

No. 1180.

HENRY E. MEEKER AND CAROLINE H. MEEKER, COPARTNERS, TRADING AS MEEKER & COMPANY,

v.

LEHIGH VALLEY RAILROAD COMPANY.

Submitted May 15, 1911. Decided June 8, 1911.

1. Upon shipments of anthracite coal made by complainants from the Wyoming region in Pennsylvania to Perth Amboy, N. J., during the period from November 1, 1900, to August 1, 1901, the rates collected by defendant were unjustly discriminatory and resulted in damage to complainant, for which reparation will be awarded.
2. Defendant's present rates for the transportation of anthracite coal in carloads from the Wyoming region in Pennsylvania to Perth Amboy, N. J., of \$1.55 per gross ton on prepared sizes, \$1.40 on pea coal, and \$1.20 on buckwheat coal, found unreasonable to the extent that they exceed \$1.40 on prepared sizes, \$1.30 on pea coal, and \$1.15 on buckwheat coal, which latter rates are established as maxima for the future, reparation to be awarded on basis of the latter rates as to shipments made by complainants since August 1, 1901.

William A. Glasgow, jr., and John A. Garver for complainants.

J. F. Schaperkotter, Frank H. Platt, and George W. Field for defendant.

REPORT OF THE COMMISSION.

McCHORD, *Commissioner*:

Henry E. Meeker and Caroline H. Meeker, copartners, trading as Meeker & Company, complainants in this proceeding, were, when the complaint was filed, engaged in the business of buying, shipping, and selling anthracite coal over the lines of the Lehigh Valley Railroad Company from mines and collieries situated in the Wyoming coal region of Pennsylvania to tidewater at Perth Amboy, N. J., and thence to the New York market.

During the pendency of the proceeding, Caroline H. Meeker died, and it has been continued to be prosecuted in the name of the surviving partner, Henry E. Meeker.

Complainants were not mine operators, but merely dealers on the New York market. The coal shipped by them to Perth Amboy was purchased from the Stevens Colliery, which is situated near the city of Wilkes-Barre, Pa., on the West Pittston branch of defendant's

Wyoming Division, 1.5 miles from Coxton and 165 miles from Perth Amboy.

Practically all the anthracite coal deposits in the United States are in nine counties in the eastern portion of Pennsylvania in an area comprising about 496 square miles. The different coal fields are as follows: The northern, commonly called the Wyoming, from which the shipments involved in this proceeding were made; the eastern middle and western middle, which together are known as the Lehigh regions; and the southern, which also bears the name of Schuylkill. All three regions are reached by the Lehigh Valley Railroad. The northern field is some 55 miles in length, has a maximum width of about 5 miles, and lies northwesterly of the Pocono Mountains, in the valley of the Lackawanna and Susquehanna Rivers. From this valley the carriers find comparatively easy outlets to points north and west, along the rivers mentioned, but coal shipped to the east over defendant's line has to be carried over the mountains at a maximum elevation of 1,750 feet. The lowest portions of the valley are about 500 feet above the level of the sea.

The coal mines are usually located at points separated from carrier's main tracks by distances varying from a fraction of a mile to several miles, and connected with such tracks by lateral lines called branches or spurs. These branches are sometimes constructed by the mine operators, but generally by the carriers. The manner in which the coal is handled at the mine openings and while in process of transportation is as follows: For convenience in handling the coal at the mouths of the mines and preparing it for market, buildings called "breakers" are erected, and in these buildings the large lumps are broken and the coal separated into required sizes by being run over a series of screens of appropriate mesh. Some lump coal is taken as it comes out of the mine and is marketed for use either in furnaces or locomotives, but the demand for this size is limited. The sizes usually transported are the following:

Broken or grate, which goes through a mesh 4 inches square and over a mesh $2\frac{3}{4}$ inches square.

Egg, which goes through a mesh $2\frac{3}{4}$ inches square and over a mesh 2 inches square.

Stove, which goes through a mesh 2 inches square and over a mesh $1\frac{3}{8}$ inches square.

Chestnut, which goes through a mesh $1\frac{3}{8}$ inches square and over a mesh three-fourths inch square.

Pea, which goes through a mesh three-fourths inch square and over a mesh one-half inch square.

Buckwheat No. 1, which goes through a mesh one-half inch square and over a mesh one-fourth inch square.

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Buckwheat No. 2, or rice, which goes through a mesh one-fourth inch square and over a mesh one-eighth inch square.

Smaller sizes are known as buckwheat No. 3 and culm.

The sizes above pea are known as prepared sizes and are used principally for domestic purposes. The smaller sizes are used almost entirely for steam purposes.

Formerly the smaller sizes had no commercial value and were allowed to accumulate as waste product in banks at the mines. But changes made in the grates of furnaces have facilitated their use for steam purposes and such use has been increasing rapidly during recent years. By means of "washeries" large quantities of the smaller sizes have been recovered from these waste or culm banks and sent to market to satisfy this increased demand. However, only comparatively small prices can be obtained for these smaller sizes.

The cars are loaded directly from the breakers by means of chutes. The loaded cars are then hauled to a convenient place of concentration along the main track designated a gathering or assembly point, where they are drilled into trains according to destination and with some reference to the sizes. The coal destined to tidewater points is hauled in trains to yards adjacent to the docks, where a more particular separation takes place; that is to say, coal of particular qualities and sizes is placed on separate tracks and afterwards transferred to the boats or storage bins in accordance with the requirements of different purchasers.

For the year ended June 30, 1908, the Lehigh Valley Railroad Company carried altogether 11,206,774 gross tons of anthracite coal, upon which its gross revenue was \$14,908,923.08, showing an average revenue of \$1.2411 per gross ton, or \$0.00737 per net ton per mile. During the same period the Lehigh Valley's entire freight revenue amounted to 23,643,001 gross tons, its gross revenue to \$30,186,581.72, its average rate per gross ton to \$1.277, and its average rate per net ton per mile on all traffic, including anthracite coal, to \$0.00630. It will thus be seen that during 1908 anthracite coal constituted approximately 47 per cent of defendant's freight tonnage and produced approximately 49 per cent of its freight revenue. Complainants shipped between August 1, 1901, and June 30, 1907, 499,901.47 gross tons of anthracite coal, upon which they paid total freight charges of \$709,637.67, resulting in an average rate per net ton per mile (based on the average mileage from the Wyoming region to Perth Amboy of 170 miles) of \$0.00745.

It appears that prior to 1900 various anthracite coal carrying railroads in Pennsylvania, in their endeavor to control the output and sale of anthracite coal, had formed other and distinct corporate organizations, usually known as "coal companies," but which through stock

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ownership were owned, officered, and controlled by the railroads which brought them into existence. Such was the relation that existed between the Lehigh Valley Railroad Company and the Lehigh Valley Coal Company. The function of the Lehigh Valley Coal Company was to acquire, hold, and operate vast tracts of anthracite coal lands, and to make contracts with independent operators for their entire output. In connection with the purchase of coal from independent operators, there came into existence what are known as "percentage contracts." The Lehigh Valley Coal Company regularly for a period of years entered into such contracts with independent coal operators along the line of the Lehigh Valley Railroad. Under these percentage contracts, the Lehigh Valley Coal Company agreed to pay the independent operators fluctuating prices for their coal at the mines, to be arrived at on the basis of certain percentages of the average market prices of the various grades of anthracite coal at tidewater. An accurate check was kept on the tidewater market prices, and monthly settlements were made. Under the contract which was in effect during the greater part of the year 1900, the agreement by the Lehigh Valley Coal Company was to pay the coal operator 60 per cent of the tidewater price on the highest grade of anthracite coal and lesser percentages on the lower grades. This contract was therefore called the "60-per-cent contract," due to the fact that that percentage figure applied on the highest grade of coal.

Although the Lehigh Valley Railroad Company was not nominally a party to any of the percentage contracts entered into by the Lehigh Valley Coal Company, yet it made a practice of settling for the freight charges on coal purchased and shipped by the Lehigh Valley Coal Company at the differences between the amounts paid to the coal operators and the average market prices at tidewater. The result therefore was, taking the highest grade of coal as an illustration, that if the Lehigh Valley Coal Company paid the independent operator 60 per cent of the tidewater price the Lehigh Valley Railroad Company transported the coal for 40 per cent of said tidewater price. It will thus be seen that although the matter of freight rates was not mentioned in the contracts made by the Lehigh Valley Coal Company with the independent operators, yet the freight rates were directly dependent upon said contracts.

It appears that if an independent coal operator lacked established business connections or capital, it was to his interest to enter into the percentage contract with the Lehigh Valley Coal Company. Meeker & Company, however, had been in business as sales agents for coal since 1889, and their facilities for selling were adequate. They therefore made a contract with the Stevens Coal Company for practically their entire output of coal. There were also a number of other ship-

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pers of anthracite coal over the lines of the Lehigh Valley Railroad, and in order to place them on an equality with the Lehigh Valley Coal Company, they were accorded the same rates as were accorded to that company.

It was the custom for all shippers, including the Lehigh Valley Coal Company, to pay the tariff rates on the various grades of anthracite to tidewater, and then by means of monthly settlements be given the benefit of the rates upon the percentage basis, which rates were known as "adjusted rates," and were usually considerably lower than the tariff rates; but which at certain periods, owing to advancing prices of anthracite coal, were higher than the tariff rates. The general purpose of the adjusted rates was, however, to give the shippers the benefit of rates lower than the tariff rates, and upon the whole, they accomplished this result, and the evidence shows that they were impartially applied on all shipments during the greater part of the time that they were in effect.

In November, 1900, the parties interested (i. e., the Lehigh Valley Railroad Company, the Lehigh Valley Coal Company, and the coal producers) began to consider making a change in the terms of the then existing 60-per-cent contract. It seems that the subject was not of easy solution, and that the negotiations dragged along for nine months, until August 1, 1901, at which time an agreement was reached whereby the price of the highest grade of coal at the breakers was to be 65 per cent of the tidewater market prices, instead of 60 per cent as formerly, with related increases on the lower grades. From almost the beginning of these negotiations, it seems to have been the understanding of all parties that whatever arrangement was finally reached would be made retroactive until November 1, 1900, the date of the beginning of the negotiations, and that the Lehigh Valley Railroad Company would readjust its freight charges retroactively in conformity with the new scale of prices not only upon shipments made by the Lehigh Valley Coal Company, but upon all coal shipped by independent dealers.

