, but that the holder capacity at Flemington was small. The installation of a water gas set during the past year provided a reserve generating unit so that the installation of additional holder capacity is not so essential as before the installation of this additional generating set. The output of this plant has been steadily increasing during the last few years, and it is reasonable to expect a further increase in the output of this plant, so that steps should be taken to provide for the installation of additional holder capacity at Flemington.

Examination of the company's records on January 14th, 1915, showed that the rules adopted by the Board on October 17th, 1911, as establishing adequate service, were being complied with, with the exception of Rule XVI, which provides that instructions be given to customers using prepayment meters as to the reading of meters. The company has complied with this part of Rule XVI by printing on the slip which is left with the prepayment customers when collections are made from the meters, a diagram showing the index of a meter and under which is given the method of reading the meter.

In a former report, it was recommended that the company provide a recording pressure gauge, preferably of the portable type, so that measurements of pressure could be made at various points in Flemington. This recommendation has not as yet been complied with.

In a former report to the Board, it was recommended that the company provide a recording pressure gauge, so that measurements of pressure could be taken at various points in Flemington.

In a letter to the Board, dated July 20th, the company states that it will be unable to increase its holder capacity until some time in the future, unless the security market for the disposal of bonds takes a turn for the better. The company also states that it does not feel that the financial conditions of the company warrants the expenditure of the money necessary to install a recording pressure gauge at Flemington.

In connection with the installation of additional holder capacity at Flemington, it is not of vital importance that the holder capacity be increased at this time, but it is a matter which the company should not lose sight of, and when the financial conditions of the company warrants it, another holder should be installed in Flemington.

In reference to the installation of a recording pressure gauge, as recom-

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mended in the Inspector's report, it is suggested that the company be relieved of complying with this recommendation for the present.

It appears that the company has a recording pressure gauge installed at Lambertville, and in the event of any complaints in reference to gas pressure in Flemington, the company could remove the gauge from its Lambertville office, and install it in Flemington.

NEW JERSEY RAPID TRANSIT CO.

A general inspection has been made of the tracks, overhead and equipment of the New Jersey Rapid Transit Company operating between Townsend's Inlet and Corson's Inlet, a distance of six miles, 3.5 miles being over public streets and ways, and the remainder or 2.5 miles being over private right of way.

This road is only operated during the summer, and during the last year was operated for eighty-one days, and has always been in poor financial condition.

The track is in bad line and surface, and will need a great number of tie renewals. The poles and overhead are considerably deteriorated, and the cars, of which the company operates six of the open type, are in an extremely dilapidated condition and are potentially dangerous.

As it is believed that it would not be feasible to rehabilitate the present equipment, it is suggested that the company take steps to acquire second-hand cars of a suitable type of sufficient number to take care of the needs of the communities served.

It is RECOMMENDED that at least 5,000 ties be placed in the track, and that the track be generally resurfaced and realigned.

That a thorough inspection of poles be made in accordance with Rule 5 in pamphlet issued by the Board of Public Utility Commissioners containing rules, regulations and recommendations for electrical supply utilities and for all utilities owning or using poles and wires. In making this inspection the earth surrounding the pole is to be removed for a distance of one foot below the ground level: all rotten wood to be removed by means of a hatchet, and wherever the measured circumference of the solid wood is less than two-thirds of the original circumference, or in any case is less than twenty-four inches, the pole shall be removed and replaced by a good pole of standard dimensions for the particular location, or reinforced in accordance with some suitable method: that all tin and pasteboard signs be removed from the poles, and that the further use of the poles for such purposes be forbidden by the officials of the company.

That the overhead be thoroughly inspected, and, where necessary, span wires replaced.

That if the company does not adopt the suggestion that a number of suitable second-hand cars be purchased, the present rolling stock be completely rehabilitated and put into safe and proper condition.

NEWTON GAS & ELECTRIC CO.

Further inspection was made of the gas plant of the Newton Gas and Electric Company by the Board's Inspector.

There have been no additions made to the generating capacity of this plant since the previous inspection, and the daily output of the plant has not changed to any extent, so that the relation between the generating capacity and the demand on the plant is the same as given in a report to the Board dated December 22d, 1913. At the present time the company is operating its coal gas bench, the water gas set being held in reserve.

In a report to the Board dated August 21st, 1914, in connection with an inspection made on August 18th, it was suggested that the remainder of the operating floor and railing be erected, and also that, if possible, the floor be extended to the building wall, as there is very little space allowed on the operating floor for charging and cleaning the generator.

This work has not as yet been finished, and it is RECOMMENDED that the company take steps to erect this floor, also to overhaul the water gas set, so that it will be in condition to operate in case it becomes necessary to shut down the coal gas plant. The gas holders, and also the shells of the water gas set, are in need of painting, and the piping connections to the oil storage tank should be painted and protected from the ashes which are used to grade the yard.

An examination of the company's records indicates that the company is now complying with the requirements of the rules adopted by the Board October 17th, 1911, as establishing standards and regulations to be followed by gas companies, with the exception of that part of Rule III which provides that the company shall file with the Board a report giving a summary of the results of tests of consumers' meters.

This company installed a standard meter prover, in compliance with Rule IV on November 10th, 1914, but no reports of meter tests have as yet been filed with the Board.

NEWTON GAS & ELECTRIC CO.

Test of Portable Rotating Standard Wattmeter.

The portable rotating standard used by this company for testing of customers' meters was tested by comparison with the Board's standard. The result of the test is as follows:

Portable Rotating Standard Wattmeter.

Maker—Westinghouse Electric and Manufacturing Company.

Type—54884 B.

Serial Number—178246.

Amperes—5, 10, 20 and 40.

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Volts—100 and 200.

Cycles—60.

Standard used—General Electric Co. No. 2205972.

Voltage of testing circuit—Approximately 115.

Coil.	Per Cent. of Rated Capacity.	Amperes.	Per Cent. Accuracy.	Per Cent. Error.
5	100	5	100.0	0
10	10	1	101.1	+ 1.1
10	50	5	100.3	+ 0.3
10	90	9	99.7	— 0.3
20	45	9	99.9	— 0.1
40	22½	9	99.5	— 0.5

This standard is hereby accepted as the portable rotating standard of this utility. A copy of the above corrections should be kept with the standard and applied when tests are made.

The correction on points not tested should be determined by plotting the curve of the 10-ampere coil and by drawing curves parallel to this curve for the other coils using the correction found on each coil as a point in that curve.

NEWTON GAS & ELECTRIC CO.
Test of Electric Wall Standard.

The wall standard of this company is hung on the wall of the meter shop, which is located at the rear of the local office, on Spring Street. No switchboard for testing of electric meters is installed, and only a small portable lamp bank is used for testing customers' meters. The capacity of this lamp bank is in definite steps of ½, 1, 5 and 9 amperes.

The wall standard was tested by the Board's Inspector, and the result of same is as follows:

Electric Wall Standard.

Maker—Westinghouse Electric and Manufacturing Company.

Type—C.

Serial Number—294317.

Amperes—10.

Volts—100.

Cycles—60.

Standard used—General Electric Co. No. 2205972

Voltage of testing circuit—Approximately 115.

Per Cent. of Rated Capacity.	Amperes.	Per Cent. Accuracy.	Per Cent. Error.
90	9	100.4	+ .04
50	5	100.0	0
10	1	99.9	— 0.1

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The accuracy of this wall standard, as found by the Inspector, was 3.8 per cent. fast on 90 per cent. load and 0.3 per cent. fast on 10 per cent. load. It was adjusted and left as above.

A copy of the above should be kept in the meter room with the wall standard. This meter is hereby accepted as the wall standard of this company, to be used to check against the portable rotating standard.

OCEAN COUNTY GAS CO.

During the year 1914 the company has extended its high pressure mains so as to supply the communities of Money Island and Pine Beach.

The generating capacity of the plant has been increased by the installation of a carburetted water gas set having a normal capacity of 125,000 cubic feet per day, which, in addition to the set already installed, provides a total generating capacity of approximately 250,000 cubic feet per day.

The necessary condensing, scrubbing and purifying apparatus has been installed.

