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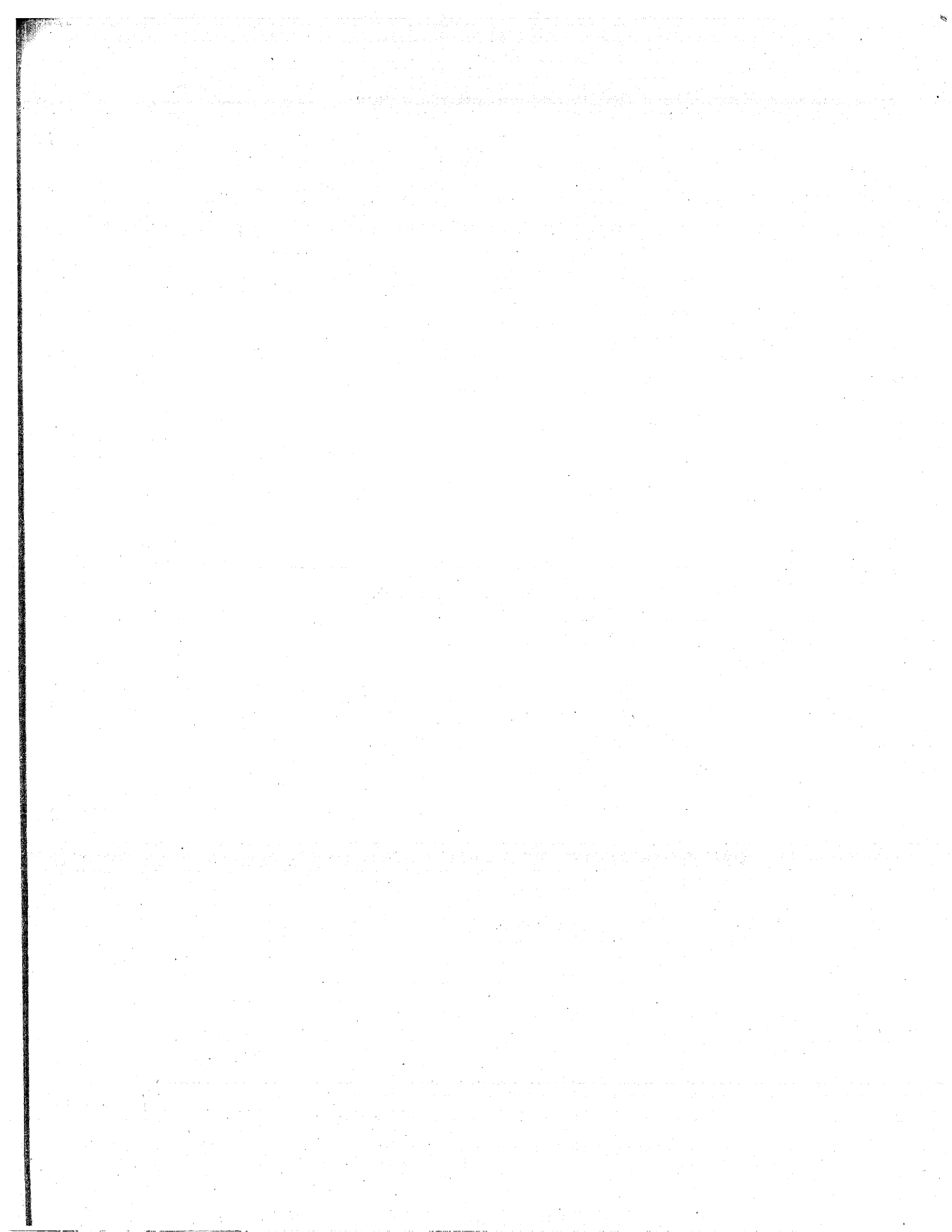
A CORPORATE HISTORY OF THE
PENNSYLVANIA RAILROAD COMPANY .

1846 -- 1890.

by

Course XV, option 1.

1921.



May 31st, 1921.

Professor A. L. Merrill,
Secretary of the Faculty,
Massachusetts Institute of Technology,
Cambridge, Massachusetts.

Dear Sir:

In accordance with the requirements for graduation, I herewith submit a thesis entitled "A Corporate History of the Pennsylvania Railroad Company, 1846--1890."

I wish to take this opportunity to express my appreciation of the kindness of Mr. Samuel Moody, a former official of the Pennsylvania Lines, for aiding me in various ways in the preparation of this thesis, and also to thank Mr. Samuel H. Church, Secretary, Pennsylvania System, Pittsburgh, Pennsylvania, for permitting me to make use of his "Corporate History of the Pennsylvania Lines West of Pittsburgh," and various documents on file at his office; and moreover, I wish to gratefully acknowledge the kindness of Mr. Andrew J. Cunningham, his assistant, for helping me to secure a great deal of the information which I desired.

Respectfully,

128692

PREFACE.

The purpose of this thesis is to trace, in as much detail as limited time and available material will permit, the growth of the Pennsylvania Railroad Company, during the first forty-four years of its existence.

No phase of industrial endeavor is fashioned of more intricate fabric than are our great railroad companies; hence, to gain an insight into the history of one of these organizations is to become reasonably familiar with fundamental principles underlying corporate expansion. In view of such facts, an investigation of the organizational structure of the Pennsylvania Railroad Company offers opportunities for constructive work, fully meeting the requirements of the Faculty of the Massachusetts Institute of Technology relative to theses submitted by candidates for the degree of Bachelor of Science.

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THE FORERUNNERS OF THE PENNSYLVANIA RAILROAD COMPANY.

The success of the Erie Canal gravely menaced the commercial welfare of the Commonwealth of Pennsylvania, through diverting much of its trade with the interior to the then more advantageous northern route. Insofar as the engineering abilities of the times permitted, the public works of Pennsylvania were pushed forward, but mountain barriers effectively prevented trans-state canals, and at that period (1820), a railroad of such magnitude was quite justly considered impracticable.

Between 1791 and 1828, over \$22,000,000 was spent on the roads and canals of Pennsylvania, and after the latter year, at least \$2,000,000 per annum was advanced for such purposes. Though unremunerative, these works were of great public benefit, and the people willingly bore the burden of increased taxation to support such improvements, and as further assistance, the charter of the Bank of Pennsylvania was extended from 1830 until 1848, in order that it

might loan the state \$4,000,000 at 5 1/2% interest to finance the construction of highways and canals.

In 1824, the Board of Canal Commissioners authorized surveys for a canal across the state. The greatest obstacle was the ridge separating the Juniata and Conemaugh valleys. To overcome this, it was at first proposed to "lock" the canal half way up the mountain side and then tunnel through, a distance of four and one-half miles, and again provide locks, for the descent. This project was in advance of its day, and came to naught. Likewise, the idea of building of a railroad across the state was abandoned.

The surveys, referred to above, gave impetus to a movement which resulted in an important canal convention being held in Harrisburg during August, 1825, while the subsequent Acts of February 25, 1825, and April 10, 1826, sanctioned building canals to connect the waters of the Ohio and the Susquehanna and the preliminary work was started forthwith. The surveys extended through several years, and finally it was decided to build a canal from the mouth of the Union Canal, near Middletown, to the headwaters of the Juniata at Hollidaysburg. From there a railroad was to be constructed over the summit of the Alleghenies to Johnstown, with canals alongside the Conemaugh and Allegheny Rivers extending from the western terminus

of the railroad, to Pittsburgh. A state-owned railroad between Philadelphia and the Susquehanna completed the chain of transportation facilities which thus stretched across the state.

The Eastern Division of the Canal, extending from Hollidaysburg to Columbia, was one hundred and seventy-two miles in length. Its one hundred and eleven locks overcame a total rise of five hundred and eighty-six feet and thirty-three aqueducts were required along its course. The cost was \$5,313,251. The Western Division in its one hundred and five miles of length had sixty-four locks, sixteen aqueducts and a one thousand foot tunnel; construction expenses totalling \$3,173,432.