On the first hearing of this case counsel for the Lehigh Valley Railroad Company took the position that the tariff rates had been paid by all coal shippers during the nine months of negotiations; and that when, on August 1, 1901, it was determined that the 65-per-cent basis should govern retroactively to November 1, 1900, the extra cost of the coal on this basis was paid by the Lehigh Valley Coal Company to the coal operators. Hence it was argued that the Lehigh Valley Railroad Company, having charged its full tariff rates to all, and the coal company having paid the increased price, there had been no discrimination against Meeker & Company during said nine months. As the evidence in support of this argument was meager and

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unsatisfactory, a supplemental hearing was had at which additional evidence was asked upon this point. The facts as disclosed by that hearing were as follows:

The Lehigh Valley Railroad Company during the period from November 1, 1900, to August 1, 1901, endeavored to settle with all shippers upon the basis of adjusted rates, under the 60-per-cent contract. During the months of November, December, January, February, and March, the adjusted rates upon some of the grades were higher than the tariff rates, owing to the high market price of coal at tidewater. Meeker & Company were expecting the 65-per-cent contract to be adopted, and believed that the effect of its adoption would be that they would get the benefit of adjusted rates which were lower than the tariff rates, whereas under the 60-per-cent contract, they were being called on to pay adjusted rates which were in many instances higher than the tariff rates. They protested against paying money to the Lehigh Valley Railroad Company under the 60-per-cent basis, which they expected to be subsequently refunded when the 65-per-cent contract was adopted. They therefore objected to settling upon the basis of the 60-per-cent "adjusted rates," even as early as November and December, 1900, but under some arrangement or understanding with the coal freight agent of the Lehigh Valley Railroad Company, settlements were made for November and December, in order that the books of that company might be closed for the year. Thereafter they refused to settle upon the basis of the 60-per-cent adjusted rates, even in those instances where settlement would have involved a refund to them from the tariff rate which they had paid. Their idea seems to have been to have nothing whatever to do with settlements upon the 60-per-cent basis, because they believed the whole matter would have to be subsequently undone and refigured upon the 65-per-cent basis.

During the earlier months of 1901, owing to the market prices of coal, the adjusted rates upon the 60-per-cent basis were in the main higher than the tariff rates; but in April, May, and June, and possibly thereafter, owing to the lower prices of coal, the adjusted rates became less than the tariff rates. The evidence does not clearly show whether independent shippers, other than Meeker & Company, paid the adjusted rates, when they were higher than the tariff rates, but the presumption is that some of them at least did so. It appears, however, that shippers other than Meeker & Company accepted refunds from the Lehigh Valley Railroad Company, in such instances as the adjusted rates were lower than the tariff rates.

When it was finally determined on August 1, 1901, to adopt the 65-per-cent contract, the Lehigh Valley Railroad Company made a

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systematic effort to pay back to all shippers, including the Lehigh Valley Coal Company, such amounts as may have been paid during the period November 1, 1900, to August 1, 1901, in excess of the tariff rates. There was not, however, at that time any attempt made to collect back from shippers refunds which may have been made to them from month to month when the "adjusted rates" were lower than the tariff rates. It thus appears that the attempted readjustment to basis of tariff rates which the Lehigh Valley Railroad Company sought to make upon the adoption of the 65-per-cent contract was only partial. Meeker & Company were offered refunds of the excess over tariff rates which had been paid in November and December, 1900, but refused to accept the same, stating in a letter of refusal that they would insist upon settlement of freight rates upon the basis of the newly adopted 65-per-cent contract.

This brings us to the contention of complainants that the payment of the increased retroactive prices to the coal producers by the Lehigh Valley Coal Company was in fact a payment by the Lehigh Valley Railroad Company, and therefore equivalent to a readjustment by the latter company of its freight rates upon the basis of the 65-per-cent contract on such coal as was shipped by the Lehigh Valley Coal Company during the period from November 1, 1900, to August 1, 1901.

Investigation of the books of the Lehigh Valley Railroad Company disclosed the fact that subsequent to August 1, 1901, there were extraordinary cash advances made by that company to the Lehigh Valley Coal Company, and one of the purposes of the supplemental hearing was to ascertain whether said cash advances included the sum which the Lehigh Valley Coal Company paid to the coal operators under the 65-per-cent contract which was made retroactive for the nine months from November 1, 1900, to August 1, 1901.

On that hearing it developed that at the end of the year November 30, 1898, the Lehigh Valley Coal Company owed the Lehigh Valley Railroad Company \$1,596,650; that at the end of the year November 30, 1899, the amount of its indebtedness remained unchanged; that during the fiscal year November 30, 1899, to November 30, 1900, there was a strike, production was curtailed, and sales were made from stored coal, whereby the coal company was enabled to reduce its stock of coal, and its accounts receivable due from customers for coal sold; that as the result of this condition the indebtedness of the coal company to the railroad company on November 30, 1900, had been reduced to about \$500,000. The unusual advances made by the railroad company to the coal company in 1901 were necessitated by the resumption of mining operations after the cessation of the strike.

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Counsel for the Lehigh Valley Railroad Company introduced in evidence the following extracts from the annual report of the company to its stockholders for 1901, viz:

Under the existing arrangements, the Lehigh Valley Coal Company is compelled to depend upon the railroad company for working capital to carry on its operations.

* * * * *

The suspension of mining during the period of the strike last year and the sale of the greater portion of coal in stock enabled the coal company to repay to the railroad company a large proportion of the amount advanced by the latter company for this purpose.

And counsel for complainant was permitted to read into the record the following additional extract from the same report, viz:

The uninterrupted continuance of operations during the fiscal year just closed (i. e., the year ending November 30, 1901) restored normal conditions, necessitating advances by the railroad company of a million dollars, which amount is more than represented by the increased tonnage and value of the coal in stock as compared with November 1st last.

The general auditor of the Lehigh Valley Railroad Company testified that the amount which the Lehigh Valley Coal Company had to pay the coal operators under the 65-per-cent contract, which on August 1, 1901, became effective retroactively to November 1, 1900, was \$231,090.19. He further testified that the deficit of \$491,576.65 shown in the operations of the Lehigh Valley Coal Company for the year ended November 30, 1901, would have been less by \$231,090.19 had it not been for the payment by the coal company to the operators of the increased prices under the retroactive 65-per-cent contract.

In view of the admissions upon the supplemental hearing the conclusion seems inevitable that the financial condition of the Lehigh Valley Coal Company was not such as to have enabled it to pay the \$231,090.19 to the coal operators out of its own treasury, and that not only this amount but much larger sums were advanced by the railroad company to the coal company during the year 1901 for the purpose of enabling the latter to carry on its operations.

It is alleged in the petition that between November 1, 1900, and August 1, 1901, complainants, Meeker & Company, shipped 88,336 tons of coal from the Wyoming region to tidewater at Perth Amboy, N. J., a distance of about 165 miles, on which they paid a sum total as freight charges, amounting to \$129,989.18; whereas upon the 35-per-cent basis which complainants contend was the necessary result of the 65-per-cent contract entered into by the Lehigh Valley Coal Company on August 1, 1901, the freight charges should have been only \$118,867.21, the amount of overpayment by complainants being \$11,121.97.

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From the facts disclosed it is apparent that the payment of the \$231,090.19, which was ostensibly made by the Lehigh Valley Coal Company to the coal operators from which it had purchased coal during the period from November 1, 1900, to August 1, 1901, was in fact made from funds advanced as cash by the Lehigh Valley Railroad Company to the Lehigh Valley Coal Company, and was therefore the equivalent of a readjustment of the freight rates upon the basis of the 65-per-cent contract on such coal as was purchased by the Lehigh Valley Coal Company and shipped to tidewater during the period from November 1, 1900, to August 1, 1901. We are of the opinion and so hold that complainants have sustained the allegation of unjust discrimination under the second section of the act. Reparation, with interest from August 1, 1901, will be awarded on this account.

Since August 1, 1901, complainants and other shippers have paid full tariff rates on coal from the Wyoming region to Perth Amboy, which rates are as follows:

	Per gross ton.
Prepared sizes	\$1. 55
Pea coal.....	1. 40
Buckwheat coal.....	1. 20
Aug. 7, 1904, to Jan. 10, 1905.....	1. 25
All sizes below buckwheat.....	1. 10

It is alleged in the complaint that any charge in excess of \$1 on all grades subsequent to August 1, 1901, is unreasonable, and reparation is asked by complainants, upon the basis of the suggested rate of \$1, upon all shipments made by them over the Lehigh Valley Railroad during the period August 1, 1901, to July 1, 1907, the aggregate amount of reparation sought during said period being \$210,351.

In a later complaint, filed April 13, 1910, No. 3235, styled *Henry E. Meeker v. Lehigh Valley Railroad Company*, complainant seeks reparation on the basis of a rate of \$1 on all grades of coal shipped during the period July 1, 1907, to April 1, 1910, alleging a total overcharge during said period of \$55,290.73.

As the subject-matter of the two complaints is the same, in so far as the reasonableness of the rates is concerned, the disposition of the later case will perhaps be determined by the conclusions reached in this case.

When complainants filed their complaint in July, 1907, they elected, as to the period from November 1, 1900, to August 1, 1901, to rely entirely upon a violation of the second section of the act, and therefore claimed reparation only to the extent of \$11,121.97, on the ground of discrimination during said period in favor of the Lehigh Valley Coal Company, claiming that the effect of the retroactive 65-per-cent contract of August 1, 1901, was to readjust upon a

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lower basis the freight rates which had been paid by the Lehigh Valley Coal Company during said period.

When the case came on for hearing in March, 1909, complainants' counsel announced orally before the Commission, and not by way of amendment of their petition, that they desired to claim additional reparation in the sum of \$41,644.82—the excess paid over \$1 per ton, during the period from November 1, 1900, to August 1, 1901.

Complainants' counsel stated in his brief filed with the Commission, but not by way of amendment to his petition, that by reason of the fact that the Commission may not be convinced that \$1 per ton is a reasonable rate on all grades of coal to tidewater, he desired to put his claim for reparation in an alternative form, viz: That in event the Commission should not approve the suggested rate of \$1 per ton on all grades of coal, complainants are entitled to reparation in the amount of \$156,144.92, the amount by which the freight charges which they have paid exceed what said charges would have been upon the basis of the average rate per ton per mile on all freight transported by the Lehigh Valley Railroad Company. In support of this claim for reparation, he sets forth an exhibit in his brief, which covers the calendar years 1902 to 1907, inclusive. This claim, therefore, does not extend back to November 1, 1900, as do his other claims; but it includes the latter half of 1907, and therefore extends six months beyond the period covered by his larger claim for reparation on the basis of the proposed \$1 rate.