The estimated maximum daily output of the Toms River plant during the year 1913 was 99,000 cubic feet on August 23d, and the maximum daily output during the year was approximately 100,000 cubic feet, so that it is apparent that ample generating capacity has been installed to meet the demands which may be expected during the next few years, and also ample reserve capacity to prevent an interruption in service in case of an accident to the generating apparatus.

The holder capacity, however, is limited, as no relief has as yet been installed, making it impossible to properly purify the gas for reasons mentioned in a report to the Board dated May 20th, 1913, in connection with a general inspection made by the Gas Inspector on May 16th, 1913. In this report it was recommended that a storage holder be erected as soon as the financial condition of the company would warrant it, and that the present storage holder be used as a relief holder.

An examination of the company's records on May 16th, 1913, showed certain rules adopted by the Board on October 17th, 1911, as establishing standards and regulations to be followed by utilities engaged in the production, sale and distribution of gas, had not been complied with, as follows:

Rule III. Reports of meter tests had not been made as prescribed by this rule.

Rule VII. No slips were left with consumers using prepayment meters.

Rule XII. No measurements were made of pressure of the low pressure distribution system.

An examination of the company's records on November 6th, 1914, showed that—

Rule III. Reports of meter tests have not been made since March, 1914.

Rule VII. The company has provided a slip which is left with consumers using prepayment meters when collections are made showing the readings of the meter and the amount of money collected from the meter.

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Rule XII. The company has provided a recording pressure gauge, and measurements of pressure have been made at various points on the distribution system, and the charts are on file in the company's office at Toms River.

**OCEAN STREET PASSENGER RAILWAY AND CAPE
MAY, DELAWARE BAY AND SEWELL'S POINT
RAILROAD.**

Inspection of Pole Lines.

The inspection of the pole lines used by these companies was only a general inspection, because of the storm conditions and repairs under way; it was not considered necessary to inspect each pole separately.

The poles on Washington Street are in very bad condition, and three of them are now supported by being tied to timber. It was learned, however, that arrangements were made for joint pole operation; one side with the electric light company and one telephone company, and on the other side with the other telephone company.

The poles on First Avenue carrying the feeders from the power house to Beach Avenue are in good condition, but too many wires are supported by brackets instead of cross-arms, and the few cross-arms in use are not braced properly.

The poles along Beach Avenue are being overhauled. The eight poles near the W. J. & S. S. R. R., carrying double space trolley arms, are rotten, but it was learned that these poles are to be removed, and joint use made of the electric light poles.

It is RECOMMENDED that the poles be stenciled not only with the company's name, but also with numbers, as required by the rules of the Board, and that all be carefully inspected by the companies using same.

PENNSGROVE ELECTRIC LIGHT & POWER CO.

Inspection of the above company's meter department was made by the Board's Inspector, and investigation was made in reference to the company's compliance with the rules of the Board.

The first rule that is not complied with is No. 8, which is in reference to the record of complaints to be kept at the company's office. It was found that no records of complaints were kept in any form.

Attention of the Superintendent was called to rule 13, in reference to refusal to connect up customers whose premises are not wired in accordance with standard rules.

Attention was also called to rule 16, with reference to location of service entrance and meter location.

In reference to rule 17, it was found that the company has never tested any electric meters, as required by the Board, and no record is kept of the

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meters. The company, however, has a supply of cards for both testing and meter history records of an approved form, but same have never been filled out.

In reference to rule 21, it was found that the company has no portable rotating standard or wall standard, as required by the Board, although the company has about 165 meters on its lines.

Rule 22 has also been ignored, which rule requires that all meters be tested before installation or within thirty days after being set.

In reference to the filing with the Board a summary of tests made on electric meters, as is required by rule 24, the system was explained to the Manager, in order that same shall be filled out correctly.

It is hereby RECOMMENDED that the above company comply with the rules of the Board as follows:

Rule 8, which requires that record of complaints be kept at the company's office; rule 17, regarding the testing of electric meters; rule 21, regarding rotating standard and wall standard; rule 22, regarding testing of meters before installation or within thirty days after being set, and rule 14, with reference to the records of meters and the filing with the Board a summary of such tests as are made.

Attention is also directed to the recommendations of the Board's Inspector covering rule 17 and 21, which were made April 14th, 1914, and concerning which no action has been taken.

PENNSGROVE ELECTRIC LIGHT CO.

Test of Electric Wall Standard.

The wall standard to be used by this utility for checking its portable rotating standard, when same will arrive, is installed on the wall of the company's office at 243 Main Street, Pennsgrove. Load used in testing this meter was only a temporary load, and the wiring was only installed temporarily.

The following is the test of the wall standard:

Manufacturer—Westinghouse Electric and Manufacturing Company.

Type—O. A.

Number—1782364.

Amperes—10.

Volts—100.

Cycles—60.

Voltage of testing circuit—118.

<i>Amperes.</i>	<i>Per Cent. Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
0.5	5	99.5	—0.5
2	20	99.5	—0.5
5	50	99.8	—0.2
10	100	99.3	—0.7

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This meter was sealed with the Board's seal, and is hereby accepted as the wall standard of this utility, to be used only in checking portable rotating standards. Copy of this test is to be kept with the meter.

It is RECOMMENDED that the wiring to this meter be installed in a permanent condition, with more convenient and variable loads.

PENNSGROVE ELECTRIC LIGHT CO.
Test of Electrical Standard.

The new portable rotating standard of the above company was tested by comparison with the Board's standard, with following results, and left as follows:

Manufacturer—Westinghouse Electric and Manufacturing Company.

Number 242536.

Type—14972-A.

Amperes—1, 5, 10, 20, 40.

Volts—100, 200.

Cycles—60.

Voltage of testing circuit—110.

<i>Coil.</i>	<i>Amperes.</i>	<i>Per Cent. Load.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
1	1	100	100.2	+ .2
5	5	100	99.6	— .4
10	1	10	99.6	— .4
10	2.5	25	100	0
10	5	50	100.1	+ .1
10	7	70	99.9	— .1
10	10	100	99.2	— .8
20	10	50	99.6	— .6
40	10	25	99.4	— .6

This instrument is hereby accepted as the portable standard by which to test consumers' meters, provided the above corrections are applied. In order to obtain the accuracy of points not tested, the enclosed card should be referred to, which shows the accuracy of the meter at all loads on all coils. This card should be kept with the instrument.

PERTH AMBOY GAS LIGHT CO.

This is a coal gas plant supplying the city of Perth Amboy, Woodbridge Township and the borough of Roosevelt under the low pressure distribution system.

During the past year the company has doubled its generating capacity by the installation of three horizontal retort benches, so that the normal

generating capacity of the plant is approximately 250,000 cubic feet per day, allowing for one bench to be shut down for repairs. The total generating capacity of the plant is approximately 300,000 cubic feet per day.

Ample provision has been made for cooling, purifying and measuring the gas. The storage holder capacity is 106,000 cubic feet, the company having erected two holders, one a steel tank double-lift holder, having a capacity of 85,000 cubic feet, and the other a masonry tank single-lift holder having a capacity of 21,000 cubic feet.

The maximum daily output during the year 1913 was 345,000 cubic feet on December 24th. The maximum daily output during the year 1914 was 407,800 cubic feet on December 24th.

In addition to the gas manufactured at the Perth Amboy plant, gas is purchased from the Elizabethtown Gas Light Company, and is delivered from the Elizabeth plant in a high pressure main to the storage holder at Perth Amboy, being measured by a rotary station meter before entering the holder. The Perth Amboy works is operated at its full capacity, and when the demand is in excess of this capacity the excess is purchased from the Elizabeth company. The gas supplied to the township of Woodbridge is purchased from the Elizabethtown Gas Light Company, and is transmitted from Elizabeth to Woodbridge in high pressure mains, the pressure being reduced at Woodbridge by means of a district regulator, the gas being measured by a station meter before entering the low pressure mains. Some consumers are served directly from the high pressure mains, the pressure being reduced by means of individual service regulators.

From the above figures it would appear that the capacity of the Perth Amboy plant, together with the gas which can be purchased from the Elizabeth Company, is ample to supply the demand which may be expected during the next few years.