The location of the Allegheny Portage Railroad (the Hollidaysburg to Johnstown line) was the subject of heated discussion on the part of its engineers, and there was especial disagreement on the advisability of using a tunnel to lower the elevation of the summit of the route. The line, as finally accepted, did not include this tunnel, but efforts to secure this improvement did not cease until it was gained, and then the State Works were rapidly declining in their usefulness and importance.

This thirty-six mile railroad was placed under contract in 1831, and the first track was put into

operation March 18, 1834. \$1,635,000. was spent on this work and its capacity, upon the completion of the second track, was five hundred and seventy-six cars per day. The summit at an elevation of twenty-three hundred and twenty-six feet was thirteen hundred and ninety-eight feet above the eastern and eleven hundred and seventy-one feet above the western basin. The ascent and descent were made on inclined planes, five on each side, having a maximum grade of 10.25%, while short stretches of track on a grade of 1% or less separated these planes. Two thirty horse-power stationary engines were installed at each plane to pull the cars, while between the planes horses were used. Locomotives first came into service in 1835, but did not completely displace the horse until 1851. The nine hundred foot tunnel, near the Johnstown end of the line, was the first one built for railroad usage in this country, and together with the stone viaduct over the Conemaugh River, near the present town of South Fork, gave the line two structures which were considered among the great engineering achievements of that day.

The line had been in operation only a very short time when a revision to obviate the planes was proposed, and on June 16, 1836, the state legislature authorized surveys for this improvement. Opposition from various quarters was intense and construction was

not started until the latter part of 1852. The new line was completed by July, 1856, at a cost of \$2,143,000. During 1853, and the early part of 1854, the tracks of this "New Portage Railroad", from a short distance East of Johnstown to Hollidaysburg, had been used by the Pennsylvania Railroad, pending the completion of its own line over the mountains, and its discontinuance of the use of the former route was a great blow to financial condition of the state-owned utility. By this time, the rapidly declining business and consequent increasing losses from operation made the sale of the public works inevitable, though this was not effected until 1857.

The Philadelphia and Columbia Railroad was the eastern link in the trans-state ways. The history of this section of the line begins with the chartering by the Pennsylvania Legislature, on March 31, 1823, of "a company to erect a railroad from Philadelphia to Columbia, in Lancaster County." Upon formal organization, the corporate title of the "Pennsylvania Railroad Company" was assumed. Though such eminent men as Stephen Girard, John Stevens and Samuel Humphreys were connected with the enterprise, investors would not put money into the venture. It was impossible to raise even a sufficient sum to build a mile of experimental road, and in 1826 the

charter was repealed because of the inactivity of the company, notwithstanding that the period of corporate existence had originally been set at fifty years.

On April 7, 1826, the Columbia, Lancaster and Philadelphia Railroad Company was incorporated, but it also died of inaction. The aim of its promoters seems only to have been to build the road and then unload it upon the state at large profit to themselves.

Acting upon the report of Major John Wilson to the Board of Canal Commissioners, the state legislature, on March 24, 1828, sanctioned the construction by the commonwealth, of a railroad from Columbia to Philadelphia. In April of the following year contracts were let for forty miles of the line. The first track was completed early in April, 1834, and the second track on October 1st. of that year. On October 6th, 1834, the road was formally opened. The line was eighty-two miles in length and cost \$5,277,278. to build. Inclined planes, similar to those in use on the Portage Railroad, were required at the termini. The one at Philadelphia ascended one hundred and eighty-seven feet in its length of twenty-eight hundred and five feet, a ratio of one in fifteen. At Columbia the ratio was one to twenty. Stationary engines were used at these places. Else-

where on this railroad, the gradients were moderate for one built at such an early date, for they were nowhere in excess of thirty feet to the mile except at Mine Hill, Gap, Pennsylvania, where an 85/100% grade was required, and this was later eliminated. The maximum curvature was nine degrees.

In April, 1834, the Board of Canal Commissioners were authorized to purchase fifteen locomotives, for use on this line, and in the following year five more were bought. To provide facilities for repairing this motive power, the Board authorized the erection of repair shops. As a diplomatic move to appease one John G. Parke, who claimed damages for injury to his property by the new line, on December 4, 1835, his lands were purchased as a location for the buildings of the Mechanical Department. The old name of Fountain Inn gave way to that of Parkesburg, and here the first Railroad shops on this continent were placed. In 1859, with the redistribution of motive power occasioned by unified operation of the entire line to Pittsburgh, the Harrisburg shops were opened and the ones at Parkesburg closed.

The first Philadelphia terminal was situated at Vine and Broad Streets. The railroad crossed the Schuylkill River at the Columbia Bridge

and here commenced the ascent of the "Belmont" plane. Relocation of the railroad to eliminate this plane was brought about through the construction of the West Philadelphia Railroad, which branched off from the line at the present location of Ardmore, and extended along the route, still used, to the West end of the Market Street Bridge over the Schuylkill. First track completed October 15, 1850, second track December 15, 1850. The mileage abandoned was sold to the Philadelphia and Reading Railway Company for \$255,000, though the State reserved the right to repurchase if line was not properly maintained.

These early state works, both railroads and canals, were operated as toll ways. All possessing the facilities for using them might do so upon payment of a moderate fee for that privilege. To meet the needs of those not possessing carriages and horses which might be run on the railroad, or boats for the canals, many individuals were engaged in supplying public freight and passenger service over this state owned line. The private car lines of later years are a development of this practice. As the state began to more thoroughly utilize steam-power in the operation of its railroads, difficulties with transporters who clung to the use of the horse, beset the officials who were in charge of these properties. Various rules were devised to minimize

the resulting confusion, but they were not satisfactory, and on April 1st, 1844, the use of horses to haul cars was permanently discontinued.

The Harrisburg, Portsmouth, Mount Joy and Lancaster Railroad Company has formed an integral part of the Pennsylvania Railroad Company's main line, from the first, and inasmuch as the former organization antedates the latter it is appropriately considered at this point, even though not a part of the state works.

This company was chartered June 9, 1832, under the name of the Portsmouth and Lancaster Railroad Company and empowered to construct a railroad from Portsmouth to Lancaster. The capital stock authorized was \$400,000. The affairs of the company languished and letters patent were not granted until June 3, 1834. March 11, 1835, an extension to Harrisburg vigorously solicited by the people of that City, was permitted by Act of the Legislature, and the corporate title was changed to the Harrisburg, Portsmouth, Mount Joy and Lancaster Railroad Company. Previously it had been stipulated that Elizabethtown was to be on the route of this company's line.

In July, 1836, the road was completed from Harrisburg as far East as Portsmouth, and by December

of the same year construction had proceeded fifteen miles westward from Lancaster. The following year the entire railroad was completed with the exception of the tunnel at Elizabethtown (this was changed into a through cut, 1886-1887) which was not finished until 1838.

Increases of \$400,000 in the capital stock of the company were sanctioned by the Commonwealth in 1838 and in 1845. The company was also granted the right to use its stock as collateral in securing loans.

In 1848, it first came under the influence of the Pennsylvania Railroad, then entering into an agreement with the latter company, effective April 21, 1849, which provided for the operation of the Harrisburg, Mount Joy, Lancaster and Portsmouth's properties for a period of twenty years. This contract proved unsatisfactory to the Pennsylvania, and to better protect its interests it leased this line, through an agreement dated December 29, 1860, for a period of nine hundred and ninety-nine years. The lessee agreed to pay semi-annual dividends of 3.5% on the \$1,182,550 capital stock, and meet the interest requirements upon \$700,000 of outstanding 6% bonds. In addition \$2000 per annum was to be advanced to the lessor so that its independent cor-

porate organization might be continued. Conversion of the stock of the lessor into that of the lessee, at par, was permissible until 1871. At the time of making this lease it was estimated that the saving upon the old contract would permit the establishment of a sinking fund adequate for the purchase of the shares which had not been converted.

A branch to Columbia was sanctioned by State Act July 16, 1848 and opened for traffic in June, 1851. In January 1849 the purchase of the Columbia, Marietta and Portsmouth Railroad Company by the Harrisburg, Portsmouth, Mount Joy and Lancaster had been legalized. A further increase in the capital stock issuances was permitted by formal state action in 1853, thereby totalling \$1,700,000, but such an amount seems never to have been issued. About this time a bond issuance of \$1,000,000 was authorized.