Complainants insist that the average rate per ton per mile upon coal ought not to exceed the average rate per ton per mile upon all freight traffic, and base their claim for reparation in large part upon the assumption that the higher rate per ton-mile on coal is proof of the unreasonableness of the rates in question. Defendant answers this contention by asserting that the initial service in connection with the transportation of coal, commonly called collection or assembly, and the terminal service at Perth Amboy, are both difficult and complicated and involve extraordinary operating expenses, as well as the permanent investment of a large amount of capital, which are not incurred in the transportation of other classes of freight. The transportation of coal from the mining regions to Perth Amboy is described in detail in the record and may be summarized as follows:

Coal from the Wyoming region around Wilkes-Barre, after being assembled from the various branches, is carried east by way of Coxton or Pittston Junction over what is known as the Mountain Cut-Off, thence by way of Avoca, Penn Haven Junction, and Phillipsburg to South Plainfield, where it leaves the main line for Perth Amboy. Coal from the Lehigh region is collected from the various branches in the neighborhood of Hazleton, Lumber Yard, New Bos-

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ton, and Mount Carmel, and carried to Penn Haven Junction, from which point it follows the same course as the Wyoming coal. Coal from the Schuylkill region reaches the main line at Lizard Creek Junction from the regions around Blackwood. Coal in transit from the Wyoming region to Perth Amboy passes over defendant's Wyoming and New Jersey & Lehigh divisions. The Wyoming division extends from Sayre to Mauch Chunk, and includes the territory known as the Wyoming coal region, or the southern part of the northern coal field, and touches also the Lackawanna coal region. The New Jersey & Lehigh division extends from Easton to the sea end of the Perth Amboy docks. Defendant's Mahanoy & Hazleton division covers a portion of the Lehigh and a portion of the Schuylkill regions in the middle and southern coal fields. This division meets the main line at Penn Haven Junction.

Coal is brought from the collieries to assembly yards, from which it is in turn taken to classification yards, where trains are made up for the main-line hauls. In the Wyoming division there are two such yards, Port Bowkley and Coxton, the former being an assembly yard and the latter both a classification and assembly yard.

At Perth Amboy defendant has adequate terminal facilities, storage bins, two docks, and appropriate equipment for the handling of anthracite coal. Ten locomotives and crews are employed by the company in handling coal at the terminal. At the entrance to the terminal are a series of tracks, eight in number, about one-half mile long, known as the receiving tracks, upon which trainloads of coal are left by the road crews. Upon these tracks employees inspect and check the cars and designate by marks thereon the various kinds and sizes of coal, region and colliery from which shipped, and such other information as may be necessary for proper unloading into vessels or storage bins. After the cars are so marked they are classified for purposes of disposition. When orders are received the coal is removed to the docks or stocking bins, both of which are provided with suitable trackage facilities.

Complainants' contention that the rates to Perth Amboy are unreasonable is based in part upon the testimony of certain persons who were formerly officers of the Delaware, Susquehanna & Schuylkill Railroad and of Coxe Brothers & Company. For many years prior to 1905, Coxe Brothers & Company were engaged in mining and shipping anthracite coal from their extensive properties in the Lehigh region. They owned and operated the Delaware, Susquehanna & Schuylkill Railroad, a road about 28 miles in length, which reached their different collieries and connected with the Lehigh Valley Railroad at a place called Lumberyard or Stockton Junction.

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After January, 1894, the Coxe coal, instead of being carried to Perth Amboy in the trains of the Lehigh Valley, was transported to tide-water in the trains of the Delaware, Susquehanna & Schuylkill Railroad, and by its motive power, under a trackage contract between that road and the Lehigh Valley, which provided for the use of the tracks of the latter company from Stockton Junction to Perth Amboy, a distance of approximately 125 miles. The agreed compensation to the Lehigh Valley for the use of its tracks was $2\frac{7}{8}$ mills per gross ton per mile, or 35.94 cents per gross ton for the haul from Stockton Junction to Perth Amboy. The Lehigh Valley unloaded the coal at Perth Amboy into vessels or bins and performed other terminal service, for which it charged Coxe Brothers 12 cents per ton. Additional payments were agreed upon from time to time for other services by the Lehigh Valley, such as supplying additional motive power to push trains over grades, furnishing coal to Delaware, Susquehanna & Schuylkill locomotives, repairing cars at Perth Amboy, and similar incidentals.

The contract of January, 1894, remained in force until April, 1904, when it was replaced by another contract, substantially similar in all material respects and providing for the same compensation to the Lehigh Valley and which was to have remained in effect for a period of 15 years. It remained in effect, however, only until 1905 when the Coxe properties were purchased by the Lehigh Valley Railroad.

During the period prior to the absorption of the Delaware, Susquehanna & Schuylkill Railroad by the Lehigh Valley Railroad Company, L. C. Smith, manager of the Delaware, Susquehanna & Schuylkill Railroad Company, and J. H. Pennington, superintendent of motive power of said railroad, and J. Brinton White, vice president and treasurer of Coxe Brothers & Company made certain calculations as to the cost to the Delaware, Susquehanna & Schuylkill Railroad of transporting anthracite coal to Perth Amboy, based on various elements of operating expense, including the aforementioned trackage charge of the Lehigh Valley Railroad.

Counsel for complainants has introduced the testimony of these three men relative to the cost of transporting coal from the Lehigh region; and insists that it has an important bearing on the cost of transporting coal from the Wyoming region, for the reason that it has been the custom of the Lehigh Valley Railroad Company to make the same rates from the Wyoming region to Perth Amboy as from the Lehigh region to Perth Amboy; and also because the Wyoming region has the advantage over the Lehigh region both in distance and in grades.

L. C. Smith, former manager of the Delaware, Susquehanna and Schuylkill Railroad, testified that about 1900, he, as manager of the Delaware, Susquehanna & Schuylkill Railroad, made up a statement

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of cost to move one train of coal from Drifton, a mine of Coxe Brothers & Company to Perth Amboy, including trackage to the Lehigh Valley Railroad Company, the shipping charges of that company at Perth Amboy, and the return of empty cars, which statement is filed as complainants' Exhibit No. 1.

The total cost per ton shown by said exhibit is 76.54 cents.

J. Brinton White, vice president and treasurer of Coxe Brothers & Company, who owned the entire stock of the Delaware, Susquehanna & Schuylkill Railroad Company, made frequent calculations as to the cost per ton of the movement of coal from the mines on the Delaware, Susquehanna & Schuylkill Railroad to Perth Amboy, and continued these calculations until he "got down to a figure which he knew to be correct." The figure which Mr. White arrived at was 76 cents per ton; but as this 76 cents included the trackage charge of the Lehigh Valley Railroad and the shipping charges at Perth Amboy, he was of opinion that the profit of the Lehigh Valley should have been deducted from the 76 cents, if the profit could have been ascertained.

J. H. Pennington was superintendent of motive power of the Delaware, Susquehanna & Schuylkill Railroad Company from 1899 until the latter part of 1905, when that road was bought by the Lehigh Valley Railroad Company, and he made certain tests for the purpose of determining the relative cost of transporting coal from Delaware, Susquehanna & Schuylkill Railroad mines to Perth Amboy in 60,000 and 100,000 pound capacity cars, respectively.

Based upon his tests for the cars of 100,000 pounds capacity (which it is claimed are *now* in use), counsel for complainants claims to show that the cost of transporting a ton of coal from the mines of the Delaware, Susquehanna & Schuylkill Railroad to and including the dumping of the cars at Perth Amboy, and the return of the empty cars to the colliery, amounted to 62.41 cents; which figure includes the profit of the Lehigh Valley Railroad Company on its trackage charge and the profit on the shipping expense of 12 cents at Perth Amboy.

Counsel for the Lehigh Valley Railroad Company, in his brief, enters upon an exhaustive criticism of complainants' Exhibit No. 1. Among other things he says:

The exhibit includes no allowance for assembling; it contains no allowance for reserve equipment; it contains no allowance for depreciation; no allowance is made for overtime of crew; no allowance is made for nonrevenue haul; no allowance is made for loss and damage or injuries to persons; the item shown for fuel is manifestly inadequate; the wages allowed are inadequate.

He also argues that as the estimate of J. Brinton White confirms that of Mr. Smith, the presumption is that Mr. White omitted the same items that were omitted by Mr. Smith.

As to J. H. Pennington's estimate of the cost per gross ton of transporting coal to Perth Amboy, counsel for the Lehigh Valley Railroad

Company says that he admitted that in making the test he purposely left out of account such expenses as would be substantially the same, whether he used 60,000-pound cars or 100,000-pound cars. He did not take into account the following:

Reserve engines.	General office expenses.
Maintenance and repairs of locomotives.	Yard expenses.
Repairs to cars.	Terminal expenses.
Expenses of telephone and telegraph.	Loss and damage claims.
Stationery.	Clearing wrecks, etc.
Clerks.	

It will be noted that in the calculations made by L. C. Smith and J. Brinton White, one of the most important items was the trackage charge of 35.94 cents per gross ton, which the Lehigh Valley Railroad Company charged the Delaware, Susquehanna & Schuylkill Railroad for the use of its tracks for the 125-mile haul from Stockton Junction to Perth Amboy.

As it did not clearly appear from the record what the conditions were that led to the trackage arrangement, further testimony was taken upon that point at the supplemental hearing. It was shown that prior to the trackage contract entered into by the Delaware, Susquehanna & Schuylkill Railroad Company with the Lehigh Valley Railroad Company, the coal traffic originating on the Delaware, Susquehanna & Schuylkill Railroad had moved to tidewater over the lines of the Philadelphia & Reading Railroad. The following extract from the annual report of the Philadelphia & Reading Railroad Company for the year ended November 30, 1893, was read into the record:

A contract was made with Coxe Brothers & Company, under date of May 14, 1891, for the transportation over the Reading Railroad System of a large tonnage of coal from the mines of that company to New York tidewater and to other markets, the minimum amount to be 1,000,000 tons per annum.