Examination of the company's records of January 7th, 1914, showed that the rules adopted by the Board as establishing standards and regulations to be followed by gas companies had been complied with, with the following exceptions: Rule X. The company had installed a standard calorimeter outfit, but was not making periodic tests of the gas. Rule XVI. No instructions were given to consumers using prepayment meters as to the reading of meters. Examination of the company's records on February 10th, 1915, showed that the company is making periodic tests of the heating value of the gas, and that a summary of the results of these tests is filed with the Board each month. The company has complied with Rule XVI by printing on the slips left with prepayment meter consumers, instructions as to the reading of meters, so that the company is now complying with all the rules adopted by the Board.

Test made of the heating value of the gas by the Board's Inspector, using the company's standard calorimeter outfit, gave an average total heating value of 590 Btu.

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PLEASANTVILLE HEAT, LIGHT & POWER CO.

A general inspection of the plant of the Pleasantville Heat, Light and Power Company, located at Pleasantville, was made by the Gas Inspector. This is a carburetted water gas plant supplying Absecon, Pleasantville, Northfield, Linwood and Somers Point under the low pressure distribution system.

There have been no additions to the equipment of this plant since the previous inspection made by the Gas Inspector on March 27th, 1914, and the relation between the capacity of the plant and the demand was covered in a report to the Board dated April 3d, 1914.

An examination of the company's records on March 27th, 1914, showed that the following rules adopted by the Board as establishing standards and regulations to be followed by gas companies had not been complied with:

Rule X. The company had not equipped itself with a standard calorimeter outfit.

Rule XVI. No instructions were given to consumers using prepayment meters as to the reading of meters.

In a report to the Board dated April 16th, 1914, by the Chief Inspector, it was recommended that the company be relieved from complying with the requirements of Rule X for a further period up to January 1st, 1915, on condition that the company install a suitable tank, table and drainage connections so that the Board's portable calorimeter could be set up at short notice and put into operation.

Investigation made on January 22d, 1915, by the Gas Inspector, shows that the company has installed a suitable tank and drainage connections so that the Board's portable calorimeter can be operated under very favorable conditions.

The company has complied with Rule XVI by printing on the back of the prepayment meter slips that the method of reading prepayment meters will be explained to any consumer on application at the office.

Summing up, it would appear that the company has now complied with all the rules adopted by the Board, excepting where specifically exempted.

POINT PLEASANT ELECTRIC LIGHT & POWER CO.

Tests of Electric Standards.

The wall standard used by this company was tested about a year ago, and was rechecked to date, as required by the rules and regulations of the Board. The result of the test of this meter is given below, and no recommendations are to be made.

Test of Wall Standard.

Maker—Westinghouse Electric and Manufacturing Co.

Type—C.

Serial Number—850073.

Amperes—20.

Volts—100.

Cycles—60.

<i>Amperes.</i>	<i>Per Cent. Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
1	5.0	100.2	+ .2
2½	12.5	101.2	+ 1.2
5	25.0	101.5	+ 1.5
10	50.0	101.5	+ 1.5
15	75.0	101.0	+ 1.0
20	100.0	100.3	+ 0.3

A copy of this test should be kept in the meter shop. The portable rotating standard used by this utility in testing customers' meters was never tested before by the Board's Inspector.

The result of the test made to-day is as follows:

Test of Portable Rotating Standard.

Maker—Westinghouse Electric and Manufacturing Co.

Type—54884-B.

Serial Number—143746.

Amperes—5, 10, 20, 40.

Volts—100 and 200.

Cycles—60.

Voltage of testing circuit—110.

<i>Coil.</i>	<i>Amperes.</i>	<i>Per Cent. Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	5	100	100.0	0
5	2.5	50	100.2	+ .2
5	0.5	10	100.4	+ .4
10	1	10	100.4	+ .4
10	10	100	99.8	— .2
20	15	75	99.8	— .2
20	20	100	99.5	— .5

A copy of this test should be kept with the instrument.

This instrument is hereby accepted as the portable rotating standard of this utility, to be used in checking customers' meters.

POINT PLEASANT TRACTION CO.

Annual inspection of the tracks, roadway and equipment of the Point Pleasant Traction Company was made on July 24th, 1915.

This road operates from Clark's Landing, Point Pleasant, to Bay Head, a distance of 3.04 miles, and a short spur of approximately .05 of a mile to the New York and Long Branch Railroad station in Point Pleasant. Of this distance 2.38 miles are on public streets and highways, and the remainder, or .71 of a mile, is on private right of way.

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There has been considerable work done in the past year, and the track and overhead are in good condition.

Of the work done, the following are the principal items:

Borough of Point Pleasant Beach:

Derail switch placed on easterly side of New York and Long Branch Railroad crossing.

New switch installed on Arnold Avenue.

Track completely retied on Atlantic Avenue, between New York and Long Branch Railroad crossing and Richmond Avenue.

Borough of Bay Head:

Track on East Lake Avenue, between Harris and Harve Streets, moved to center of street.

Ties renewed and overhead construction changed from bracket to span.

The cars, five in number, are of the single truck two-motor type, with open bodies. They have been overhauled, and are in fair condition. These cars are not equipped with either sanding apparatus or with fenders. As to the former, it would appear that as the road operates through a sandy territory, it would not be necessary to equip the cars with sanding apparatus, but as to the fenders, it would appear that the company should take steps to equip the cars with some suitable type of fenders or wheel guards.

It is therefore RECOMMENDED that the company equip all passenger cars with suitable type of fender or wheel guard. This to be completed before May 15th, 1916.

POSTAL TELEGRAPH AND CABLE CO.

Pole Line Conditions.

There are eight telegraph poles on the main road in Mount Freedom that are leaning at an angle of about 60 degrees over the road. These are heavy poles, having four or five cross-arms heavily loaded with wires, and are in a dangerous condition. The numbers on these poles are in the thirteen hundreds.

As these poles are not guyed, it is RECOMMENDED that they be straightened up as soon as possible to prevent any accidents.

RAHWAY GAS LIGHT CO.

This plant was formerly a coal gas plant, supplying the city of Rahway under the low pressure distribution system. The company has dismantled this plant, and now purchases gas from the Elizabethtown Gas Light Company, which is delivered from the Elizabeth works of this company to a storage holder in Rahway. Pressure of the gas is reduced by means of a station governor, and the gas is measured by a station meter before entering the holder. The storage holder, which was erected in 1913, has a capacity of 146,000 cubic feet.

An examination of the company's records on January 23d, 1914, showed that the rules adopted by the Board on October 17th, 1911, as establishing standards and regulations to be followed by utilities engaged in the production, sale and distribution of gas, had been complied with, with the following exceptions:

Rule II. Company had allowed a number of consumers' meters to remain in service for a period longer than six years, without checking them for accuracy.

Rule XVI. No instructions had been given to customers using prepayment meters, as to the reading of same.

An examination of the company's records on April 30th shows that the company is now removing and testing consumers' meters which have been in service for a period of over six years, and that although this work has been delayed on account of illness of its employees, the work will proceed upon their recovery.

In reference to Rule XVI, the company has provided a slip which is left with the prepayment meters, which explains the method of reading meters.

Rule XIV provides that the company keep a record of complaints in regard to service. At the time of last inspection such a record was being kept in the Rahway office, but it appears that since this date the company has neglected to keep a record of the complaints received, in accordance with this rule.

The company states that owing to several changes in the management of the Rahway office, the matter of properly recording complaints had been overlooked, but that immediate steps will be taken to keep a complaint record in accordance with Rule XIV.

SALEM GAS LIGHT CO.

This is a coal gas plant supplying the city of Salem under the low pressure distribution system.

No additions have been made to the generating equipment since the last inspection was made, and the relation between the generating capacity and the maximum demand is approximately the same as at the time of the last inspection, and is covered in a report to the Board dated November 22d, 1913.

Examination of the company's records on November 20th, 1913, showed that the rules adopted by the Board as establishing standards and regulations to be followed by gas companies had been complied with, with the following exceptions:

Rule II. The company had allowed some meters to remain in service for a period of over six years without checking them for accuracy.

Rule X. The company had not installed a standard calorimeter outfit in accordance with this rule.