Subsequent legislation granted the rights for construction of a branch from Harrisburg to Dauphin, to connect with either or both the Northern Central Railway and the Dauphin and Susquehanna Railroad Company's lines.

THE PENNSYLVANIA RAILROAD COMPANY.

The charter under which the Pennsylvania

Railroad Company was incorporated was approved by the Legislature of Pennsylvania April 13, 1846. It authorized the construction of a line from Pittsburgh to Harrisburg, a branch to Erie, and other branches in any counties through which the main line might pass. The company was further empowered to unite with the Harrisburg, Portsmouth, Mount Joy and Lancaster Railroad Company, conditioned that this last named company should consent to the payment of the same tonnage tax as was to be exacted of traffic on the Pennsylvania's line. In the event of failure to effect such a consolidation, the Pennsylvania was empowered to extend its railroad eastward to make connection with the Philadelphia and Columbia Railroad at Columbia.

It was stipulated that letters patent, the formal conveyance of charter rights, should be issued when subscriptions for fifty thousand shares of stock had been received and five dollars per share paid in. Another provision of the original act of incorporation was that between March and December, the time during which the private enterprise would be in competition with the State Works, the Pennsylvania Railroad Company should pay to the Commonwealth a tax of three mills per ton mile on all freight which it carried. This proved a very heavy burden. Other sections of

the Act of April 13, 1846, dealt with such matters as the election and duties of the Directors, the appointment of officials, the issuance of stock certificates, the payment of dividends out of earnings, et cetera. It was further stated that the railroad should be considered a public highway for the conveyance of passengers and freight, and tariffs were definitely set, both for business done with the cars owned by the company and those owned by individuals.

The authorized capital stock was \$7,500,000. in 150,000 shares of \$50. each. In consideration of valuable franchise concessions, the state reserved to itself the right of purchasing the railroad at the end of twenty years, by repayment to the Pennsylvania Railroad Company of all moneys expended by it, plus interest at 8%, minus the earnings of that period. Should such an acquisition not be made at that time, the privilege should inure to the Commonwealth at the end of every twenty years thereafter, ad infinitum. Legislation of later years repealed this clause.

On April 21, 1846, eight days after the chartering of the Pennsylvania, the Legislature of the Commonwealth authorized the Baltimore and Ohio to construct a railroad from a point on the

state border in the vicinity of Cumberland, Maryland, to Pittsburgh. The Baltimore and Ohio had been in operation as far west as Cumberland since 1842 and sought an entry into Pittsburgh. This was inimicable to the interests of Philadelphia and to the Pennsylvania Railroad, and in spite of the vigorous opposition from the people of Pittsburgh and the southwestern part of the state, the former succeeded in including in the charter of the Baltimore and Ohio the proviso that should sixty thousand shares of stock of the Pennsylvania be subscribed for and ten per cent of each share actually paid in and that the Pennsylvania Railroad Company should have in its treasury more than \$1,000,000. on account of payments for capital stock and, moreover, should fifteen miles of line at each end be under contract, all these things being done on or before July 30, 1847, then the Baltimore and Ohio franchise was null and void.

Ceaseless efforts on the part of the organizers were necessary to achieve the requirements of keeping the Baltimore and Ohio out of Pittsburgh. The sale of Pennsylvania Railroad stock was largely effected through a house to house canvass in Philadelphia. In many instances several persons bought one share amongst them. It is said that even

porters and draymen were earnestly solicited for subscriptions. Out of twenty-six hundred subscribers only eight hundred purchased more than five shares. Though meeting with spirited opposition, a bill was passed authorizing the City of Philadelphia to purchase stock in the Pennsylvania Railroad Company and as a result of this the condition precedent to granting letters patent was fulfilled and these were transmitted by Governor Francis Rawn Shunk to the Pennsylvania Railroad Company on February 25, 1847.

March 30, 1847, the stockholders elected directors, and on the following day the company was organized and Samuel Vaughan Merrick was elected the first president. April 9, 1847, the Board selected John Edgar Thomson as Chief Engineer and W. B. Foster, Jr., and Edward Miller as Associate Engineers. Thomson was destined to become one of the most eminent railway executives this country has ever had.

Within the required time limit, the necessary total of stock subscriptions had been obtained, and through some of the purchasers making payments in advance for installments due

on the shares, by July 30, 1847, a sum in excess of one million dollars had been paid into the treasury of the company on more than sixty thousand shares and since contracts had been let, early in July, for fifteen miles of road, at its termini, the charter rights of the Baltimore and Ohio were thus rendered null and void, and a proclamation to this effect was issued by Governor Shunk on August 2nd, 1847.

From the latter part of 1847 until its final completion in 1854, the construction of the line was uninterruptedly pushed forward. The valleys of the Susquehanna and the Juniata were naturally chosen as the route from Harrisburg to the base of the Allegheny Divide, the line extending alongside the former named river for the first fifteen miles (to Duncannon), thence following the Juniata to Petersburg. At that place this stream branches into two forks, the railroad following the northern branch, known as the Little Juniata River, almost to Altoona. No unusual difficulties were to be overcome in building this "Eastern Division" and so undivided energies were thrown into the work here in order that at the earliest possible date a section of the line might be opened and the company receive the advantages of such a source of revenue.

The construction at Harrisburg started on

July 7th, 1847. The thirty-six hundred and eighty foot Susquehanna River Bridge (between the present stations of Rockville and Marysville) was completed in August, 1849, and on the first of September, 1849, service as far west as Lewistown (60 miles) was inaugurated. The length of line in actual operation was gradually lengthened and on September 16, 1850, trains were run through to Hollidaysburg. From the western terminus of the division (now Altoona) a branch had been built to Hollidaysburg to connect with the Portage Railroad, it being the plan of the Pennsylvania to leave the construction of that portion of the line which would parallel the State road until the last. The idea was to first complete the Harrisburg to Hollidaysburg line and so form a continuous all-rail connection between Philadelphia and Johnstown, when used in conjunction with the Portage Railroad, Philadelphia & Columbia and the Harrisburg, Portsmouth, Mount Joy & Lancaster Railroad. Next the route from Johnstown to Pittsburgh, then termed the "Western Division" would be finished and finally the "Mountain Division", extending between Altoona and Johnstown. Such a construction programme was obviously the most preferable one, for it permitted the maximum utility of the partly constructed line to the business interests of Philadelphia, and moreover as the surveys for the line west of Altoona, from the nature of the country traversed, required much greater length of time before being able to choose the final location of the line, and the construction throughout this section was of a particular-

ly heavy and expensive nature, it naturally followed that the Eastern Division would be completed first.

As part of the formalities incident to ousting the Baltimore and Ohio, contracts for the line from Pittsburgh as far east as Turtle Creek (about fifteen miles) had been let in 1847, but was not completed until 1850. From this point the surveys carried the line eastward through the towns of Greensburg and Latrobe to the valley of the Conemaugh River, which it reaches fifty miles east of Pittsburgh. The Conemaugh pierces Chestnut Ridge through a deep canyon known as the Packsaddle and the extension of the Pennsylvania along its precipitous sides is an undying tribute to the ability of the men who achieved it. The Conemaugh is followed through Johnstown, then the Division point on as far as Lilly (ninety-six miles from Pittsburgh). The summit of the mountains is six miles further east.

During the latter part of 1849 and the whole of 1850, various portions of Western Division were placed under contract, and on August 25, 1851, a connection was made with the Portage Road at Conemaugh (2.5 miles east of Johnstown) and twenty miles of the Pennsylvania Railroad, from there to Lockport, were placed into service, hence effecting, in conjunction with the Allegheny Portage Railroad, a continuous rail line to Philadelphia, two hundred and ninety miles in total length. By the close of 1851, the only gap remaining

was between Deatty and Turtle Creek, twenty-five miles, and this was closed the following year, and through use of certain completed portions of the Mountain Division, in conjunction with such of the route of the New Portage Railroad as was then finished, through trains from Philadelphia to Pittsburgh placed in service December 10, 1852.