In order to transport the coal to be furnished under this contract, a railroad 10 miles in length was constructed by the Reading Company to connect its lines with those of the Delaware, Susquehanna & Schuylkill Railroad, which was controlled by Coxe Brothers & Company, and a large coal tonnage had passed and was passing over this road; but the division of the freight rate as between the two railroad companies was felt by the receivers to be so inequitable to the Reading Company, as on the greater part of the tonnage it allowed the Delaware, Susquehanna & Schuylkill Railroad Company an average of about 73 cents per ton for gathering the coal, hauling it an average of about 12 miles to Roan Junction, and shipping it at Port Johnston, leaving for the Reading Company only 80 cents per ton for hauling the coal 168 miles to Bound Brook Junction, that they notified Coxe Brothers & Company that after August 15, 1893, they would no longer transport their coal under that contract, offering, however, to continue to carry the coal upon terms similar to those which are ordinarily accorded to other railroad companies for the exchange of similar business. This offer was, however, not found satisfactory by Coxe Brothers & Company, and the transportation of their coal has, therefore, been almost entirely lost to the Reading Company.

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The following extract from the annual report of the Lehigh Valley Railroad Company to its stockholders, for 1894, was also read into the record:

On January 31, 1894, a contract was entered into with the Delaware, Susquehanna & Schuylkill Railroad Company whereby that company was granted the privilege of running its own trains coal laden to the tidewaters of New York, thus assuring to this company for a term of 15 years from July 1, 1894, an important traffic, that of the Cross Creek Coal Company, formerly Coxe Brothers & Company, for which several outlets existed, and which had been in contention for some time previously. It also removed an incentive for the construction of new lines into the territory tributary to the Lehigh Valley System. Local coal received from the line of that company continues to be hauled in our trains as it was previously.

It appears that, when the contract with the Lehigh Valley Railroad Company was entered into, the Philadelphia & Reading Railroad Company tore up its 10-mile extension which it had built to connect with the Delaware, Susquehanna & Schuylkill, because there was no longer any use for it

For the purpose of showing the effect of the trackage contract of January, 1894, upon the movement of anthracite coal over the Lehigh Valley Railroad, counsel for that company at the supplemental hearing, put in evidence the following exhibit, viz:

Statement of anthracite coal received from the Delaware, Susquehanna & Schuylkill Railroad during the fiscal years ended November 30.

Year.	Gross tons.	Year.	Gross tons.
1891.....	233,031	1894.....	976,415
1892.....	199,310	1895.....	1,053,965
1893.....	350,295	1896.....	1,115,077
Total.....	782,636	Total.....	3,145,457

It was also shown that the Central Railroad of New Jersey had a track into Drifton, a point located on the Delaware, Susquehanna & Schuylkill Railroad, and that the Delaware, Susquehanna & Schuylkill Railroad also had a connection with the Pennsylvania at Tomhicken.

Defendant has endeavored to show the actual cost of transporting coal from the Wyoming district to the barges at Perth Amboy. Three civil engineers, William J. Wilgus, J. F. Stevens, and John F. Wallace, were engaged by defendant to investigate the transportation of coal from the anthracite region to tidewater for the purpose of ascertaining the cost thereof. They were assisted in their investigation by officers and employees of the road and by engineers in Mr. Wilgus' office. Mr. Wilgus prepared an estimate of the cost of carrying coal based upon theories and formulæ which were approved by the other engineers. His estimate is set forth in a voluminous exhibit

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known as "Defendant's Exhibit F-3." The exhibit contains all the details from which the final estimate of cost is deduced. The recapitulation of Exhibit F-3 is as follows:

Cost of transporting anthracite coal on the Lehigh Valley Railroad from the Wyoming district to Perth Amboy.

Items	Perth Amboy terminal	Main line. Perth Amboy to Coxton.	Wyoming collection district.	Total.
Operating expenses, including taxes.....	\$0. 1189	\$0. 6915	\$0. 0866	\$0. 8970
Interest:				
Roadbed, tracks, and structures.....	. 0700	. 1470	. 0412	. 2582
Equipment.....	. 0096	. 0437	. 0233	. 0816
General facilities.....	. 0012	. 0045	. 0010	. 0067
	. 0808	. 1952	. 0705	. 3465
Depreciation:				
Roadbed, tracks, and structures.....	. 0071	. 0034	. 0009	. 0114
Equipment.....	. 0080	. 0646	. 0176	. 0902
General facilities.....	. 0004	. 0015	. 0003	. 0022
	. 0155	. 0695	. 0188	. 1038
Total.....	. 2152	. 9562		1. 3473
Additions and betterments.....				. 0400
Risks and deficits.....				. 1070
Grand total.....				1. 4943

There are many circumstances, however, connected with the preparation of this exhibit, which seriously impair its value as evidence on the question of cost.

Mr. Wilgus testified that the figures which he used in preparing said exhibit as to the value of the roadbed, track, and structures and value of equipment were based on an examination of the road and an examination of the equipment, and that he had attempted to estimate the cost of reproduction. This work he states was done by himself and assistants in his employ. The assistant in his employ, who undertook to make an examination of the road with a view to determining the cost of reproduction, was T. A. Lang, and Mr. Wilgus testified that his calculations are absolutely dependent upon the information furnished him by Lang.

The story of Mr. Lang's investigation as to cost of reproduction, as told by Lang himself, was as follows:

He left Perth Amboy at 1.20 p. m. on a passenger train for Easton, arriving there about 3.20 or 3.30 p. m. In going to Easton he stood on the rear platform of the train. After arriving at Easton, he did nothing more that day, as it was Sunday. The following morning at 9 a. m., he left Easton on a pony engine, which had a coach on top of the boiler. On this engine he traveled at the rate of 15 or 20 miles

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an hour, stopping at various points. About 5.30 p. m., of the same day, he arrived at Wilkes-Barre, and stayed there all night, all the next day, and the next night. While there, he made computations in the railroad company's office. On the following day, he left Wilkes-Barre at 8.30 a. m. on a passenger train, and arrived at Easton about 11 or 12 o'clock. He remained in Easton until that afternoon, and then took a train for New York. While at Easton, he devoted a "few minutes" to an examination of the Delaware bridge and the Easton steel viaduct. Based upon this examination, he furnished Mr. Wilgus the data which he required as to estimated cost of reproduction of the Lehigh Valley Railroad.

This examination by Lang was made in the latter part of April, 1909. Mr. Wilgus accepted his estimates, and gave his testimony on April 29, 1909. Mr. Lang, however, was not called as a witness until May 25, 1909. Evidently feeling that his first superficial examination of the road would become the subject of attack, he undertook early in May to make a more thorough examination of the road.

On this second trip he consumed eight and one-half days going over the road on a hand car, and the results of his work on the second trip he terms his "check estimate." The cross-examination of Mr. Lang developed that his check estimate was also a very superficial piece of work. He testified that he "could see" the thickness of the ballast "very easily," and that he measured it "at one place" only; that it was from 18 to 20 inches in thickness. He also testified that he started out to count the number of switches and frogs, but did not carry it all the way through. He further says that there never had been any examination of the ties and ballast or going over the road in a hand car at the time that Mr. Wilgus made his estimate.

Based upon information thus furnished, Mr. Wilgus undertook to determine the cost of carrying a ton of coal from the Wyoming district to Perth Amboy, and Messrs. Wallace and Stevens were called as witnesses to confirm the reliability of his figures.

Mr. Wilgus testified that on the trip which he made over the Lehigh Valley Railroad he started from New York at 6 p. m. in an observation car with Messrs. Wallace and Stevens and certain officials of the Lehigh Valley Railroad Company, and went to Wilkes-Barre. The two following days were spent in riding over the main line of the Lehigh Valley Railroad and some of its branches. It appears never to have been the intention that Messrs. Wilgus, Wallace, or Stevens should personally do any of the detail work incidental to the determination of the cost of carrying coal

to Perth Amboy. All of that was to be done for them by subordinates, and they were then to testify whether they believed the work of these subordinates constituted a conservative estimate of the cost.

Mr. Stevens testified in substance that he believed it possible for a competent engineer to get a correct approximate idea of the value of a railroad by riding over it, and that he has done considerable work in estimating values by traveling over railroads. He stated that he was not prepared to dispute Mr. Wilgus' figures, and that he would not guarantee them; and "that it would be worse than foolish for him to say that he had time to undertake to make a mile-by-mile estimate of the cost of reproducing the Lehigh Valley Railroad." The most that he had to say concerning Mr. Wilgus' estimate was that it was "probably conservative."

Mr. Wallace frankly admitted that his testimony given in corroboration of Mr. Wilgus' figures was a matter of purely personal judgment, based on his experience and observation. He testified that men in his line of business were continually drawing comparisons and making "estimated judgments," and that sometimes they were correct and sometimes wrong. He further stated that it was his custom to value railroad property very much as a farmer would value a horse.

The estimate of cost made by Mr. Wilgus is based on the fundamental assumption that the cost of carrying coal is equal to the average cost of carrying all traffic. If this proposition be sound, it follows that by far the greater part of tariffs covering the transportation of coal are improperly constructed, for the rates upon coal are generally much below the average rates.

Again, as a basis of apportioning expenses for which no actual division could be obtained, the engineers used the relation of passenger-train ton-mileage to freight-train ton-mileage, finding that of the total the former was 7.8 per cent and the latter 92.2 per cent. This arbitrary basis of apportionment seems to be unwarranted when we take into consideration the relation which exists between freight revenue and passenger-train revenue on the Lehigh Valley Railroad. Those revenues were as follows for the years shown:

	1901	1905	1908	1910
Total freight revenue.....	\$19,829,363	\$25,962,920	\$30,186,582	\$30,579,597
Passenger-train revenue.....	3,460,528	4,116,847	4,842,652	5,097,118

It thus appears that upon the basis of relative earnings at least 14 per cent of the value of the road could properly have been assigned to passenger traffic, whereas in the estimate made by Mr. Wilgus but 7.8 per cent has been so assigned.

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Moreover, it will be noted that the estimate of cost shows that the average cost of carrying anthracite coal from the Wyoming region to Perth Amboy is \$1.49. An exhibit filed by the Lehigh Valley shows that its average receipts per gross ton of anthracite coal to Perth Amboy for the 10 years ending June 30, 1908, were \$1.46. It would therefore follow that all anthracite coal which has been hauled by the Lehigh Valley to tidewater has been carried at a loss of about 3 cents per ton. But it is shown by reports on file with the Commission that the operations of the Lehigh Valley Railroad Company for a number of years past have been exceedingly profitable, and as anthracite coal has constituted almost half of its tonnage, it is fair to assume that it has made a profit upon the handling of that commodity.