Rule XII. The company had not provided a recording pressure gauge.

Rule XI. No records were made of pressure conditions in Salem.

Investigation shows that the company has now complied with all of the

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rules adopted by the Board, having removed and tested all meters which have been in service for a period over six years in accordance with the requirements of Rule II.

The company has installed at its works in Salem a standard calorimeter outfit, and tests are made of the heating value of the gas four or five times each month.

Examination of the results obtained would indicate that the heating value of the gas is well above the standard prescribed by Rule IX.

The company has purchased a recording pressure gauge of the portable type, and has made measurements of pressure conditions at various points on their distribution system. An examination of the charts obtained would indicate that pressure conditions in Salem are within the limits prescribed by Rule XI.

Tests of the heating value of the gas made by the Gas Inspector on August 20th, 1915, shows an average total heating value of 669 Btu's. Rule IX reads as follows:

"The company furnishing gas which, within one-mile radius from the distribution center, gives a monthly average total heating value of not less than 600 Btu, with a minimum which shall never fall below 550 Btu., may be considered as giving adequate service as far as the heating value of the gas is concerned."

STANDARD GAS CO.

This is a carburetted water gas plant supplying a number of towns and boroughs in Monmouth County, under the high pressure distribution system. No additions have been made to the generating apparatus since the last inspection on March 9th, 1915, and the relation between the capacity of the plant and the maximum demand on the plant, also a description of the territory supplied, and the methods of distribution, are given in a report to the Board dated August 24th, 1914.

The company has recently purchased an Ingersoll Rand Duplex Compressor, Type 10, having a capacity of 40,000 cubic feet per hour, which will be installed during the coming week, and which will provide pumping capacity sufficient to take care of the maximum hourly demands which occur on Sundays during the months of July and August, and which tax the present pumping capacity to its maximum.

Examination of the company's records shows that the rules adopted by the Board as establishing standards and regulations to be followed by gas companies are being complied with, with the exception of that part of Rule III, which provides that the company shall make a report to the Board, giving a summary of the records of tests of consumers' meters. The last reports received covered the meters tested up to April 1st, 1915. It is understood that these summaries, showing the results of meters tested from April 1st to date, will be forwarded to the Board in the near future.

STANDARD GAS CO. OF SOUTH JERSEY.

This is a carburetted water gas plant, supplying Sea Isle City under the high pressure distribution system, the pressure being reduced before entering the consumers' meters by means of individual pressure regulators.

There have been no additions to the equipment of this plant since the previous inspection made by the Gas Inspector on March 27th, 1914, and the relation between the capacity of the plant and the demand was covered in a report to the Board dated March 31st, 1914.

An examination of the company's records on March 27th, 1914, showed that the following rules, adopted by the Board as establishing standards and regulations to be followed by gas companies, had not been complied with:

Rule VII. No slips were left with consumers using prepayment meters.

Rule XIV. No records were kept of complaints in regard to service.

Rule XVI. No methods had been adopted to inform customers as to the reading of meters.

As this company has considerably less than five hundred meters in service, it was recommended that the company be relieved from complying with Rules III, IV and XII, for a period of one year beginning January 1st, 1914.

An examination of the company's records on January 23d, 1915, shows that the company has complied with Rule VII by leaving with the customers using prepayment meters a slip showing the number of the meter, the reading of the meter, the amount collected from the meter and the date. The company has complied with Rule XVI by printing on the back of its regular bills and on the back of the prepayment meter slips instructions as to the reading of meters. The record of complaints required by Rule XIV has not been kept in accordance with the requirements of this rule. The company states, however, that in the future its complaint record will show the name and address of the complainant, the date, the nature of the complaint and the remedy, as required by Rule XIV.

In connection with Rules III, IV and XII, it is recommended that the company be relieved from complying with these rules for a further period of one year from January 1st, 1915.

SEA ISLE CITY ELECTRIC LIGHT, POWER & WATER CO.

Test of Electrical Standards.

The wall standard and portable rotating standard used by this company were tested by comparison with the Board's standard, with the following results:

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Test of Wall Standard.

Maker—Westinghouse Electric and Manufacturing Co.

Type—O. A.

Number—1143601.

Amperes—5.

Volts—100.

Cycles—60.

Voltage of testing circuit—105.

<i>Amperes.</i>	<i>Per Cent. Load.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
0.5	10	99.5	— .5
1.	20	100	0
2.5	50	100.6	+ .6
4.	80	100.3	+ .3
5.	100	100.3	+ .3

This instrument was sealed by the Board's seal, and is hereby accepted as the wall standard of this utility, to be used only for checking the portable standard. *Copy of this test should be kept with the instrument.*

Portable Rotating Standard.

Manufacturer—Westinghouse Electric and Manufacturing Co.

Type—149742-A.

Number—242535.

Amperes—1, 5, 10, 20, 40.

Volts—100 and 200.

Cycles—60.

Voltage of testing circuit—105.

<i>Coil.</i>	<i>Amperes.</i>	<i>Per Cent. Load.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
1	1	100	100	0
5	.5	10	98.9	— 1.1
5	1	20	99.2	— .8
5	2.5	50	100	0
5	4	80	100.5	+ .5
5	5	100	100	0
10	10	100	99.5	— .5
20	10	50	99.2	— .8
40	10	25	98.8	— 1.2

This instrument is hereby accepted as the portable standard to be used by this utility for testing customers' meters, provided the above corrections are made. In order to determine the accuracy of the meter at loads not tested, the curve should be drawn for the 5-ampere coil, and curves for the other coils, drawn parallel to same, but a distance from same, in proportion to the difference in error at the same per cent. of rated capacity.

A copy of this test should be kept with the instrument.

SEA ISLE CITY ELECTRIC LIGHT, POWER & WATER CO.

The Board's Inspector assisted a representative of the company in installing a wall standard, with the understanding that the company was to purchase a portable rotating standard in the near future and to start testing its customers' meters.

Up to the present time the company has done nothing about purchasing a standard or keeping records of the meters on the lines. At present there are 285 meters in service, of which no tests have been made.

The Board's Inspector tested one customer's meter, at the request of the superintendent of the company, and found same to be approximately 20 per cent. slow. This is mentioned so as to emphasize the need that this company has for a standard.

It is therefore RECOMMENDED that this company purchase a portable rotating standard, and notify the Board, so that the Board's Inspector may test same.

Attached to this report are electric meter test records and meter history records of an approved form. These record cards can be purchased at the Library Bureau.

SAYREVILLE ELECTRIC LIGHT & POWER CO.

Test of Electric Standards.

The wall standard used by this company to check its portable standard is installed on wall in the chemical laboratory used by the Sayre & Fisher Brick Company, and was tested by comparison with the Board's standard, with the following results:

Manufacturer of wall standard—Westinghouse Electric and Manufacturing Company.

Type—B.

Serial Number—417155.

Amperes—5.

Volts—100.

Cycles—60.

<i>Amperes.</i>	<i>Per Cent. of Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	100	100.6	+ 0.6
4	80	100.3	+ 0.3
2½	50	100.6	+ 0.6
1	20	100.3	+ 0.3
½	10	100.5	+ 0.5

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This meter is hereby accepted as the wall standard of this utility, to be used only in checking the portable standard, and is sealed with the Board's seal. A copy of this test should be kept with the instrument.

The portable rotating standard used by this utility for testing customers' meters was tested by comparison with the Board's standard, with the following results:

Manufacturer—Westinghouse Electric and Manufacturing Company.

Type—149742-A.

Serial Number—230662.

Amperes—1, 5, 10, 20, 40.

Volts—100 and 200.

Cycles—60.

<i>Coil.</i>	<i>Amperes.</i>	<i>Per Cent. of Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	5	100	100.2	+ 0.2
5	4	80	100.0	0
5	2½	50	100.6	+ 0.6
5	1	20	100.3	+ 0.3
5	½	10	99.6	- 0.4
1	1	100	100.7	+ 0.7
10	5	50	100.2	+ 0.2
20	5	25	99.9	- 0.1
40	5	12½	100.0	0

This instrument is hereby accepted as a portable rotating standard to be used by this utility in testing its customers' meters. Copy of this test should be kept with the instrument, and the above corrections applied.