Meantime the entire Mountain Division (taken over as part of the Western Division in 1852) was under construction throughout its entire unfinished length. The principal feature of this division was the tunnel, thirty-six hundred and twelve feet in length, at the summit of the Alleghenies and the Horseshoe Curve. The completion of this section permitted operation of the entire Pennsylvania Railroad with the consequent abandonment of the Portage line, on February 15, 1854.

Relative to the important matter of the profile of this railroad: between Harrisburg and Lewistown the maximum grade was sixteen feet per mile, and in continuing on to Altoona the railroad ascends at a rate never in excess of twenty-one feet to the mile; while eastbound over this line, the direction of maximum traffic, a grade of ten and five-tenths feet per mile is the most abrupt one to be overcome. From Altoona to the tunnel at the summit of the mountain (at the town of Gallitzin) the maximum grade is ninety-five feet per mile, properly compensated for curvature, the average

rise per mile from Altoona to Gallitzin being ninety-one and six-tenths feet per mile for nine and three-quarters miles, and this in but one direction, and that the one of least traffic. By way of comparison, the Baltimore and Ohio in crossing the Alleghenies through the region of maximum grades ascends and descends for many miles at a rate varying from one hundred and five to one hundred and sixteen feet to the mile. The superiorities of the Pennsylvania's location are manifest. Both for eastbound and westbound traffic, between Pittsburgh and Gallitzin, the ruling grade was fifty-two and eight-tenths feet to the mile.

The line from Pittsburgh to Altoona traverses very rugged country the entire way. It is mostly built on lofty fills (often over one hundred feet in height) or through long and deep rock cuts. The line often winds along the tortuous courses of waterways, constantly crossing and recrossing them. As first built, the route included tunnels at Greensburg and Radebaugh as well as at Gallitzin. The first mentioned was eliminated about 1910, but the others are in use at the present time, though the entire line of Western and Mountain (now Pittsburgh) Divisions have been relocated throughout a large portion of its length.

The Eastern (now Middle) Division is in marked contrast, from the physical standpoint, to the one just described, for here nature has provided the railroad path,

and save through the several "narrows" of the Juniata River and through the long, deep rock cuts at Newton Hamilton and various places between Mt. Union and Tyrone there were no unusual obstacles to be overcome. There was but one tunnel on the division, that located at the present station of Spruce Creek, where the railroad bores through the base of Tussey's Mountain.

The estimated cost of the Pennsylvania Railroad, from Harrisburg to Pittsburgh, with grading and structures for double track and one track laid, totalled, is as follows:

Eastern Division -----	\$4,075,000	130 miles
Mountain Division -----	2,400,000	40 "
Western Division -----	2,715,000	78 "
<hr/>		
Total -- grading, structures, roadway, track, real estate, etc. -----	\$9,190,000	248 miles
Cost of cars, locomotives, shops, warehouses, stations, ..	1,990,000	
	<hr/>	
	\$11,180,000	Grand Total.

These figures are given over the signature of John Edgar Thomson in the annual report for a report dated November 15, 1849, and included in the Third Annual Report of the Company.

Double tracking of the railroad started soon after the completion of the line, but though within a short time a very considerable portion of this work had been done it was not until December 1, 1877, that the second track over the

entire main line east of Pittsburgh (and then extending to Jersey City) was in operation. At the present time this road is four-tracked, and there is an auxiliary double track line to relieve the main line of slow freight traffic, extending from Pittsburgh to New York (save for the distances between Petersburg and Maryville, Pennsylvania, and Morrisville, Pennsylvania, to Waverly, New Jersey).

To continue uninterruptedly the account of the building of the Pennsylvania Railroad the other corporate affairs of the Company have not been considered chronologically with topics appertaining to this other subject, hence necessitating reference once more to the year 1848, et sequentum.

By state legislation dated March 27th, 1848, the cities of Pittsburgh and Allegheny and the municipal corporations in the county of Philadelphia were given the right to purchase the stock of the Pennsylvania Railroad Company, and they might issue bonds to obtain funds for this purpose. The same Act provided that any municipal corporation owning in excess of ten thousand shares of the capital stock of the Pennsylvania Railroad Company might, in lieu of voting, elect one director. Another section authorized the payment of six per cent dividends during the construction period, such an outlay being chargeable to construction costs. This was brought about through the urgent request of the Board of Directors,

referred to in the first annual report, as a means of insuring the receipt of sufficient share capital to obviate the necessity of borrowing money during the early days of the company. The Treasurer's report for the year ending October 1st, 1849, is the first one to show interest payments. That recorded therein was for \$86,093.77, and from that time henceforth the payment of dividends has been unbroken. About \$10,000,000 of the \$12,000,000 required for building the Pennsylvania Railroad was secured through stock. Between 1852 and 1854 the Company was in desperate need of money to complete the Mountain Division and to supply the needed equipment for the Company's lines. Accordingly, the Board in spite of previous hopes to the contrary was forced to secure the approval of the stockholders and the State to issue bonds. The report for the year ending 1851 does not give any statement of company indebtedness, showing no money having been borrowed through sale of bonds up to and through that year. However, the one for 1852 shows receipts from sale of bonds as \$1,906,666.67, and in the following year this sum had risen to \$5,084,967.91.

In 1852 the Pennsylvania Railroad Company was empowered to construct a lateral branch from some point on its main line between Greensburg and Latrobe, via Mount Pleasant and Connellsville to Uniontown, and thence if desired to Geneva or some other Monongahela River point. During the same year, additional authority was granted to increase stock issuances sixty thousand shares, and a short time later, to

sell 20,000 more; thereby bringing total stock authorized up to 230,000 shares, representing \$11,500,000 par value.

In considering the affairs of the Company during this period, it is significant to glance over some of its traffic and financial statistics. Certain tables of this kind are included in Appendix "A".

During the year 1853, the State granted the Pennsylvania additional privileges relative to making subscriptions to the capital stock and guaranteeing the bonds of such railroads in other States as might become valuable tributaries to the main stem, and so promote the trade of the State. Moreover, it was given the right to issue 80,000 additional shares of capital stock so that funds for building the second track might be obtained. In April of the following year pressing needs for increased motive power and terminal facilities required it to again petition for authorization to increase its bonded debt. The State in reply gave the Company the right to sell such issues of bonds as might have been duly authorized by a majority vote of shareholders, at a regular or special meeting, provided, however, that the debts of the Company should never exceed the amount of capital stock paid in and expended on road and equipment. An Act of May 2nd, 1855, provided that additional issuances of stock might be made from time to time as deemed necessary, but were limited to forty thousand shares (\$2,000,000) increase at any one time.

The legislature of 1856 authorized the construction of a line from the Philadelphia and Columbia Railroad, to the Delaware and Schuylkill Rivers, and the acquisition of lands for terminal facilities. The customary wharfage and storage charges were legalized and authority was given to connect with any railroad, thereafter built along the route of the proposed extension.

At first the Pennsylvania was greatly hampered by unfair discrimination against it by the Philadelphia and Columbia Railroad, in not permitting its trains to be operated over this public line; and later even with this barrier removed other difficulties still beset the Pennsylvania in using the railroads east of Harrisburg for it was necessary to use smaller cars because of narrow spacing of tracks in the city of Philadelphia and the reduced clearance of the Elizabethtown tunnel. The Pennsylvania bearing the total expense, eliminated the former obstacle, while the latter was done at the cost of the owning company. In February, 1858, through trains were run between Harrisburg and Philadelphia, via Mount Joy, though trains had previously been run through without change of cars, via the Columbia route. July 18, 1858, the first train passed completely across the state without transfer of cars at Harrisburg, or some other point.

As has been previously brought out, the traffic over the Philadelphia and Columbia had originally been carried by a host of individual transporters, who paid tolls to the State for the use of the tracks, and for motive power when the locomotive came into general use. As time went on, the passenger conveying business gradually became concentrated into the hands of a few companies, and finally one of these, the firm of Bingham and Dock, acquired the others and so had an almost exclusive monopoly of the carriage of traffic over this railroad. Meanwhile, methods of paying the State for its use had been altered, for contracts covered such matters, and before such written instruments were not used.