There are other matters contained in the record which go to show that the cost of transporting coal as estimated by Mr. Wilgus is excessive.

Henry B. Ely, who was formerly general eastern agent for Coxe Brothers & Company, testified that after the decision in the case of *Coxe Brothers & Co. v. Lehigh Valley Railroad Company*, 4 I. C. C. Rep., 535, in 1891, and up to the 31st of January, 1894, the rates paid by Coxe Brothers & Company were the tariff rates of the Lehigh Valley, less a discount of 35 per cent. The tariff rates which were in effect during this period are contained in an exhibit filed by the Lehigh Valley, and deducting said discount therefrom, it appears that the rates actually charged Coxe Brothers & Company were as follows:

	Rate per ton.
For prepared sizes.....	\$1. 10½
For pea coal.....	.91
For buckwheat and smaller sizes.....	.78

Defendant has also filed in evidence an exhibit, which shows the adjusted rates to Perth Amboy on the various grades of anthracite coal, by months, during the period from January, 1895, to October, 1900, inclusive, a period of five years and nine months, immediately preceding the discontinuance of adjustments upon the percentage basis. An average of the rates contained in said exhibit shows the following:

	Rate per ton.
Prepared sizes.....	\$1. 4164
Pea coal.....	1. 1712
Buckwheat.....	1. 1566

These latter figures are of themselves sufficient to show that the estimated cost of carrying coal to tidewater of \$1.49 is far from correct.

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A very noticeable feature of the work of these experts employed as disinterested parties to ascertain the cost of carrying coal to Perth Amboy is the manner in which they arrived at their valuations of real estate and rights of way.

Mr. Wilgus testified that he did not himself make the estimates upon the value of the Perth Amboy terminals, but took the estimates of his assistant, Mr. Van Houten. Mr. Van Houten testified that he got his information as to the cost of reproduction of the Perth Amboy terminals from the general solicitor of the defendant, because he is an authority on real estate and handles all the real-estate matters for the Lehigh Valley Railroad. Mr. Wilgus also stated that he valued the right of way from Perth Amboy to South Plainfield Junction at \$3,000 an acre, and between Penn Haven and Phillipsburg at \$1,200 an acre, and that these estimates were made "not only upon the way it impressed me, but also from consultation with Mr. Schaperkotter, the general solicitor of the company."

Complainants have called attention to the rates of the Pennsylvania Railroad Company for the transportation of anthracite and the rates of certain bituminous carriers. The Pennsylvania Railroad Company carries anthracite coal from South Wilkes-Barre and Plymouth, in the Wyoming region, to South Amboy, N. J. There are two routes by which the Pennsylvania may carry this coal, the longer route being 276 miles and the shorter 222 miles. Owing to the fact that the grades on the long haul are very much easier than those on the short haul, the long haul is the one generally used. Its rates for this transportation are as follows: Prepared sizes, \$1.40 per gross ton; pea coal, \$1.25 per gross ton; and buckwheat, \$1.15 per gross ton. Up to a comparatively recent date the same rates applied from points on the Delaware, Lackawanna & Western Railroad, which brought the coal to the Pennsylvania Railroad, and the Pennsylvania allowed the Lackawanna a 15-cent lateral charge. The Pennsylvania has since withdrawn the lateral allowance and requires payment to it of its full rate.

The Norfolk & Western Railway Company transports bituminous coal from Pocahontas to Lambert's Point, 377 miles, crossing the Blue Ridge and Allegheny Mountains, at a rate of \$1.40 per gross ton, and this includes the collection of the coal in the Pocahontas district and dumping the same into vessels at Lambert's Point. The rate per ton per mile for this haul is \$0.00377. In the Pocahontas district there are two assembling yards, Bluefield and Vivian, the average distance of the collieries from Bluefield being about 29 miles, and the average distance of the collieries from Vivian about 15 miles. During 1907 the Norfolk & Western collected from the 67 collieries in the district 7,285,360 tons of coal. During the same year the

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Lehigh Valley collected 4,142,442 tons from the 26 collieries connected with its tracks in the Wyoming region. The following exhibit shows certain rates for the transportation of bituminous coal, together with the length of haul and the rate per ton per mile:

Statement showing origin, destination, transporting railroad, miles hauled, rate charged, and rate per ton per mile on bituminous-coal shipments to tidewater.

[2,240 pounds per ton. Rates include dumpage from piers to vessels.]

Region or district.	Transporting railroad.	Destination.	Miles hauled.	Rate charged.	Rate in cents per ton per mile.
Meyersdale.....	Baltimore & Ohio...	Baltimore.....	215.0	\$1.18	0.549
Do.....	do.....	Philadelphia.....	310.8	1.25	.402
Do.....	do.....	St. George.....	390.6	1.55	.396
Pocahontas.....	Norfolk & Western...	Norfolk (Lamberts Point)...	377.0	1.40	.371
New River Thurmond.	Chesapeake & Ohio..	Newport News via Lynchburg.	418.0	1.40	.335
Do.....	do.....	Newport News via Gordonsville.	381.0	1.40	.367
Kanawha Handley..	do.....	Newport News via Lynchburg.	457.0	1.50	.328
Do.....	do.....	Newport News via Gordonsville.	420.0	1.50	.357
Kentucky Marrowbone.	do.....	Newport News via Lynchburg.	673.0	1.70	.253
Do.....	do.....	Newport News via Gordonsville.	636.0	1.70	.267
Beech Creek.....	New York Central and Philadelphia & Reading.	Port Reading.....	308.0	1.55	.503
Do.....	do.....	Philadelphia (Port Richmond).	229.0	1.25	.546
Clearfield.....	Pennsylvania R. R..	Baltimore (Canton Pier)....	242.2	1.18	.487
Do.....	do.....	South Amboy.....	322.5	1.55	.481
Do.....	do.....	Philadelphia (Greenwich piers).	262.2	1.25	.477
Do.....	do.....	Philadelphia via Lock Haven and Sunbury.	317.0	1.25	.394

Defendant answers that the tidewater rate of the Pennsylvania Railroad, cited by the complainants, is entirely inconsistent with the other anthracite rates charged by the Pennsylvania, whereas the Lehigh Valley tidewater rate is in line and consistent with its other anthracite rates. An exhibit in this connection shows that the Pennsylvania Railroad Company's rate on prepared sizes to Harrisburg, a distance of 110 miles, is \$1.50; to Philadelphia, a distance of 164 miles, \$1.80; to Reading, a distance of 111 miles, \$1.80; to Perth Amboy, a distance of 226 miles, \$1.80; to South Amboy, when not for transshipment, \$1.80. The Pennsylvania Railroad Company is a bituminous rather than an anthracite road.

The defendant also introduced evidence tending to show that the market for anthracite coal on the lines of the Pennsylvania Railroad exhausts the supply originating on the road, and for this reason a 15-cent lateral was allowed on coal assembled on other roads and turned over to the Pennsylvania. On such shipments the Pennsylvania was relieved of the gathering cost; and in view of the high line rates

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on anthracite coal over the Pennsylvania, the arrangement was favorable to the railroad. As has been noted, the Pennsylvania has since withdrawn the lateral allowance.

In so far as the comparison with bituminous rates is concerned the defendant calls attention to the fact that bituminous rates are generally less than anthracite rates, due in part to the difference in value of the two kinds of coal, and that there are dissimilarities in connection with the carriage and shipment of bituminous and anthracite coal which render the transportation of anthracite coal more expensive. About 95 per cent of the coal shipped from the bituminous regions is run of mine and no such elaborate classification is necessary in the assembling regions as in the anthracite regions. Bituminous coal is not stored at tidewater and the carriers are therefore relieved of the expense of building storage bins and of placing the coal in the bins and removing it therefrom. It is also claimed that the carriage of bituminous coal involves less empty car mileage, but upon that point the record is rather indefinite. At any rate, the conditions relating to the transportation of anthracite and bituminous coal have not been shown to be similar to such a degree that the existence of a lower rate on bituminous would warrant a conclusion that a higher rate on anthracite on a different road is unreasonable.

It is earnestly contended that any such comparison disregards the fact that the Lehigh Valley Railroad was built and is maintained primarily as a coal-carrying road; that as such it has the right to receive a return upon the coal transported sufficient to enable it to operate profitably, and is further justified in obtaining all traffic that it can secure in addition to its anthracite tonnage at rates which exceed cost of operation; and that a successful search for such outside tonnage, so long as it is carried at a margin of profit above operating expenses, aids the road to perform more cheaply its service in gathering and carrying coal.

Defendant contends that the extraordinary terminal expense attributable to the comparatively short haul on anthracite coal makes any per-ton-per-mile comparison improper and misleading.

In connection with its terminal at Perth Amboy, defendant has erected 372 stocking or storage bins, which vary in capacity from 500 to 1,000 tons each, and have a total capacity of about 250,000 tons. Trestles extend over the stocking bins and coal is dropped into them from cars which have been pushed onto the trestles. Underneath the stocking bins are tunnels through which cars are run to remove the coal as called for. About 350 cars of 60,000 pounds capacity are employed exclusively in removing coal from the bins.

Attention is called by defendant to the special privileges accorded and services rendered in connection with the transportation of anthra-

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cite coal without extra compensation above the tidewater rates. The rate covers delivery of coal by the railroad into vessels at Perth Amboy. No demurrage is charged on cars at the collieries or at Perth Amboy. A slight deduction is made from the scale weights at the collieries to offset the weight of water in the coal when loaded, and an allowance is made for depreciation in weight due to rehandling. The shippers have the privilege of stocking in transit. Extensive storage privileges are permitted at Perth Amboy, the railroad providing the bins and performing the labor of storing and lifting from storage without additional compensation. This privilege tends to permit daily operation of mines to the limit of their production regardless of the fluctuation of the market demand. Moreover, the demand for different sizes is more or less irregular, while the production of the several sizes is fairly uniform; and this condition makes the storage privilege of additional value to the shipper at certain seasons of the year. Complainants have freely exercised their privilege of storage. In 1907 they had 47.56 per cent and in 1908 32.27 per cent of the coal shipped by them to Perth Amboy placed in the bins. Of the coal tonnage carried to Perth Amboy in 1908, 20.96 per cent was placed in the bins.