In order to determine the accuracy of the meter at points not tested, a curve should be drawn for the 5-ampere coil, using the above figures, and plotting curves parallel to same for the other coils but a distance from the original curve, proportional to the difference in error *at the same per cent. of rated capacity.*

It is RECOMMENDED that the wall standard be firmly and permanently attached to the wall, and that the connections from same be run out to switches, so that the connections are not disturbed when this meter is to be cut in or out of service. It is also suggested that a portable load box be obtained, to make it more convenient for the meter tester in the testing of meters, as at present the available loads in this shop are not convenient. This portable load box could be also used to advantage in testing of meters on the customers' premises.

TOMS RIVER & ISLAND HEIGHTS ELECTRIC LIGHT & POWER CO.

Test of Electric Standards.

The meter shop used by this company is on the second floor of their building, which is used as a commercial office, at No. 7 Washington Street.

The wall standard is installed on the wall of the meter shop, and was

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tested by comparison with the Board's standard, and found to be 1.5 per cent. fast on 100 per cent. load and 1 per cent. slow on 10 per cent. load.

Adjustments were made, and the following is the report of the final test, copy of which should be kept with the instrument in the meter shop:

Test of Wall Standard.

Maker—Fort Wayne Electric Company.

Type—K-4.

Serial Number—866834.

Amperes—10.

Volts—110.

Cycles—60.

<i>Amperes.</i>	<i>Per Cent. Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
10	100	100.2	+ .2
7½	75	100.4	+ .4
5	50	100.6	+ .6
2½	25	100.4	+ .4
1	10	100.3	+ .3

This meter was sealed with the Board's seal, and it is hereby accepted as a wall standard of this utility, to be used only in checking the portable rotating standard.

The portable rotating standard of this company, used to test customers' meters, was tested on the same circuit, and the following is the result of the test, a copy of which should be kept with the instrument:

Test of Portable Rotating Standard.

Maker—Fort Wayne Electric Company.

Type—K M-2.

Serial Number—816212.

Amperes—5, 10, 20.

Volts—110 (only).

Cycles—60.

<i>Coil.</i>	<i>Amperes.</i>	<i>Per Cent. Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	5	100	102.4	+ 2.4
10	1	10	101.3	+ 1.3
10	2½	25	101.7	+ 1.7
10	5	50	102.3	+ 2.3
10	7½	75	102.5	+ 2.5
10	10	100	102.2	+ 2.2
20	10	50	102.1	+ 2.1

It was stated by an official of the company that this instrument had not been used recently in checking customers' meters because a new jewel had

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been installed in the meter, and it was decided to wait until the accuracy of this meter was known.

It was suggested that the company calibrate this instrument themselves, using the wall standard which was calibrated by the Board's Inspector as standard of accuracy, using the corrections as noted above.

VULCAN ELECTRIC LIGHT, HEAT & POWER CO.

A few months ago the above company requested information from the Board's Inspectors in reference to the purchase of a wall standard and whether one standard could be used by the above company in conjunction with the Stone Harbor Electric Company, which is under the same ownership, and supplied from the same power house. The Board's Inspectors approved of this arrangement, but to date the company has done nothing in reference to the purchase of same. There is no wall standard installed in Cape May Court House nor in Stone Harbor.

There are 159 meters in service in Cape May Court House, and over 300 in service in Stone Harbor. With this number of meters on the lines, it is important that the company purchase a standard and test meters in service.

It is hereby RECOMMENDED that this company purchase a portable rotating standard of at least 40 amperes capacity, to be used on 110 and 220 volt circuits, and that one 10-ampere wall standard be installed in Cape May Court House and one in Stone Harbor. These wall standards are to be so connected that a portable standard may be connected in series with it, together with a variable load of at least 10 amperes capacity, and so arranged that no current will go through the wall standard when the portable standard is used in checking customers' meters.

WASHINGTON GAS CO.

This is a carburetted water gas plant, supplying the Borough of Washington under the low pressure distribution system. There have been no additions to the generating equipment of the plant, nor any changes in the method of operating the plant, since the previous inspection. The maximum daily output during the year 1914 was approximately the same as during the previous year, so that the relation between the generating capacity and the maximum demand of the plant is the same as given in a report to the Board, dated January 5th, 1914.

Since the last inspection the company has installed an additional gas purifier, which provides for a more thorough purifying of the gas.

The company has also made a number of extensions to its distribution system, with a view of bettering pressure conditions in Washington.

During the past year the company has experienced considerable difficulty in maintaining a uniform pressure in its mains, owing to stoppages which appear to be in the holder outlet pipe. The company has been trying to

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eliminate this stoppage for some time, and expects to overcome this trouble in the near future.

An examination of the charts taken from the company's recording pressure gauge located in the company's office, shows a rather sharp drop in pressure at about noon time. The charts taken during the last few days, however, show that the pressure is within the limits prescribed by the Board's rules.

Examination of the company's records at the time of the previous inspection, August 19th, 1914, shows that the rules adopted by the Board on October 17th, 1911, as establishing standards and regulations to be followed by utilities engaged in the production, sale and distribution of gas has been complied with, with the exception of Rules III and IV, which provide that the company shall equip itself with a standard meter prover, and keep a record of tests made of consumers' meters.

Examination of the company's records on August 11th, 1915, would indicate that the company is now complying with the rules and regulations adopted by the Board, although the company has not as yet provided a standard meter prover to test consumers' meters. Meters which are removed for test and for repairs are all sent to the manufacturer's shop in Philadelphia, and a report of the test is sent to the company.

The company has approximately five hundred meters in service and should provide a standard meter prover in accordance with Rule IV, and make tests of meters in accordance with Rule III and Rule V.

WEST JERSEY ELECTRIC CO.

Tests of Electric Standards.

The second annual check on the above company's standards was made July 8th by the Board's Inspector. Adjustments were made on both the wall and rotating standards, and same were found to be between one and two per cent. fast. The results of the tests are as follows:

Test of Wall Standard.

Manufacturer—Fort Wayne Electric Company.

Type—K-2.

Number—44031.

Amperes—10.

Volts—110.

Cycles—60.

<i>Amperes.</i>	<i>Per Cent. of Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
1	10	99.6	— 0.4
2.5	25	99.3	— 0.7
5	50	100.0	0
7	70	100.4	+ 0.4
10	100	100.2	+ 0.2

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This instrument was sealed with the Board's seal and is hereby accepted as a wall standard of this utility, to be used only in checking its portable rotating standard. *A copy of this test should be kept with the instrument.*

Test of Portable Rotating Standard.

Manufacturer—Fort Wayne Electric Company.

Type—KM-2-S.B.A.

Number—634841.

Ampères—5, 10, 25, 50 and 100.

Volts—110 and 220.

Cycles—60.

Voltage of testing circuit—120.

<i>Ampères.</i>	<i>Coils.</i>	<i>Per Cent. of Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	5	100	100.3	+ 0.3
1	10	10	100.3	+ 0.3
2.5	10	25	100.3	+ 0.3
5	10	50	100.5	+ 0.5
7	10	70	100.2	+ 0.2
10	10	100	99.7	— 0.3
25	25	100	99.8	— 0.2
50	50	100	99.0	— 1.0
100	100	100	98.5	— 1.5

This instrument is hereby accepted as a portable rotating standard of this utility, to be used in checking its customers' meters, provided the above errors are allowed for. To obtain the accuracy on points not checked, curves should be drawn for the 10-ampere coil using the above figures, and plotting curves for the other coils parallel to the original curve at a distance from same in proportion to the difference in error at the same per cent. of rated capacity. A copy of this test should be kept with this instrument.

WILDWOOD GAS CO.

As shown in a report to the Board dated July 14th, 1914, in reference to an inspection made on July 9th, 1914, the generating capacity of this plant is ample to meet the present demands.

The company has recently installed a water tube gas condenser, which is used to cool the gas before entering the purifiers, resulting in a more economical operation of the purifier, as well as improving the quality of gas sent out. No steps have been taken, however, to provide for the installation of a station meter to measure the amount of gas manufactured, as recommended in a report to the Board dated April 16th, 1913.