During the year of 1853 the State Legislature, in approving the contract of Bingham and Dock with the Board of Canal Commissioners (who had charge of the Philadelphia and Columbia Company's affairs) asserted the right of the Pennsylvania Railroad Company to operate its cars over the Philadelphia and Columbia Railroad. As a result thereof the Pennsylvania purchased one-half the passenger cars in use on this road. August 16, 1856, the contract with Bingham and Dock expired and in its place one was made with the Pennsylvania Railroad Company and the Harrisburg, Portsmouth, Mount Joy and Lancaster Railroad Company, whereby these two railroads agreed to jointly provide for all passenger traffic requirements on the Philadelphia and Columbia Railroad. In furnishing necessary facilities, and

sharing profits or loss, the proportion was the Pennsylvania sixty-six and seven-tenths per cent and the second party thirty-three and three-tenths per cent.

The State works, from the very beginning, had been a heavy drain upon the public treasury and very soon after the opening of the Pennsylvania Railroad the marked superiority of this private enterprise in meeting the transportation needs of the Commonwealth led to an active desire on the part of the State to rid itself of this almost completely useless expense which the ever increasing business of the Pennsylvania only served to make more unprofitable. The first and second attempts, made during 1854 and 1855, to negotiate a sale failed. This sale was to have been made at public auction, but the only possible purchaser was the Pennsylvania Railroad Company, and it would not place a bid, owing to the illiberal conditions demanded.

John Edgar Thomson, President of the Company since 1852, submitted the following terms, for purchase of the State works, to Andrew G. Curtin, Secretary of State of Pennsylvania, in a communication dated December 20, 1855:

First: Purchase entire State works (both divisions of the canal, the Portage Railroads, and the Philadelphia and Columbia Railroad, as well as all property appertaining thereto or affixed therewith, for the sum of \$7,500,000.00.

Second: Payment to be made as follows: \$500,000 on

delivery of the works, in cash or certificates of the State loan, ten per cent of the remainder on July 30, 1875, and an equal sum on each July 30th. until the entire obligation had been met. All unpaid balances to bear interest at five per cent, the purchaser reserving the right to pay the whole or any portion of the amount in advance, in cash or certificates of the State loan.

Third: All tonnage taxes to be repealed.

Fourth: The purchaser agreed to keep up all of the Eastern Division of the Canal, and the Western Division, between Blairsville and Pittsburgh, until the Northwestern Railroad should be opened for business from Blairsville to the Allegheny River.

Fifth: The Pennsylvania Railroad Company further agreed to forever pay to the State upon the cost of construction of the Philadelphia and Columbia Railroad a dividend of the same percent as paid to its shareholders; this cost to be determined by three "eminent civil engineers, to be appointed by the State with the concurrence of the Company".

This proposal was submitted to the Legislature and with the single important change of requiring payment to the State of an additional sum of \$1,500,000 as consideration of the Pennsylvania Railroad and the Harrisburg, Portsmouth, Mount Joy and Lancaster Railroad being forever exempted of tonnage and other taxes which were specified was accepted by the Legislature and the Act signed by the Governor May 16, 1857.

June 25, 1857, the formalities of the auction were held and the sale made to J. Edgar Thomson, for the Pennsylvania Railroad. The stockholders of the Company ratified this action on the 23rd. of July. Possession of the works was gained on August 1, 1857.

The different sections of the State Works fared in varying manner. The Philadelphia and Columbia is now the principal constituent of the Philadelphia Division, whereas operation of the New Portage Railroad was discontinued on November 1st, 1857, because of its being totally unprofitable. Except for the tunnel at Gallitzin, which furnished connection with some coal mines, and the utilization of odd portions of the New Portage's track at Lilly and at Hollidaysburg for industrial sidings and allied purposes, the New Portage Railroad was dismantled and the salvaged equipment used elsewhere on the system. However, the present route of the low-grade freight line in passing from Cresson to Hollidaysburg extends along what once was the New Portage Railroad, and the tunnel built for this last named carrier at Gallitzin, having been enlarged, is now used for all eastbound freight and passenger traffic.

Though the old Allegheny Portage Railroad was included among the acquisitions of August 1, 1857, it had even been completely abandoned some years before.

The Canals were kept in operation to satisfy the

contract with the State. In 1864 the Western Division was sold to the West Penn Railroad Company, a Pennsylvania Railroad subsidiary. In 1867 the Pennsylvania Railroad transferred its remaining canal properties to an independent organization, the Pennsylvania Canal Company, receiving therefor the capital stock of this corporation, which amounted to \$2,750,000, representing \$1,000,000 original cost of canals plus interest and expenditures for enlargements. Later in the year, the majority of the stock of the West Branch and the Susquehanna Canals (extending from Clark's Ferry to Farrandsville on the West Branch of the Susquehanna River, a distance of 123 miles) was purchased with the bonds of the Canal Company. This gave direct access to new lumber and coal districts. In 1869 the Pennsylvania Canal Company merged with the Wyoming Valley Company, through the exchange at par of shares of the Pennsylvania Canal Company for those of the Wyoming Valley Company, and the refunding at par of \$600,000 maturing Wyoming Valley Company bonds with forty year bonds of the Pennsylvania Canal Company. In 1872 all the bonds and stock of the Wiconisco Canal Company, extending from Clark's Ferry to Millersburg, were bought, for nineteen hundred and eighty-two shares of Pennsylvania Canal Company stock, the purchaser thereby gaining access to the Lykens Valley coal fields. Later both the West Branch and Wiconisco Canals were sold under judgment and purchased outright by the Pennsylvania Canal Company, which then owned a total of three hundred and sixty miles of canal.

In the early seventies, the Columbia and Wilkes-Barre line of canals received improvements which required expenditures totalling \$2,000,000, but the Juniata branch of the former state works remained untouched.

It has previously been mentioned that in the terms of the agreement for the sale of the state canals and railroads to the Pennsylvania Railroad Company, provision was made for the annulment of the tonnage tax exacted of that enterprise. The act legalizing that sale, as finally passed by the General Assembly of the Commonwealth, not merely freed the Pennsylvania Railroad of the obligation of meeting the traffic assessments, but moreover exempted it from taxes and duties, of all sorts, on capital stocks, bonds, dividends, and property. The Supreme Court of Pennsylvania decided that though the legislature might repeal the tonnage tax, to place all property of the railroad company beyond reach of taxation was unconstitutional, hence rendering the entire provision relative to taxation, null and void. Bitter controversy between the state and the railroad resulted, for since the latter had come into possession of the state works, it refused to pay the tax, arguing that inasmuch as

the sole purpose of the tax had been to protect the state works against the competition of the private organization, their purchase by the railroad company, made the levy unnecessary and unjust as well as very burdensome, for it merely served to act as a differential in favor of the Pennsylvania's rivals. Action was taken by the legislature in 1861, looking towards a compromise, and final settlement of the points at issue; and it was provided that in case the Pennsylvania Railroad Company should pay into the State treasury, semi-annually, such a sum over and above the installments of principle and interest on its debt to the state as might be required to make such payments amount to \$460,000 annually, -it being understood that these periods of semi-annual payments should end July 31, 1890, and should amount in the aggregate to \$13,570,000, exclusive of the balance then (1861) unpaid of the principal and interest of bonds paid as purchase money of the state canals and railroads--all laws imposing taxes upon freight should be repealed, and the Pennsylvania Railroad Company should only be liable for such taxes as might be imposed by the general revenue laws of the state.

By the same act it was stipulated that the

Pennsylvania Railroad Company should expend the sum of \$850,000 to aid the financing of certain railroad companies, incorporated within the state. The various provisions of the Act of 1861 annulling the traffic tax were accepted and fulfilled by the Pennsylvania Railroad. In reference to the clause requiring it to assist in construction of new lines, the Pennsylvania purchased six percent twenty year mortgage bonds, of the following companies, in the amounts tabulated below:

Bald Eagle Valley Railroad Company--	\$200,000.
Ebensburg and Cresson Railroad Co.	66,500.
Tyrone and Clearfield Railroad Co.	75,000.
Bedford Railroad Company	100,000.
West Pennsylvania Railroad Company	250,000.
Pittsburgh and Steubenville. RR. Co.	<u>158,500.</u>

Total-----\$850,000.