It is claimed that the limited life of anthracite railroads has an important bearing on the matter of freight rates, and is therefore a factor to be taken into consideration in connection with the question of "fair return."

As to the limited life of the anthracite railroads, counsel for defendant say in their brief:

The evidence establishes the fact that when the railroad shall be deprived of the tonnage from the collieries along its lines, and the incidental tonnage involved in and dependent upon the production of coal, the traffic on the Mahanoy and Hazelton Division and the Blackwood Branch will for all intents and purposes be nil.

As to the Wyoming Division, the investment in everything but the main line will have been destroyed, and the continued existence of the road will depend upon whether or not the through traffic is sufficient to pay the operating expenses and the interest charges.

There are many instances where, on account of closing up breakers for one reason or another, portions of the Lehigh Valley Railroad have already become useless.

They then cite the following instances of abandoned tracks in the Wyoming region, viz:

Crescent breaker, 1 mile long, abandoned 1900.

Babylon breaker, $1\frac{1}{2}$ miles.

Lawrence track, partially abandoned, length not given.

Phoenix track, 1 mile long.

Heidelberg breaker, No. 2, tracks abandoned, length not given.

Henry breaker, tracks $1\frac{1}{2}$ miles long, will soon be abandoned.

Wyoming breaker, $\frac{1}{4}$ mile long.

Midvale track, $\frac{1}{2}$ mile long, abandoned.

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Franklin breaker, $1\frac{1}{2}$ miles.

Abbott or Hillman mine, $\frac{1}{2}$ mile long.

Mosier mine, track $1\frac{2}{8}$ miles, abandoned.

Butler colliery, tracks taken up; length not given.

In addition, it is stated that many collieries have been abandoned which have not involved the taking up of tracks, the tracks remaining in partial use in connection with other breakers.

It will be noted that while the list of abandoned tracks in the Wyoming district has the appearance of being quite large, yet the sum total of such of the mileages as are specified shows that a fraction more than 8 miles has been abandoned.

Counsel also in their brief give quite a list of names of breakers which have been abandoned on the Mahanoy and Hazelton Division; but it is found that the total of abandoned mileage on this division is only 9.5 miles.

As to the kindred subject, namely, the exhaustion of anthracite coal supply, counsel in their brief thus state the result of the testimony of W. F. Dodge, an expert mining engineer, introduced as a witness on behalf of the defendant:

The total future shipments from the Wyoming Division, starting with the year 1909, will amount to 91,230,000 tons. The lives of the various collieries will vary from 5 to 50 years. The annual output is estimated for the first five years to be 19,395,000 tons, and will diminish gradually until, from the twenty-fifth to the thirtieth year, the annual output is estimated at only 7,055,000 tons, dwindling down in the period between the forty-fifth and fiftieth years to 500,000 tons per annum. At the end of 25 years, according to the testimony of Mr. Dodge, the output of the Wyoming region will be less than half what it is now, and at the end of 50 years will cease altogether.

On the other hand the following more optimistic view of the situation appears from the Report of the Anthracite Coal Strike Commission, rendered to the President of the United States, March 18, 1903, viz:

What is of some importance, however, in connection with the discussion of the past production is a consideration of what is to be expected in the future in the way of production and the probable duration of the anthracite coal supply. The original deposits of the anthracite coal field have been ascertained with a reasonable degree of accuracy.

According to the estimates of the Pennsylvania geological survey, the amount of workable anthracite coal originally in the ground was 19,500,000,000 tons. The production to the close of 1901, as previously stated, amounted to 1,350,000,000 long tons, which would indicate that there remained still available a total of 18,150,000,000 tons. Unfortunately, however, for every ton of coal mined and marketed one and one-half tons, approximately, are either wasted or left in the ground as pillars for the protection of the workings, so that the actual yield of the beds is only about 40 per cent

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of the contents. Upon this basis the exhaustion to date has amounted to 3,375,000,000 tons. Deducting this from the original deposits, the amount of anthracite remaining in the ground at the close of 1901 is found to be, approximately, 16,125,000,000. Upon the basis of 40 per cent recovery, this would yield 6,450,000,000 long tons. The total production in 1901 was 60,242,560 long tons. If this rate of production were to continue steadily, the fields would become exhausted in just about one hundred years.

Mr. William Griffith, in a series of articles contributed to the Bond Record in 1896, considers that the estimates upon which the foregoing computations have been made were too liberal. His estimate of the amount of minable coal remaining at the close of 1895 was 5,073,786,750 tons.

In the six years from 1896 to 1901, inclusive, the production has been, approximately, 308,570,000 tons, which would leave still available for mining 4,765,216,750 tons. This supply, at the rate of production in 1901, would last a little less than 80 years. But as indicating how susceptible to error are human predictions, it is well to state that in his carefully prepared statement, published in 1896, Mr. Griffith assumes the limit of annual production would be reached in 1906 and would amount in that year to 60,000,000 tons.

This amount of production was reached in 1901, in just half the time predicted by Mr. Griffith, and the production of January, 1903, as recently reported, shows that the anthracite mines are capable of producing at a rate of 72,000,000 tons annually in their present state of development. It is not to be supposed, however, that the annual rate of anthracite production will continue practically uniform until the mines are exhausted and then suddenly cease. Portions of the fields have already been worked out, others are rapidly approaching total exhaustion, while others at the present rate of production will, it is calculated, last from 700 to 800 years. If we can assume the annual production will have reached its maximum limit at between 60,000,000 and 75,000,000 tons, and that the production will then fall off gradually as it increased, we may expect anthracite mining to continue for a period of from 200 to 250 years. (Report of Anthracite Coal Strike Commission, pp. 21, 22.)

Defendant claims the right to earn enough out of its coal rates to provide for a return of the principal of the investment in that part of the railroad company devoted to the carriage of coal, when and as this principal becomes reduced and extinguished by exhaustion of the coal. We have noted the estimate of defendant's witnesses to the effect that shipments of anthracite coal over the railroad will practically cease in 50 years, and we have quoted the opinion expressed on the same subject by the Anthracite Coal Strike Commission to the effect that production may last for 250 years. Probably the truth lies somewhere between the two extremes. During the years 1903 to 1910, the Lehigh Valley Railroad Company under the rates in controversy succeeded in accumulating an unappropriated surplus of \$27,219,780. If the company could accumulate this sum for every eight-year period during the next 30 or 40 years, it would have a surplus in the neighborhood of \$125,000,000. It seems, therefore, that the present rates are more than sufficient to meet defendant's idea of an annual income sufficient to provide for return of the capital when that part of the railroad devoted to the carriage

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of anthracite coal loses its earning capacity through the exhaustion of that commodity. This matter, however, is too speculative to be of much value in determining the reasonableness of present rates. By the time anthracite coal is exhausted other traffic may have become so dense that the present value of the road will not be impaired.

It requires no extended argument to sustain the proposition that the maintenance of an unreasonably high rate operates to the advantage of the Lehigh Valley Railroad Company as a dealer in coal. The record shows that the only line of demarcation between the Lehigh Valley Railroad Company and the Lehigh Valley Coal Company is one of bookkeeping. Assuming for purposes of illustration that the cost of mining anthracite coal is \$2 per ton and the cost of carrying it to tidewater is \$1 per ton, it follows that the cost of coal at tidewater would be \$3 per ton; and if the published rate were \$1 the independent operator and the railroad coal company would be on a fair competitive basis so far as the cost of mining and transportation are concerned. But as between the railroad company and its coal company it matters not whether the profit comes from mining or transporting the coal. So, therefore, if, instead of the \$1 rate above mentioned, the railroad company were to establish a rate of \$1.50 per ton, the railroad and its coal company could still sell coal at tidewater for \$3 per ton, standing a deficit of 50 cents per ton in the mining price and taking an equal profit in the transportation price. But the independent operator can not recoup himself in this manner, and the best price that he could make at tidewater would necessarily be the mining price of \$2, plus the carrying charge of \$1.50, or \$3.50; and he would enter the market at a disadvantage of 50 cents per ton as compared with the railroad and its coal company. It is obvious that such an advantage would enable the railroad company and its *alter ego*, the coal company, to monopolize the field of production and the selling market. Whatever the means employed, it is a fact that the railroad coal company has monopolized the coal field served by it. In 1901, 47 per cent of the defendant's coal tonnage to Perth Amboy was controlled by it and 53 per cent by independent operators; while in 1908 the defendant controlled 95 per cent of the anthracite tonnage over defendant's line to Perth Amboy and the independent operators 5 per cent. During the same period complainants' shipments to Perth Amboy decreased from 147,811 tons for 1901 to 40,562 tons for 1908.

Coming now to the question of the reasonableness of the rates, counsel for defendants asserts that the rates on coal must be sufficient to produce four results, viz: (1) An income sufficient to make up for past deficiencies in current return on investment. (2) A

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reasonable current annual return upon the investment in the railroad and transportation adjuncts. (3) An amount sufficient to provide reasonably for keeping the property up to constantly modern standards—i. e., such improvements as are necessary for public convenience and safety and to enable the railroad to get business in competition with other roads. (4) An amount sufficient to provide for a return of the principal of the investment, when and as this principal becomes reduced and extinguished by the exhaustion of coal freight.

Under the first proposition defendant argues that the present rates should be sufficiently high to enable it now to earn the amount by which it has fallen short of paying a 6 per cent annual dividend in the past, or at least as far back as 1894. It shows that a dividend rate of 6 per cent applied to its common stock of \$40,441,100 for the period from November 30, 1894, to June 30, 1908, would amount to \$35,091,276; that during this period the dividends paid amounted to \$7,260,264; and argues that upon a 6-per-cent basis the common-stock shareholders suffered a deficiency in dividends during this 14½-year period of \$27,831,112. In the Wilgus estimate above mentioned 10 cents per ton is added to the assumed cost of carrying coal to Perth Amboy for the purpose of "making good the deficit of over \$20,000,000 in dividends" for past years.

Assuming, without conceding, that the present producers and consumers of anthracite coal must bear the burden of the misfortunes or mismanagement of a previous generation, it is worth while to inquire whether this claim does not amount for the most part to a declaration, not that the shareholder is entitled to a fair dividend, but rather to an assertion that he may invest his dividends in improvement of the property and have it in cash also.