Examination of the company's records shows that the rules adopted by the Board on October 17th, 1911, as establishing standards and regulations

to be followed by utilities engaged in the production, sale and distribution of gas have been complied with, excepting Rule X, which provides that each company whose output exceeds twenty million cubic feet a year shall equip itself with a standard calorimeter outfit.

As mentioned above, the company has not installed a station meter at its plant, consequently there are no accurate records available as to the annual yearly output of the company. There is no doubt, however, that the yearly output during the year 1914, as indicated by a summation of gas sales as measured by consumers' meters, will exceed twenty million cubic feet.

The company should equip itself with a standard calorimeter outfit, with which periodic tests of the heating value of the gas furnished its consumers should be made as prescribed by Rule X, and as recommended in previous report to the Board dated July 14th, 1914.

WILLIAMSTOWN ELECTRIC CO.

Test of Wall Standard.

The wall standard used by this company to check the portable rotating standard is installed on a wooden switchboard in the meter shop, which is a room on the second floor of the commercial office, 212 Main Street. The switchboard has connections for the checking of customers' meters with the portable standard. The load consists of a bank of lamps of about 20 amperes capacity.

The result of the test of the wall standard is as follows:

Manufacturer—Westinghouse Electric Manufacturing Company.

Type—O A.

Serial Number—1422781.

Amperes—5.

Volts—100.

Cycles—133.

Voltage of testing circuit—Approximately 110 volts.

Standard used—Westinghouse. No. 157938.

<i>Amperes.</i>	<i>Per Cent. Load.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5.0	100	101.3	+ 1.3
3.5	70	100.9	+ 0.9
2.0	40	100.6	+ 0.6
1.0	20	99.7	— 0.3
0.5	10	100.0	0

A copy of the above test should be kept in the meter shop by the meter tester.

This standard was sealed with the Board's seal, marked N.J.P.U.C., and is hereby accepted as the wall standard of this company to check against the portable standard.

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WILLIAMSTOWN ELECTRIC CO.*Test of Portable Rotating Standard Wattmeter.*

The portable rotating standard wattmeter, used by this company to test customers' meters, was tested, and the result of the test is below:

Manufacturer—Westinghouse Electric and Manufacturing Company.

Type—55884 B.

Serial Number—219936.

Amperes—5, 10, 20 and 40.

Volts—100 and 200.

Cycles—133.

Voltage of testing circuit—110 volts approximately.

Standard used—Westinghouse. No. 157938.

<i>Amperes.</i>	<i>Coil.</i>	<i>Per Cent. Load.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5.0	5	100	102.3	+ 2.3
3.5	5	70	102.3	+ 2.3
2.0	5	40	102.1	+ 2.1
1.0	5	20	100.4	+ 0.4
0.5	5	10	99.6	— 0.4
10	10	100	102.0	+ 2.0
20	20	100	102.6	+ 2.6
20	40	50	102.5	+ 2.5

A copy of this test should be kept with the meter until superseded.

This standard may be used for the testing of customers' meters, provided that the above corrections be applied. To obtain the corrections for points not given, curves should be plotted, using the points given to obtain a curve for the 5-ampere coil and the curves for the other three coils being drawn parallel to same, a distance from the given curve in proportion to the difference in error between same and given curve at the *same per cent. of load*.

It was noticed that the manufacturer's card was marked "60 cycles," and it is possible that they have made an error and tested the meter on a 60-cycle circuit, which would account for the large errors found. It is suggested that to assist the local meter tester in his testing that this matter be taken up with the manufacturer and the instrument be recalibrated by them, and a *calibration card* be obtained from them.

WILLSBROOK ELECTRIC LIGHT CO.*Test of Electric Wall Standard.*

The wall standard of this company is attached to the wall of a well kept meter shop, which is a separate building, but in the rear of the local office. The loads used for testing have a capacity up to 30 amperes at 110 volts, and

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makes it a very convenient load for all testing for a company of this size. The meter used as a wall standard was found to be 1.2 per cent. slow on 100 per cent. load and .4 per cent. slow on 10 per cent. load. Adjustments were made and result of final test is as follows:

Wall Standard.

Maker—Westinghouse Electric and Manufacturing Co.
Type—O A.
Serial Number—1641692.
Amperes—5.
Volts—100.
Cycles—60.
Standard used—General Electric Co. No. 2205972.
Voltage of testing circuit—Approximately 110.

<i>Per Cent. of Rated Capacity.</i>	<i>Amperes.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
100	5	100.2	+ 0.2
80	4	100.4	+ 0.4
50	2.5	100.3	+ 0.3
20	1	100.1	+ 0.1
10	0.5	100.4	+ 0.4

A copy of this test should be kept in the meter room.

This meter is hereby accepted as the wall standard of this company to be used to check the portable rotating standard.

WILLSBROOK ELECTRIC LIGHT CO.

Test of Portable Rotating Standard Wattmeter.

The portable rotating standard wattmeter used by this company for testing of customers' meters was tested by comparison with the wall standard. The result of the test is as follows:

Rotating Standard.

Maker—Westinghouse Electric and Manufacturing Co.
Type—54884 B.
Serial Number—219933.
Amperes—5, 10, 20 and 40.
Volts—100 and 200.
Cycles—60.
Standard used—General Electric Co. No. 2205972.
Voltage of testing circuit—Approximately 110.

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<i>Coil.</i>	<i>Per Cent. of Rated Capacity.</i>	<i>Amperes.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	100	5	99.5	—0.5
5	80	4	99.3	—0.7
5	50	2.5	99.6	—0.4
5	20	1.0	99.4	—0.6
5	10	0.5	99.1	—0.9
10	100	10	98.8	—1.2
20	100	20	99.3	—0.7
40	75	30	98.3	—1.7

This standard is hereby accepted as the portable rotating standard of this company. A copy of the above corrections should be kept with the standard and applied when tests are made.

The corrections on points not tested should be determined by plotting the curve of the 5-ampere coil and drawing curves parallel to this curve for the other coils, using the correction found on each coil as a point in that curve.

WOODSTOWN ICE & COLD STORAGE CO.

Test of Electric Standards.

The electric wall standard of this company is installed on the wall of the Commercial office. Only a portable load consisting of a bank of lamps of 5-amperes capacity is used in testing customers' meters. There is no switch-board installed, and when meters are to be tested they are hung on the office wall and the standard placed on a portable table. This system is not up to standard, but in consideration of the fact that there are less than 200 meters on the lines, no recommendations will be made at this time.

The wall standard was found to be 2.1 per cent. fast on full load and 0.7 per cent. slow on light load. Adjustments were made, and the following is a copy of the test after final adjustment:

Test of Wall Standard.

Manufacturer—Westinghouse Electric and Manufacturing Co.
 Type—OA.
 Serial Number—1160657.
 Amperes—5.
 Volts—100.
 Cycles—133.
 Standard used—Westinghouse 157938.
 Voltage of test circuit—Approximately 114.

<i>Amperes.</i>	<i>Per Cent. Load.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	100	100.0	0
3.5	70	100.4	+ 0.4
2.5	50	100.2	+ 0.2
1.0	20	99.8	- 0.2
0.5	10	100.3	+ 0.3

A copy of this test should be kept with the meter. This meter was sealed with the Board's seal, and is hereby accepted as the wall standard of this utility, to be used only in checking the portable rotating standard meter.

The Portable Rotating standard used by this company was tested by the same standard as above, and on the same circuit. The following is the result of the test, a copy of which should be kept with the instrument:

Test of Portable Rotating Standard.

Manufacturer—Westinghouse Electric and Manufacturing Co.

Type—63417 B.

Serial Number—200764.

Cycles—133.

Amperes—5, 10, 20 and 40.

Volts—100 and 200.