The principal occurrence of the year 1860, was the leasing of the Harrisburg, Portsmouth, Mount Joy and Lancaster Railroad. In November, 1861, the board of directors of the Pennsylvania Railroad, acting under instructions from a special meeting of the stockholders, entered into a contract for the leasing of the Philadelphia and Erie for a term of nine-hundred and ninety-nine years.

The net earnings for the year 1862 were

were \$3,000,000 in excess of those of 1861, and an increase in the dividend might have been made, but the more conservative policy was adopted and this money was reinvested in extensions and betterments to directly owned and allied lines. During 1863, as a result of this course, rapid progress was made on the building of the Philadelphia and Erie, the Ebensburg and Cresson, the Bedford, the Tyrone and Clearfield, the Western Pennsylvania, and the Bald Eagle Valley Railroads.

At the annual meeting in 1864, a stock dividend of \$15 per share was declared. This extra dividend was issued upon surplus profits of the company during the immediately preceding years, which had been reinvested. Net earnings advanced to new high levels in that year (1864) in spite of inflated costs of operation incident to war conditions. The completion of the Philadelphia and Erie Railroad and its opening for through traffic occurred in October, 1864, and during that year the Western Pennsylvania and the other roads aided in persuance of "The Act to Commute the Tonnage Tax", except the Steubenville line, were brought into productive use.

No new project was undertaken during 1865,

except the conversion of the abandoned canal below Freeport into a railroad to connect the Western Pennsylvania Railroad with the Pittsburgh, Fort Wayne and Chicago Railway in Allegheny City; but the year was characterized by the opening of the new line between Pittsburgh and Steubenville and by the commencement of construction of the Connecting Railway, between Frankfort and Mantua Junction, in the city of Philadelphia.

A most important occurrence of the year 1865, was the directors giving their sanction, for the first time, to the introduction of private fast freight lines on the Pennsylvania Railroad. Such an action had been studiously and persistently opposed by the managers of the Pennsylvania Railroad, up to this time, and they had even made vigorous, though unsuccessful efforts, to induce New York trunk lines to withdraw from such a system which they considered pernicious and inconsistent with obligations to the shareholders. However, the measure was at last forced upon them, and with the view of counteracting diversion of traffic from their route, and providing additional facilities for the merchants of Philadelphia, they assented to the introduction of such lines, with the understanding that the cars for transporting the freight of these

private lines should be furnished by the transporters and should be constructed of the so-called "compromise gauge", in order to permit reaching all western points without transshipment. It was claimed, and events proved, justly so, that the ordinary freight business of the Pennsylvania Railroad Company would continue to increase in its usual ratio, notwithstanding the introduction of these fast freight lines, and that they would derive their traffic from the business of similar organizations already existing on rival routes, whose competition they were introduced to meet, and the railroad company, through ceding these privileges would gain a business not previously enjoyed by it, and which could not be secured by other means.

In 1866, the Connecting Railroad was completed and leased to the Philadelphia and Trenton and Camden and Amboy Railroad Companies for legal interest upon its cost. Heavy outlays were made by the Pennsylvania Railroad, upon the lines of the Philadelphia and Erie and the Western Pennsylvania Railroads, and authority was obtained from the legislature to increase the capital stock of the company, so that it might bear a correct financial relation to the importance of the enterprises in which it was directly interested.

In 1867, the stockholders voted to increase share capitalization \$15,000,000, and to issue a new series of consolidated mortgage bonds. During this year the Bedford Railroad was completed from Bloody Run to Mount Dallas and the Mifflin and Centre County Railroad from Lewistown to Milroy. In the winter of 1868-69, the directors of the Pennsylvania Railroad Company were compelled to deviate from the former ultra-conservative policies by which their previous relations to and investments in railroads west of Pittsburgh, had been governed. It had originally been deemed proper to assist only those lines whose interests harmonized directly with those of the Pennsylvania Railroad; but sound judgment at this juncture justified the adoption of measures which would secure in perpetuity, unbroken connection with the chief trade centers of the middle west, and a lease of the Columbus, Chicago and Indiana Central Railroad, entered into by the Pittsburgh, Cincinnati and Saint Louis Railway Company, was guaranteed by the Pennsylvania Railroad Company. Additional capital was required to develop these newly acquired properties, and for such a purpose, the Pennsylvania Railroad issued \$6,800,000 additional capital stock. During the year 1868, the Tyrone and Clearfield Railroad was extended from

Phillipsburg to Clearfield.

In July, 1869, the Pennsylvania Railroad Company assumed control, as lessee, of the Pittsburgh, Fort Wayne and Chicago Railway. In taking this highly important step, and accepting conditions, then supposed by railroad critics and financial experts, to be somewhat onerous, the directors of the Pennsylvania merely acted in self-defence, and with a view of protecting their avenues of communication with the west and the northwest. During the construction of the line from Pittsburgh to Chicago, large advances of money and credit had been made by the Pennsylvania Railroad to extricate the new road from financial embarrassment, and facilitate the completion of the line through to Chicago. But after the opening of this new railroad, its successes caused its managers to become oblivious to all obligations to that company which had rendered such great and timely assistance, a few years before, and the Fort Wayne Route almost passed under the control of the Erie Railroad. After experiencing such an occurrence, the Pennsylvania definitely adopted a policy of direct and widespread control of lines in the state of Indiana, Ohio, Illinois, West Virginia, and Michigan.

The principal items of interest for the year 1870 are; lease of the Erie and Pittsburgh and the Wrightsville, York and Gettysburg Railroad Companies; the formation of a company to bridge the Ohio River at Cincinnati; and miscellaneous developments in connection with the Baltimore to Washington extension.

1871~~was~~ was characterized by the incorporation of the Pennsylvania Company, the lease of the United New Jersey Railroad and Canal Company, acquisition of the Chartiers Railway and the Jeffersonville, Madison and Indianapolis Railroad Companies; arrangement of favorable traffic contracts with the Mansfield, Coldwater and Lake Michigan and the Cairo and Vincennes Railway Companies; numerous extensions to existing lines; and the securing of a controlling interest in a transatlantic steamship line, the American Steamship Company.

On subsequent pages, the history of the majority of the constituent Pennsylvania System companies is treated in such detail as is possible in a work of this nature. To avoid much duplication, a continuation of the preceding chronological discussion, for the years 1871 to 1890, will not

be made. The subject matter, which follows, is classified geographically, and in general the groups correspond to the larger operating units of the railroad.

BRANCH LINES OF THE PENNSYLVANIA RAILROAD DIVISION,
BETWEEN HARRISBURG AND PHILADELPHIA.

Junction Railroad Company.

In 1860, a company called the Junction Railroad was incorporated to connect the lines of the Philadelphia and Reading, the Pennsylvania, and the Philadelphia, Wilmington and Baltimore Railroad Companies in the city of Philadelphia. Its line extends along the west bank of the Schuylkill River from a connection with the Reading near Peters' Island to an intersection with the Philadelphia, Wilmington and Baltimore at Gray's Ferry, a distance of 3.56 miles.

The capital stock of the company was fixed at \$250,000, subdivided into shares of \$50 each, and the company was empowered to issue bonds for a sum not exceeding \$300,000, which might be indorsed by the interested connecting lines. Subsequent authorization permitted the creation of a larger debt, which in 1865 totalled \$800,000.

The portion joining the Pennsylvania and the Reading was completed in 1863, but the remaining section to Gray's Ferry was not placed in operation until the middle of 1866.

The Pennsylvania Railroad operates the Junction Railroad Company for the benefit of the connecting lines.

Delaware Extension.

Prior to the building of the Delaware Extension, access to the Philadelphia river front had been gained through the use of the City Railroad, but the latter's facilities were entirely inadequate, and accordingly the Pennsylvania built a harbor terminal line of its own. This work was done during the years of 1860-61-62, under franchises approved in 1856.