Certain aspects of the financial condition of the Lehigh Valley for the years 1901 to 1910, inclusive, are set forth in the following table:

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LEHIGH VALLEY RAILROAD COMPANY.

Item.	Year ending June 30—									
	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
A. MILEAGE:										
1. Owned—single track, miles.....	317.67	317.09	316.98	311.63	308.12	306.70	302.30	302.39	303.09	302.61
2. Owned—all tracks, miles.....	797.17	799.69	797.84	799.69	802.09	815.42	824.66	833.60	832.99	840.85
3. Operated—single track, miles.....	1,387.38	1,387.24	1,392.15	1,392.67	1,393.87	1,429.16	1,443.24	1,447.63	1,445.67	1,440.25
4. Operated— a tracks, miles.....	2,905.48	2,923.31	2,953.68	2,971.87	3,003.30	3,133.48	3,163.30	3,228.49	3,241.48	3,251.43
B. COST OF ROAD AND EQUIPMENT:										
Per mile owned—single track.....	\$37,657,712	\$37,657,712	\$46,435,550	\$46,435,504	\$48,410,162	\$48,410,162	\$54,365,714	\$58,782,995	\$58,639,362	\$61,443,218
Per mile owned—all tracks.....	118,543	118,760	146,493	149,009	157,115	157,842	179,840	184,395	193,472	203,044
Per mile operated—single track.....	47,239	47,080	58,201	58,067	60,355	69,369	65,925	70,517	70,396	73,073
C. TOTAL CAPITALIZATION:										
Per mile owned—single track.....	87,416,100	87,900,100	97,565,100	97,267,100	98,984,100	120,982,100	129,644,100	132,338,981	129,427,289	127,017,047
Per mile owned—all tracks.....	275,179	277,208	289,072	293,897	304,464	394,464	428,859	437,643	427,269	419,738
Per mile operated—single track.....	109,658	109,918	122,274	121,631	123,408	148,368	157,209	168,756	155,473	151,058
Capital stock.....	40,441,100	40,441,100	40,441,100	40,441,100	40,441,100	40,441,100	40,441,100	40,441,100	40,441,100	40,441,100
Funded debt.....	46,975,000	47,459,000	57,114,000	56,826,000	58,543,000	80,541,000	89,203,000	91,897,881	89,065,947	86,576,947
D. TOTAL OPERATING REVENUES:										
Per mile operated—single track.....	23,654,215	23,668,672	25,692,270	28,672,362	30,235,345	32,050,187	35,287,381	37,426,745	34,949,953	38,151,174
Per mile operated—all tracks.....	17,049	17,062	18,455	20,588	21,692	22,426	24,450	25,854	24,176	26,489
Total operating expenses.....	8,141	8,097	8,698	9,648	10,067	10,228	11,155	11,593	10,782	11,698
Per mile operated—single track.....	18,676,927	19,103,254	18,877,822	18,255,917	18,445,230	19,682,035	21,700,358	24,012,038	22,541,145	23,814,256
Per mile operated—all tracks.....	13,462	13,771	13,201	13,109	13,233	13,772	15,036	16,587	15,892	16,535
Ratio to total operating revenues... per cent.....	6,428	6,535	6,222	6,143	6,142	6,281	6,860	7,438	6,954	7,302
Analysis of operating expenses under official classification:	78.96	80.71	71.53	63.67	61.01	61.41	61.50	64.16	64.50	62.42
Maintenance of way and structures.....	4,241,717	4,632,997	4,099,169	3,058,204	3,269,383	3,163,245	3,196,854	3,398,642	3,273,339	3,462,903
Per mile operated—single track.....	3,057	3,340	2,944	2,196	2,346	2,206	2,215	2,348	2,264	2,404
Per mile operated—all tracks.....	1,460	1,585	1,388	1,029	1,089	1,006	1,011	1,053	1,010	1,062
Ratio to total operating revenues, per cent.....	17.93	19.58	15.96	10.67	10.82	9.83	9.06	9.08	9.37	9.08
Maintenance of equipment.....	4,448,244	5,149,924	4,694,395	4,744,232	4,894,269	5,485,794	6,186,642	6,153,874	5,832,430	5,966,810
Per mile operated—single track.....	3,206	3,712	3,372	3,407	3,511	3,838	4,287	4,251	4,034	4,163
Per mile operated—all tracks.....	1,531	1,762	1,589	1,596	1,630	1,751	1,956	1,906	1,799	1,838
Ratio to total operating revenues, per cent.....	18.81	21.76	18.27	16.54	16.19	17.12	17.54	16.44	16.68	15.71

Traffic and transportation expenses.....	9,251,820	8,581,666	8,964,825	9,857,586	9,694,567	10,421,778	11,686,787	12,121,580	10,760,203	11,512,285
Per mile operated—single track.....	6,669	6,186	6,440	7,078	6,955	7,282	8,098	8,373	7,443	7,983
Per mile operated—all tracks.....	3,184	2,935	3,035	3,317	3,228	3,326	3,694	3,755	3,320	3,530
Ratio to total operating revenues, per cent.....	39.11	36.25	34.89	34.38	32.06	32.52	33.12	32.39	30.79	30.17
General expenses.....	735,146	738,667	619,533	595,895	587,011	621,218	630,075	637,940	709,764	713,149
Per mile operated—single track.....	530	533	445	428	421	436	436	441	491	495
Per mile operated—all tracks.....	253	253	210	201	195	198	199	198	219	219
Ratio to total operating revenues, per cent.....	3.11	3.12	2.41	2.08	1.94	1.94	1.78	1.71	2.03	1.87
Analysis of operating expenses between labor and other expenses:										
Compensation paid direct to labor.....	9,199,572	9,995,715	10,550,679	10,977,294	10,920,360	12,013,783	14,282,297	12,891,828	12,113,151	13,703,030
Per mile operated—single track.....	6,631	7,205	7,579	7,882	7,834	8,406	9,896	8,905	8,379	9,514
Per mile operated—all tracks.....	3,166	3,419	3,572	3,694	3,636	3,834	4,515	3,993	3,737	4,202
Ratio to total operating revenues, per cent.....	38.89	42.23	41.07	38.29	36.12	37.49	40.48	34.44	34.66	35.92
Compensation paid general officers.....	139,352	128,320	145,835	116,746	103,188	104,576	129,718	178,063	184,768	160,821
Per mile operated—single track.....	100	93	105	84	74	78	90	123	128	112
Per mile operated—all tracks.....	48	44	49	39	34	33	41	56	57	49
Ratio to total operating revenues, per cent.....	.59	.54	.56	.40	.34	.32	.37	.49	.53	.42
Material, fuel, and all other items.....	9,338,003	8,979,219	7,681,408	7,161,877	7,421,682	7,563,706	7,288,343	10,942,147	10,243,226	9,950,406
Per mile operated—single track.....	6,731	6,473	5,517	5,143	5,325	5,293	5,050	7,559	7,085	6,909
Per mile operated—all tracks.....	3,214	3,072	2,601	2,410	2,472	2,414	2,304	3,339	3,160	3,051
Ratio to total operating revenues, per cent.....	89.48	37.94	29.90	24.98	24.55	23.60	20.65	29.23	29.31	26.08

LEHIGH VALLEY RAILROAD COMPANY—Continued.

Item.	Year ending June 30—									
	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
§ D. TOTAL OPERATING REVENUES—										
Continued.										
Taxes.....	\$312,182	\$285,781	\$289,996	\$471,262	\$538,933	\$468,849	\$660,501	\$850,301	\$780,494	\$794,998
Per mile owned—single track.....	983	901	915	1,512	1,749	1,529	2,185	2,812	2,675	2,627
Per mile owned—all tracks.....	392	358	364	589	672	575	801	1,020	937	946
Per mile operated—single track.....	225	206	208	338	387	328	458	588	540	552
Per mile operated—all tracks.....	107	98	98	159	179	150	209	263	241	244
Ratio to total operating revenues...per cent.....	1.31	1.21	1.13	1.65	1.78	1.47	1.87	2.27	2.23	2.09
Operating income.....	4,665,106	4,279,637	7,024,352	9,945,183	11,251,182	11,899,303	12,926,522	12,564,346	11,628,314	13,541,920
Per mile operated—single track.....	3,302	3,085	5,046	7,141	8,072	8,326	8,956	8,679	8,044	9,402
Per mile operated—all tracks.....	1,606	1,404	2,378	3,346	3,746	3,797	4,086	3,892	3,587	4,152
Ratio to total operating revenues...per cent.....	19.73	18.08	27.34	34.68	37.21	37.12	36.63	33.57	33.27	35.49
§ E. INCOME ACCOUNT:										
Operating income from railroad operation.....	4,665,106	4,279,637	7,024,352	9,945,183	11,251,182	11,899,303	12,926,522	12,564,346	11,628,314	13,541,920
Additions to income: (total of items 1 and 2 following).	1,286,836	1,357,808	1,690,528	1,682,763	1,493,508	1,548,521	1,726,188	1,474,833	1,057,273	1,463,372
1. Rents received from other roads for the use of road, equipment, and facilities of the operating property.....										
Interest on bonds and dividends on stocks in separately operated railroads and income from other miscellaneous property.....	718,098	621,011	962,233	1,209,376	1,040,498	739,670	781,050	509,581	292,630	409,013
	568,738	746,797	698,295	473,387	453,010	808,851	945,138	856,921	764,643	1,054,359