<i>Coil.</i>	<i>Amperes.</i>	<i>Per Cent. Rated Capacity.</i>	<i>Per Cent. Accuracy.</i>	<i>Per Cent. Error.</i>
5	0.5	10	100.3	+ 0.3
5	1.0	20	100.8	+ 0.8
5	2.5	50	101.3	+ 1.3
5	3.5	70	101.3	+ 1.3
5	5	100	100.9	+ 0.9
10	5	50	100.4	+ 0.4
20	5	25	100.2	+ 0.2
40	5	12½	100.1	+ 0.1

This meter is hereby accepted as the portable rotating standard of this utility to be used in testing customer's meters, and the above corrections applied. The corrections for points and loads not tested may be determined by plotting the results of the 5-ampere coil and plotting the curves for the other coils parallel to same, but a distance from same in proportion to the difference in error as found by test at the same per cent. of rated capacity.

Inspectors' Reports on Accidents.

PENNSYLVANIA RAILROAD—Crossing accident—November 5th, 1914—
Hightstown.

As train No. 32 of the Union Transportation Company was moving over the tracks of the Pennsylvania Railroad Company at Academy Street, Hightstown, at 8:38 A. M., it collided with a stage containing seven school children. The stage was damaged, all the children were injured, also the driver. At this crossing, which is protected by a flagman from 6:10 A. M. to 7:40 P. M., there are three tracks, one main and two siding. The view from both approaches is limited. When the accident occurred the train was backing and the rear end was protected by air hose whistle, with a brakeman operating same who claims that whistle was sounded as the train was backing, and also at a point 45 feet east of crossing. The train was moving about six miles an hour, and the flagman was not on the crossing as he should have been. The baggagemaster was on the rear end of the train with the brakeman. The engineer did not look in the direction the train was moving, evidently relying on the rear brakeman to operate the emergency brake if it became necessary to make a quick stop. The Inspector's report stated that owing to obstructions at the crossing the train crew should not have relied on the flagman to properly protect this crossing, and that as the train was moving backward such movement should have been made with extra caution. In the opinion of the Inspector the train crew was primarily responsible for the accident, and the crossing flagman negligent. It was recommended that the Union Transportation Company exercise more supervision of the discipline of its crew. The Union Transportation Company contended that the accident was caused by the failure of the flagman of the Pennsylvania Railroad Company to be on duty at the crossing and stated that the train crew did not use the rear brake valve as the stage was but forty feet away when it was first seen and they were afraid to try to operate the rear brake valve as they knew that was the point which would first strike the vehicle.

PENNSYLVANIA RAILROAD—Crossing accident—November 26th, 1914—
Pemberton.

As train No. 34 of the Union Transportation Company was moving over the single track of the Pennsylvania Railroad at Pemberton, at 12:30 P. M., November 26th, 1914, it struck an automobile, demolishing same. The engine was hauling four cars going in a northerly direction to clear the switch to siding track south of the crossing, then back to couple remainder of train standing near the station. The engineer was alone in the locomotive at the time. Conductor and flagman were on the rear end of the train. There:

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was no protection at the crossing, as called for in the company's book of rules covering shifting movements, which provides:

"When a train is shifting over a crossing where there is no watchman, a trainman must be stationed on the crossing to give warning to persons using the same."

The automobile approached the cars at a speed of about twelve miles per hour and as the curtains of the machine were down the view of the driver was somewhat obstructed. The company advised that it would take measures to force compliance with its rules.

ERIE RAILROAD—Crossing accident—February 6th, 1915—Ridgewood.

A taxicab, containing three passengers from the 12:45 A. M. train, attempted to cross in front of train at the Ridgewood station and was struck by the engine, which was backing up. The machine crossed two tracks before reaching the one on which it was struck. The crossing is protected by gates from 6 A. M. to 11:30 P. M., operated by man in tower, who also protects a crossing fifty feet east, and is protected at all times by bell. It was recommended that the crossing be protected for the full twenty-four hours.

The recommendation was adopted by the company.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD—Derailment—February 17th, 1915—West end of Bergen tunnel.

As train No. 210 was passing over the crossing at the west end of Bergen tunnel, 8:24 A. M., February 17th, axle on second car from the engine broke and six coaches were derailed. No one was injured but seventeen trains were delayed on an average of thirty minutes each. The axle was examined by the Board's Inspector of Equipment, who stated that a crack extended from the outside to $2\frac{5}{16}$ inches deep. The break occurred one-eighth of an inch under pulley hub, which rendered detection on ordinary inspection impossible. Following the investigation the company advised that it had made arrangements, in addition to the present method of inspection, to paint the pulley seats white and after the paint dries test the axle at "four different points by holding a flatter on same and striking several blows with a heavy sledge; this we think will show up any imperfection that is not susceptible to ordinary visual inspection. Furthermore, we have arranged to substitute a straight axle, rough turned, whenever it is necessary to renew any of the pulley axles now in service."

ERIE RAILROAD—Man struck by train—February 24th, 1914—Carlton Hill.

A passenger alighted from train No. 59, which had just left the station at Carlton Hill, passing over the crossing ahead of train No. 4, for which

gates were down at the time. The operator in tower shouted a warning, but the man was struck by train No. 4 and killed. There is an inter-track fence at this point, and the crossing is protected by gates and bell. It was recommended that when a westbound train is standing or just starting from the station, eastbound trains pass over this crossing at such a slow rate of speed that persons may cross over the same with reasonable safety. The company advised that this recommendation was in accord with its present operating rules, and that therefore a compliance with the rule will be a compliance with the recommendation.

ERIE RAILROAD—Man struck by train—April 10th, 1915—West Paterson Bridge.

As train No. 120 was approaching West Paterson Bridge, at 8:45 A. M., April 10th, a member of the repair gang, engaged in work on the bridge, was struck and killed. It was recommended that when work is being done on bridges of this nature that a man be placed on guard to warn workmen of approaching trains.

The recommendation was adopted by the company.

ERIE RAILROAD—Crossing accident—April 29th, 1915—Garfield.

As train No. 9 was passing over Van Winkle Avenue, Garfield, it struck an automobile, demolishing same and injuring the two occupants, one slightly and one seriously. At this crossing, which is diagonal and on a level grade, there are three tracks, two main and one siding. The view was reported to be good except when there are cars standing on siding, which would obstruct the view for people driving in an easterly direction. It was recommended that standard crossing alarm bell be installed.

The recommendation was adopted by the company.

ERIE RAILROAD—Man struck by train—May 7th, 1915—Lakeview.

An intending passenger was walking up the track to board train No. 125, due at Lakeview at 6:06 P. M., and was struck and killed at Crooks Avenue crossing by train No. 176. At crossing there are three tracks, two main and one siding, and same is protected by flagman from 7 A. M. to 6 P. M. It was reported, however, that the flagman stays on duty each night until the departure of train No. 125. There is an inter-track fence at this point, and at time of accident train No. 125 had just about stopped at the station when train No. 176 passed over the crossing and struck and killed the man in question. It was recommended that the company put into effect the same order as was put in force at Carlton Hill following the Inspector's investigation of the accident which occurred there on February 24th.

The recommendation was adopted by the company.

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PUBLIC SERVICE RAILROAD COMPANY—Automobile struck by car
—June 6th, 1915—Hightstown Road.

As train No. 8 on the Public Service Fast Line, eastbound from Trenton, reached Hightstown Road, at 3:02 P. M., June 6th, it struck an automobile, demolishing same and killing the driver and seriously injuring seven other occupants. The crossing was protected by standard crossing sign and an automatic flagman with locomotive bell attachment. There is a whistling board four hundred feet west of the road, and it was stated that the whistle was sounded at this point. The country in the vicinity of the crossing is extremely flat, and it was reported that there was no place within five hundred feet of the crossing where the car would not be visible from the highway. The Hightstown Road is a sandy road, and not much traffic. It was reported that on the north side of the cut there is some little vegetation which should be cut down in order to afford a better view of an approaching car, and it was recommended that this be done.

The recommendation was adopted by the company.

CENTRAL RAILROAD—Crossing accident—July 4th, 1915—Farmingdale.