The tide-water piers and yards of this branch are located in the Greenwich and Point Breeze sections of Philadelphia, extreme southern portion of the City. The eight mile Extension connects these properties with the West Chester Railroad, near Gray's Ferry, and through use of the latter Company's tracks reaches the main line of the Pennsylvania Railroad at Market Street.

Even in 1890, the City of Philadelphia was covered with a network of Pennsylvania track, totalling over seventy miles of line, with nearly three hundred and forty miles of running tracks and company sidings.

In addition to those lines which are treated in some detail in this paper, the Pennsylvania Railroad controlled and operated the following branches within the corporate limits of Philadelphia:

Filbert Street Extension, River Front Railroad, Midvale Branch, Canal Street Branch, 52nd. Street Branch, Girard Point Branch, Swanson Street Branch, Fairhill Railroad, Engleside Railroad, Cresheim Branch, Kensington and Tacony Railroad, Schuylkill Branch, and the Philadelphia, Germantown and Chestnut Hill Railroad.

Columbia and Port Deposit Railroad Company.

This company was incorporated in 1878 to build a railroad from Columbia, Pennsylvania, through Port Deposit to Perryville, Maryland, a distance of forty miles. The line was opened in 1877. The Pennsylvania Railroad owns the entire capital stock of this Company - \$600,000. par value.

Wrightsville, York and Gettysburg Railroad Company.

This company owns the line between Wrightsville (opposite Columbia) and York. The company had been financed by the Northern Central, and was operated by that interest until 1871, when the Pennsylvania Railroad purchased a majority of the stock of the Wrightsville, York and Gettysburg conjointly with that of the

of the Columbia Bridge Company, all of which has been consolidated with the capital stock of the Pennsylvania Railroad Company, and the thirteen mile line between York and Columbia has been operated as the York Branch.

Hanover and York Railroad Company.

Road extends from Hanover to York, 18.35 miles. Chartered July 9, 1873; in operation June, 1876. Leased to the Pennsylvania Railroad on January 1, 1875, for a term of nine hundred and ninety-nine years for a yearly rental to equal net earnings. The entire capital stock of this company is held by the lessee.

Littlestown Railroad Company.

Chartered February 17, 1854. Leased to the Pennsylvania Railroad for nine hundred and ninety-nine years, May 1, 1875; rental, net earnings. This company owns the nine mile railroad between Hanover, Pa., and Kingsdale, Md.

Frederick and Pennsylvania Line Railroad Co.

Line--Kingsdale, Md., to Frederick, Md. Chartered in 1868, opened in 1872. Leased to Pennsylvania Railroad, in 1875; rental to be net earnings. This company, together with the Littlestown and the Hanover and York Railroads and the York Branch comprise the

Frederick Division of the Pennsylvania Railroad.

Pennsylvania Schuylkill Valley Railroad Company.

The Pennsylvania Schuylkill Valley Railroad Company is commonly referred to as the Schuylkill Division. This company was organized June 1, 1883, under the provisions of the general railroad law of Pennsylvania, through the consolidation of the following railroads:

- (1) Philadelphia, Norristown and Phoenixville Railroad Company.
- (2) Phoenixville, Pottstown and Reading Railroad Company.
- (3) Reading and Pottsville Railroad Company.
- (4) Pottsville and Mahony Railroad Company.
- (5) Phoenixville and West Chester Railroad Company.

The first four companies enumerated above give a direct line from Philadelphia to Pottsville, and from the latter city, branches (of the Sunbury Division) extend into the anthracite regions. The Phoenixville and West Chester furnishes a route between these cities, crossing the main line at Frazer, twenty-four miles west of Philadelphia.

Downington and Lancaster Railroad Company.

The line owned by this company forms what is customarily termed the New Holland Branch. This branch extends from Downington to Conestoga Junction, near Lancaster, a distance of thirty-eight miles. This company was formed through the reorganization, following a judicial sale of the East Brandywine and Waynesburg Railroad Company, on June 7, 1888.

The history of the Downington and Lancaster Railroad begins with the chartering of the East Brandywine Railroad Company, in 1857. The capital stock of this company was limited to \$250,000, which amount was doubled within the next few years. This East Brandywine Railroad was permitted to construct a railroad from an intersection with the Philadelphia and Columbia at Downington, westward along the main branch of the Brandywine River to a junction with either the Cornwall and Phoenixville or the Lancaster Lebanon and Pine Grove Railroad. Power was conferred upon this company, in 1855, to extend a railroad from Downington to Birdsboro, on the Schuylkill River, and southwardly to the Pennsylvania-Delaware State Line, but the company never availed itself of this privilege. In March, 1866, the corporate title was changed to East Brandywine and Waynesburg, and it

permitted to make Waynesburg the western terminus. The same Act empowered the Pennsylvania Railroad to aid the East Brandywine and Waynesburg Company, through stock subscription or endorsement of its bonds, and also permitted the former leasing the latter's property, which was done in November, 1861.

The line proved a constant source of loss, and so the mortgage on it was foreclosed in 1888, with the consequent reorganization that has been previously mentioned.

In 1876, the line had been extended from Waynesburg to New Holland, and in 1890, was completed through to Conestoga Junction.

Pomeroy and Newark Railroad Company.

This company is a consolidation of several railroads, which taken together form a direct line between Pomeroy, Pa., and Newark, Del., twenty-seven miles.

The Doe Run and White Clay Creek Railroad (incorporated 1868) was reorganized in 1869, and the corporate title changed to the Pennsylvania and Delaware Railroad Company. This merged with the Delaware and Pennsylvania Railroad (a Delaware Corporation formed in 1857), keeping

the former's title. Later the new corporation was sold under foreclosure of mortgages, and the Pomeroy and State Line Railroad Company was formed through this latest reorganization. In 1881, the properties of the Newark and State Line Railroad Company, lying to the north of Newark, Del., were consolidated with those of the Pomeroy and State Line Railroad, and the name of the Pomeroy and Newark Railroad Company was given to the route thus formed. Though now part of the Maryland Division, in 1890 the Pomeroy and Newark Railroad was under the jurisdiction of the Superintendent of the Philadelphia Division.

BRANCH LINES OF THE PENNSYLVANIA RAILROAD DIVISION,
BETWEEN HARRISBURG AND ALTOONA.

Cumberland Valley Railroad Company.

Though an integral part of the Pennsylvania System, the Cumberland Valley Railroad Company was (1896) operated by its own organization, and therefore it may be out of place to refer to it under the heading of "Branch Lines of the Pennsylvania Railroad Division," However, it is most conveniently treated when considering the territory between Altoona and Harrisburg, so possible technical objections will be overlooked.

The line of road owned and operated by this company extends from Harrisburg to Winchester, Va., and embraces the Cumberland Valley Railroad proper, the Franklin Railroad, the Mount Alto Railroad, the Martinsburg and Potomac, the Dillsburg and Mechanicsburg, the Southern Pennsylvania Railway and Mining Company, and the Cumberland Valley and Martinsburg Railroad Company.

The Cumberland Valley Railroad Company was incorporated in April 2, 1831, to build a railroad from Carlisle to a point on the Susquehanna River at or near Harrisburg. The capital stock of this company

was fixed at \$200,000, but authority was given to increase it to \$500,000, if such a sum might be required to finance construction. A provision of the original act provided that if net earnings should ever exceed twelve percent upon invested capital a corresponding reduction in tariffs should be made. The State reserved the right of purchasing the railroad at any time within thirty years of the date of its incorporation. A capital stock tax was exacted and also a levy of eight percent was to be made upon all dividend payments in excess of six percent. Unless work should be started within three years and one track be completed within seven, the charter would become null and void. This condition could not be fulfilled, so amendatory acts extended the respective time limits of commencing the work and placing the railroad in operation. In 1835, an extension from Carlisle to Chambersburg was authorized, and the following year the Cumberland Valley Railroad was empowered to construct a bridge across the Susquehanna at Harrisburg and connect with the Harrisburg, Portsmouth, Mount Joy and Lancaster Railroad and also the Pennsylvania Canal. At the same time, the right to increase capital stock to \$800,000 and to borrow \$400,000, was formally granted. In 1838

the legislature recognized the advisability of lending State aid to certain railroad projects, and the Governor was authorized to subscribe, on behalf of the Commonwealth, to two thousand shares (\$100,000 par) of the capital stock of the Cumberland Valley Railroad.