Deductions from income: (total of items 1, 2, and 3 following)	7,091,757	6,980,222	6,307,633	5,907,095	5,940,251	6,426,014	6,559,167	6,606,532	6,841,783	6,867,892
1. Rents paid for lease of roads which form a part of the operating property	2,724,019	2,743,965	2,727,328	2,332,434	2,410,967	2,455,286	2,347,253	2,520,523	2,748,308	2,763,893
2. Rents paid to other roads for the partial use of road, equipment, and facilities needed in operating the property	706,919	526,293	562,258	574,384	444,471	430,176	373,895	185,833	180,806	173,270
3. Interest accrued on funded and floating debt	3,660,819	3,709,964	3,018,047	3,000,277	3,084,813	3,540,552	3,838,019	3,900,176	3,942,669	3,930,729
Corporate income for the year	Def. 1,139,815	Def. 1,332,777	2,377,247	5,720,851	6,804,439	7,021,810	8,093,543	7,432,647	5,843,804	8,137,400
Per cent on capital stock outstanding § C.	2.82	3.29	5.88	14.14	16.82	17.36	20.01	18.38	14.45	20.12
Accumulated surplus brought forward from preceding year	77,014	Def. 1,178,258	Def. 3,372,147	1,620,681	5,914,796	8,657,325	11,380,915	14,009,283	16,516,904	19,212,252
Corporate income for the year	Def. 1,139,815	Def. 1,332,777	2,377,247	5,720,851	6,804,439	7,021,810	8,093,543	7,432,647	5,843,804	8,137,400
Discounts on securities bought and sold and other profit and loss allocations	-299,195	-861,112	+3,881,763	+38,554	-1,424,371	-1,103,971	-1,252,541	-719,059	-135,110	-391,017
Total surplus available for distribution	Def. 1,301,996	Def. 3,372,147	2,886,863	7,380,086	11,294,864	14,575,164	18,221,917	20,722,871	22,225,598	26,958,035
Per cent on capital stock outstanding § C.	3.37	8.34	7.14	18.25	27.93	36.04	45.06	51.24	54.96	66.66
Dividends declared				1,225,989	1,225,989	1,624,022	2,144,044	2,430,703	2,430,703	2,430,703
Additions, betterments, and permanent improvement appropriations			1,266,182	1,465,290	1,411,550	1,570,227	2,068,590	1,363,834	580,206	843,877
Sinking and special reserve funds	Cr. 183,738		1,266,182	1,465,290	2,637,539	3,194,249	4,212,634	4,205,967	3,013,346	261,745
Total surplus appropriated	Cr. 183,738		1,266,182	1,465,290	2,637,539	3,194,249	4,212,634	4,205,967	3,013,346	261,745
Per cent on capital stock outstanding § C.	.45		3.13	3.62	6.52	7.90	10.42	10.40	7.45	.65
Unappropriated surplus carried over to the following year	Def. 1,178,258	Def. 3,372,147	1,620,681	5,914,796	8,657,325	11,380,915	14,009,283	16,516,904	19,212,252	27,219,780

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The figures for years prior to 1901 are not given above because we have not had them revised to conform to the present system of accounting; but from 1895 onward they tell practically the same story—that is, the charges to maintenance of way from 1895 to 1904 were abnormal as compared with the years 1905 to 1910. During this 10-year period the density of tonnage per mile of line has increased about 30 per cent. Three of the large items of operating expenses, namely, maintenance of equipment; compensation to labor; and material, fuel, and supplies, show an increase somewhat proportionate to the increase in density of tonnage; while the fourth large item of operating expense, maintenance of way and structures, has decreased from \$3,057 per mile in 1901 and \$3,340 in 1902 to \$2,404 in 1910. The only inference which can be drawn from these figures is that in the period from 1895 to 1902 the shareholders elected to devote surplus earnings to rebuilding and improving their road instead of distributing the earnings to themselves in the form of dividends. The excess of the maintenance of way item alone for several years prior to 1903 over that for 1910 was sufficient to pay a 2-per-cent dividend on the stock. The devotion of earnings to permanent improvements and betterments was no doubt a wise policy on the part of those in control of the road. But the indications are that the shareholders have already received the benefit of that policy, even though it has not come in the form of cash dividends covering the period in question. From 1894 to 1903 the average market value of Lehigh Valley Railroad stock was in the neighborhood of \$75 per share. At this writing the same stock is quoted at \$178. Thus a person who had invested in Lehigh Valley at par prior to 1904, has benefited by an appreciation in value of his stock to the amount of 5 per cent per annum since 1894 and has received dividends gradually increased from 2 per cent to 5 per cent since 1905. The earnings in 1910 were sufficient to pay a dividend of 20.12 per cent, but the company elected to increase its unappropriated surplus from \$19,212,252 in 1909 to \$27,219,890 in 1910. Moreover, the Lehigh Valley Railroad Company has been carrying amongst its assets certificates of indebtedness of the Lehigh Valley Coal Company amounting to \$10,537,000, upon which no interest is collected. Interest on this indebtedness would be sufficient to pay a 1-per-cent dividend on the stock.

We should hesitate to assent to defendant's first proposition that present shippers must bear the burden of earlier misfortunes of the road, but it is unnecessary to decide that point in this case because it has been sufficiently demonstrated that the shareholders have received a fair return on their investment, taking into consideration the money actually received in dividends, the increased value of their shares, the increased value of the property, and the

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large unappropriated surplus. It follows therefore that the allowance in the Wilgus estimate of 10 cents per ton to make up for this alleged deficit should be eliminated from the calculation.

Defendant's second and third contentions that the rates should be sufficient to guarantee a fair annual return on the investment and to provide reasonably for keeping the property up to improved modern methods are sound but have little bearing on this case, in view of the summary of the road's finances above set forth. It will be noted by referring to that tabulation that defendant's corporate income was sufficient to pay a dividend on the capital stock of 16 per cent in 1905, 17 per cent in 1906, 20 per cent in 1907, 18 per cent in 1908, 14 per cent in 1909, and 20 per cent in 1910. Instead of paying such dividends it has paid 5 per cent on its capital stock, appropriated to additions, betterments, and improvements sums ranging from \$580,206 to \$2,068,590 per annum, and has increased its unappropriated surplus from nothing in 1902 to \$27,219,780 in 1910. Certainly it must be conceded that the present rates provide liberally for a fair annual return on the investment and the proper maintenance of the property.

As noted, the Lehigh Valley Railroad Company carries amongst its assets \$10,537,000 noninterest bearing certificates of indebtedness of the Lehigh Valley Coal Company. At 5 per cent per annum the interest on these certificates would be \$526,850. The latter sum is in all substantial respects a rebate to the Lehigh Valley Coal Company. The proportion of the total tonnage from the anthracite field shipped by the Lehigh Valley Coal Company does not appear, but it is of record that it ships about 95 per cent of the coal to tidewater. If its proportion of the total traffic is the same as that to tidewater, its tonnage for 1910 was in the neighborhood of 10,500,000 tons; and the net result of the transportation as between it and its competitors was the same as if it had had its coal transported for 5 cents per ton less than the independent dealers. Referring to the same matter in *Coxe Brothers Co. v. L. V. R. R. Co.*, *supra*, the Commission said:

The railroad company advances to the coal company nearly \$7,000,000 with which to transact its business, and for the use of which the railroad company receives no advantage other than such advantages as it gets from carrying the freight of the coal company. The value of the annual use of such advances at 5 per cent interest amounts to \$350,000, nearly. This sum exceeds 10 cents per ton on all the coal shipped by the coal company over the lines of the railroad company, and is to that extent an undue preference given to said coal company, to the disadvantage of Coxe Brothers & Company and other shippers who receive no advances. The advantage of like advances if made to complainants, estimated on their annual shipments, would exceed \$100,000. Had the Lehigh Valley road as a means of securing freight made like advances to any other competitor of complainants, whether an individual operator or a coal company in which the railroad company had no interest, it would hardly

be contended that such act did not amount to undue preference and unjust discrimination. The fact that the road was interested in the coal company, as the owner of its capital stock, does not make lawful what would be unlawful without such interest.

Defendant has filed an exhibit purporting to show that its average revenue for the transportation of coal to Perth Amboy from 1898 to 1908 has been \$1.46 per gross ton. Assuming that by the loan to the coal company defendant loses interest charges amounting roughly to 5 cents per ton, the average just given would be reduced to \$1.41 per gross ton. In the *Coxe Brothers case*, decided in 1891, the Commission decided that a fair return to defendant upon traffic here involved would be an average of \$1.40 per gross ton. The rates ordered as a result of that decision were never put in force because, while litigation resulting therefrom was in the courts, it was decided that as the law then stood the Commission was without authority to fix a rate for the future. Since that decision density of tonnage has increased, the ratio of operating expenses to income has materially decreased, grades have been eliminated, train loads and car capacities have materially increased; in short, every factor which ought to make for lower rates has been present. But the rates charged have produced revenue of about 6 cents per ton in excess of that found reasonable by the Commission.

Turning again to the Wilgus exhibit, we find the estimated cost of transporting a ton of coal from the Wyoming region to Perth Amboy is \$1.49. But we have shown that 10 cents of that amount, designed to cover past deficits, is an improper charge. Therefore \$1.39 would be the cost if the exhibit were accurately and properly constructed on the basis of facts known to the witnesses. In considering this exhibit it must be remembered that the so-called cost does not mean operating expense. The item of \$1.49 is designed to cover all proper, possible, and probable charges, including not only interest and depreciation charges, but other items, such as the 10-cent allowance above mentioned. Therefore, if the exhibit were not open to objection, it would be seen that, after eliminating the 10-cent charge above referred to, defendant's rates on the several sizes of anthracite coal ought to bring them revenue averaging \$1.39 per gross ton. That is to say, upon defendant's own showing it is collecting rates which have been on the average 7 cents per ton in excess of a reasonable rate.

After careful study of defendant's exhibits relating to tonnage and cost of movement, as well a painstaking analysis of defendant's voluminous exhibits respecting its past and present financial condition, we are of opinion and so find that defendant's rates for the transportation of coal from the Wyoming region to Perth Amboy of \$1.55 per gross ton on prepared sizes, \$1.40 on pea coal, and \$1.20 on buckwheat

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coal are unreasonable so far as they exceed \$1.40 on prepared sizes, \$1.30 on pea coal, and \$1.15 on buckwheat. If the relative tonnage of the several sizes continues as it has in the past, the rates herein found to be reasonable would result in an average reduction in defendant's revenue per gross ton for hauling coal to Perth Amboy of about 11 cents below the figure of \$1.46 for the 10 years from 1898 to 1908. As applied to 1908, the last year for which anthracite tonnage to Perth Amboy is shown in the record, the proposed rates would have resulted in reducing its operating revenue by about \$247,000 and apparently 95 per cent of this amount would accrue to the benefit of the railroad coal company. By reference to the table above set forth it is at once apparent that such a reduction will have no serious effect on defendant's revenues and will afford ample allowance for interest charges, operation, dividends, and all proper reserve funds.

We are further of opinion that reparation should be awarded upon basis of the rates herein found to be reasonable upon all shipments of coal by complainants from the Wyoming region to Perth Amboy since August 1, 1901. The amount of reparation which should be awarded under our finding in this case can not be ascertained from the exhibits now on file, and such further proceeding will be had as may be necessary to determine the amount of money due to complainants.

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