As the Atlantic City Express on the Central Railroad was passing over Asbury Road Crossing, Farmingdale (about two miles north of Farmingdale station), at 3:52 P. M., July 4th, it struck an automobile, demolishing same and killing four occupants. Asbury Road is improved and crosses the single track diagonally. When the accident occurred the automobile was going in a westerly direction and the train in a southerly direction. The Inspector reported that the standard crossing sign at this point can be seen about one mile east of the crossing; that the view of trains southbound at a point one hundred feet east of the track is good, northbound fair; that from the westerly side the view of both north and southbound trains is unobstructed, and trains can be seen for a distance of 2,000 feet. The track at this point is tangent, affording good running ground for speed necessary to make the schedule of Atlantic City express trains, and, in the opinion of the Inspector, therefore the train was running possibly sixty miles an hour. Following the Inspector's investigation the company decided to install an automatic bell with attached flashlight warning, which was placed in service on July 23d.

ERIE RAILROAD—Crossing accident—August 10th, 1915—Waldwick.

As train No. 84 was passing over the first crossing, one-half mile west of Waldwick Station, it struck a vehicle, demolishing same, seriously injuring one occupant, fatally injuring the other, and killing the horse. There was no protection at the crossing, which consisted of five tracks, four main and one siding. It was reported that view of eastbound train, when traveling south, was fair; that other than this the view was poor. There was no

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protection at the crossing. It was recommended that a standard crossing alarm bell be installed.

The recommendation was adopted by the company.

ATLANTIC CITY RAILROAD—Collision—August 8th, 1915—Atlantic City.

In shifting a draft of twelve passenger coaches to the terminal on track No. 3, Atlantic City Railroad, Atlantic City, August 8th, 6:30 P. M., they were rammed against the Ellis bumping block with sufficient force to break the rails and force the first car against the projecting roof of the passenger concourse of waiting-room. Four or five people were slightly injured in the rush by being knocked down and trampled on. The conductor and two brakemen jumped off, within seven car lengths of bumping block, depending entirely on signals of the engineer to stop the train. The engineer miscalculated the distance and ran into the block as described. In this movement no backing-up hose and whistle was used. It was recommended that a back-up hose be used on all trains being backed in train shed.

The recommendation was adopted by the company.

ERIE RAILROAD—Man struck by train—August 14th, 1915—Passaic.

At Summer Street, Passaic, a pedestrian was struck by train No. 5, 9 P. M., August 14th, and seriously injured. This crossing was protected by a man in tower, between the hours of 6 A. M. and 7 P. M. It was recommended that continuous protection be afforded.

The recommendation was adopted by the company.

MOUNT HOPE MINERAL RAILROAD—Collision—August 19th, 1915—Mount Hope.

At 11:45 A. M., engine of the Empire Steel and Iron Company pushed the Mount Hope Mineral Railroad Company's passenger coach out on Main line and down to a curve about a quarter of a mile below the depot. The Mount Hope Mineral engine was coming up at the time and the coach and the engine collided, smashing end of platform and injuring three passengers. The accident was caused by a misunderstanding of orders. It was recommended that no movement be made on the main line unless fully protected, and that when a passenger coach is left on the main line where there is a grade, switch be left open so that in case coach starts it will not run down the main line to the Mount Hope Mineral line.

The recommendation was adopted by the company.

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WEST SHORE RAILROAD—Plug blew out of steam pipe—August 30th, 1915—Bogota.

On extra freight train No. 3187, August 30th, at 7:42 A. M., a plug blew out of steam pipe on the left side and the escaping steam injured a passenger on train No. 64 which was passing at the time. The plug came from the opening which is used for pyrometer tests on superheated steam, and the plugs are removed only when tests are to be made. Engineer's and inspector's work reports for fifteen days prior to accident were examined and nothing was found which would indicate that the plug had been defective or leaking. It was recommended that these plugs be inspected as to thread and depth in steam pipe.

The recommendation was adopted by the company.

BURLINGTON COUNTY TRANSIT COMPANY—Derailment—October 2d, 1915—Burlington.

Car No. 501 on the Burlington County Transit Company's line, westbound from Burlington to Mount Holly, was derailed at a point near Brennan's Hotel, on South High Street, Burlington, on October 2d, at 11:20 A. M. Car, after leaving rails, turned completely around and the rear vestibule was damaged. Four of the fifteen occupants were injured. Contributory causes for the accident were reported by the Inspector to be:

"(1) The rails were out of surface, thus allowing road metal which had been used in repairing the road to be brushed over on to the ball of the rail, and

(2) That the track was found to be over one inch out of gauge, and this, coupled with the fact that the car in question had narrow tread wheels, undoubtedly led to the accident."

It was stated that the recommendations made in the general inspection report on the line will remedy the condition referred to.

The recommendations contained in this report were adopted by the company.

PUBLIC SERVICE RAILWAY—Fall of trolley pole—October 29th, 1915—Camden.

On October 29th, at 2:40 P. M., a twenty-five-foot chestnut pole, located on Eighth Street, Camden, fell, killing one person and injuring two others. The pole was struck by a city ash cart, the wheels of which rode up on the curb, causing wings of the cart to strike the pole which, in falling, struck a small touring car, killing one occupant and injuring two others. Investigation showed that the pole was in a rotten condition. It was recommended that an inspection be made in accordance with the Board's rules for utilities owning or using poles.

The recommendation was adopted by the company.

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WEST SHORE RAILROAD—Falling of rock from tunnel—December 16th, 1915—Weehawken Tunnel.

While a freight train was hauling out of Weehawken Yard, at 12:04 P. M., December 16th, a rock weighing about two tons fell from roof of tunnel upon center car sixty feet west of east portal, derailing one car and turning it over so that it fouled both east and westbound tracks, blocking same one hour and forty minutes. It was recommended that an expert rockman be engaged to examine the roof from the tower car furnished by the railroad company and report the condition so that it may be decided if any additional safeguard is needed to protect the lives of the public and the employees of the railroad company. This recommendation was adopted by the company, and a copy of the expert rockman's report submitted to the Board with the recommendation by the Board's Chief Inspector of its railroad division that the report be approved and accepted.

WEST SHORE RAILROAD—Crossing accident—December 30th, 1915—Teaneck.

At Cedar Lane crossing, one-half mile south of Teaneck station, train No. 106 struck an automobile traveling west, killing one occupant and seriously injuring the other. At this crossing there are two main tracks and one siding. There is a slight descending grade at both approaches, at a short distance from the crossing. The road is improved, and crosses at right angles, the crossing being protected by an automatic bell with a large crossing sign on southeast corner. It was reported that a large number of trains pass over the crossing, also that there is an extensive traffic in automobiles and vehicles. It was recommended that gates be installed and operated both night and day. The recommendation was adopted by the company.

Accidents on Steam Railroads.

The causes of accidents which occurred on steam railroads from December 1st, 1914, to December 1st, 1915, were as follows:

	<i>Killed.</i>	<i>Injured.</i>
Collisions—		
Passengers, .....	...	1
Employees,	4	38
Others,	1	7
Crossing Track at Highway—		
Passengers, .....	...	...
Employees, .....	...	1
Others,	59	110
Derailments—		
Passengers, .....	...	11
Employees,	3	13
Others, .....	...	...
At Bridges and Tunnels—		
Passengers, .....	...	...
Employees, .....	...	4
Others, .....	...	...
Struck by Locomotives or Cars—		
Passengers, .....	...	2
Employees,	35	28
Others,	1	2
Getting On or Off Trains—		
Passengers,	2	45
Employees,	3	30
Others, .....	...	...
Coupling or Uncoupling Cars—		
Passengers, .....	...	...
Employees,	1	16
Others, .....	...	...
Other Causes—		
Passengers,	5	14
Employees,	14	116
Others,	2	5
Trespassing on Right of Way,	172	129
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ACCIDENTS ON ELECTRIC RAILWAYS.

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Accidents on Electric Railways.

The causes of the accidents which occurred on electric railways from January 1st, 1915, to January 1st, 1916, were as follows:

	<i>Killed.</i>	<i>Injured.</i>
Derailments—		
Passengers, .....	...	21
Employees, .....	...	4
Others, .....	...	...
Struck by Cars—		
Passengers, .....	...	...
Employees, .....	...	...
Others,	28	280
Collisions—		
Passengers, .....	...	20
Employees, .....	...	4
Others, .....	...	1
Getting On and Off Cars—		
Passengers,	2
Employees,
Others,
Other Causes—		
Passengers,	1	4
Employees,
Others,	1	1
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	30	337

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