The road was completed from Carlisle to a point within one and one-half miles of the Susquehanna River on August 12, 1837, and between Carlisle and Chambersburg on November 16, 1837. Trains were first run into Harrisburg on January 16, 1839.

The bridge over the Susquehanna at Harrisburg was destroyed in 1845 and an Act of relief was passed by the legislature, authorizing the Cumberland Valley Railroad Company to borrow \$60,000 to be used in its reconstruction. To induce persons to advance funds to the company, a \$50 loan was given the voting rights of a share of stock. In the foregoing Act it was stipulated that the Cumberland Valley stock held by the State should be transferred and vested again in the company, for the purpose of subsequent sale to aid in financing the rebuilding of the bridge. Further aid in this direction was granted in 1846 through additional acts being passed, providing for loans of \$30,000 and \$80,000. In 1848, an increase of \$450,000

in the capital stock was permitted in order to enable the company to make much needed improvements to roadway and track. The following year an issue of preferred stock was legalized. The funds raised from the sale of these shares were used to meet maturing obligations. For the next few years, the Cumberland Valley Railroad was able to carry on its business without invoking aid from the legislature, to authorize new financing. In 1857, however, the company became desirous of extending its road south of Chambersburg to a connection with the Baltimore and Ohio Railroad in the State of Virginia, and an act was passed empowering it to do so. To carry out the project, additional financing, limited to \$2,500,000, was authorized and the Cumberland Valley was, moreover, permitted to acquire the Franklin Railroad.

The Franklin Railroad, to which allusion has been made, was chartered by Pennsylvania during 1832, and later Maryland conferred corporate privileges upon it. Under the franchises so granted, the Franklin Railroad Company constructed a line of railroad between Hagerstown, Maryland, and Chambersburg, Pennsylvania. It was completed during 1840, and about ten years later, the company became financially embarrassed, and after the road had been operated for a short time by trustees, the property was sold under court order at a public

auction. The property was then operated by the Chambersburg and Hagerstown Railroad Company, and they were authorized to issue preferred stock and bonds to secure funds to rehabilitate the road, for it had fallen into a state of complete delapidation. In granting this privilege, it was stipulated that if the road had not been placed in a condition fit for operation of trains by April 1, 1857, all the franchises and privileges granted by the States of Maryland and Pennsylvania should be revoked. This was done and the road later passed into the control of the Cumberland Valley. The Franklin Railroad's property and franchises were later, formally merged with the Cumberland Valley, and the former company ceased to exist.

Martinsburg and Potomac Railroad Company.

Organized in 1870, and completed its road from the Potomac to Martinsburg in 1873. It was sold under foreclosure proceedings in 1887, and purchased by interests affiliated with the Cumberland Valley. It was reorganized on March 17, 1888, as the Cumberland Valley and Martinsburg Railroad Company and was extended to Winchester the following year.

Dillsburg and Mechanicsburg Railroad Company.

Organized November 1, 1871; length of line-- seven and seven-tenths miles. Leased to Cumberland Valley Railroad for nine hundred and ninety-nine years.

Mount Alto Railroad Company.

Organized November 14, 1871. This railroad extends from a junction point with the Cumberland Valley to Waynesboro, Pa., and with a small branch between Ledy and Mount Alto Park. This road was built during 1872 and 1873. It is operated in the interests of the Cumberland Valley.

Southern Pennsylvania Railway and Mining Co.

This company was incorporated February 1, 1873. Its railroad extends from Marion to Richmond and from Mercersburg Junction to Mercersburg. The Southern Pennsylvania Railway and Mining Company is leased to the Cumberland Valley Railroad for one hundred and ninety-nine years.

The Cumberland Valley Railroad is controlled by the Pennsylvania Railroad Company through ownership of the larger portion of its capital stock.

Tyrone and Clearfield Railroad Company.

The company which commenced the construction of this road was incorporated by special charter, dated March 23, 1854, with an authorized capital stock of \$30,000, and power to construct a road from Tyrone on the Pennsylvania Railroad, thence by Emigh's Gap, and the shortest and most practicable route to the connection with any railroad leading to Lake Erie; conditioned that the line should not be located northwardly nor eastwardly of the located route of the Sunbury and Erie Railroad. The company was allowed to increase its capital stock, from time to time, as the exigencies of work might demand, and was further authorized in 1857, 1859, and 1861, to issue bonds secured by a mortgages, up to \$500,000.

In 1861, a bill was passed by the Legislature of Pennsylvania commuting the tonnage tax paid by the Pennsylvania Railroad Company, and therein it was stipulated that they should purchase six percent bonds of certain railroad companies to the amount of \$850,000. In the distribution of this sum, \$75,000, was apportioned for the Tyrone and Clearfield Railroad Company, and further advances were subsequently made, whereby ownership was practically established, and in July, 1862,

that portion of the road then completed between Powelton and Tyrone (16 miles) passed into the hands of the Pennsylvania Railroad Company. By 1869, the line had been extended to Clearfield. The entire share capital and debt of the Tyrone and Clearfield Railroad Company is held by the Pennsylvania, and in addition, the former is leased to the latter for a term ending January 1, 1932.

The Moshannon and Clearfield Railroad Company was merged with the Tyrone and Clearfield on May 23, 1884,

Bald Eagle Valley Railroad Company.

This company is a consolidation of the Bellefonte and Snow Shoe Railroad Company and the Bald Eagle Valley Railroad Company, approved March 25, 1861. The former company owns a twenty-one mile railroad from Snow Shoe Intersection, on the Bald Eagle Valley Railroad, to Snow Shoe, and has trackage rights from Milesburg to Bellefonte, four miles. It was originally incorporated, in 1839, under the title of Allegheny, Bald Eagle Railroad, Coal and Iron Company; the name being changed in 1859.

The Bald Eagle Valley Railroad Company,

proper, was originally chartered as the Tyrone and Lock Haven Railroad Company. The capital stock was limited to \$50,000, but the company had the right to double this amount if necessary. A mortgage of \$300,000, might be made upon the company's property should it required. The Tyrone and Lock Haven was empowered to construct a railroad between Lock Haven and Tyrone, and southward to the Maryland boundary line and eastward to Williamsport, should it wish to undertake this additional work; something that never was done. In 1859, a further issue of bonds, to the sum of \$500,000, were sold. The road went into the hands of the receivers and was sold in January, 1861, to a Mr. Philip M. Price, who conveyed the property and franchises thus received to a company which was styled the Bald Eagle Valley Railroad Company. This company received aid through the commutation act of 1861. It was leased to the Pennsylvania, in 1864, for ninety-nine years. The following year, the road was in operation throughout its entire length.

Lewisburg and Tyrone Railroad Company.

This railroad extends from Milesburg, on the Bald Eagle Valley Railroad, to Montandon, on the

Philadelphia and Erie. It is leased to the Pennsylvania for ninety-nine years, ending January 1, 1880.

Many miles of line, controlled by the Pennsylvania Railroad, cover the coal areas north and west of Tyrone, but this total is composed of a mass of small branches, and so detailed mention of them is out of question in a paper of this nature, which is subject to serious limitations of time and space.

Sunbury and Lewistown Railroad Company.

This company built a railroad from Selinsgrove, on the Northern Central, to Lewistown, a distance of forty-three and one-half miles, and when completed leased it to the Pennsylvania Railroad Company, the lessees agreeing to furnish the equipment and work the road at cost. Authorized capital stock--\$500,000.

Mifflin and Centre County Railroad Company.

Chartered in 1860, to build a railroad from Lewistown to Milesburg, but only a line from Lewistown to Milroy (13 miles) has been constructed to date. The Pennsylvania Railroad Company acquired this railway through lease, in May, 1865.

Bedford Railroad Company.

A company had been incorporated, prior, to build a railroad from Hopewell to Bedford, and it was provided in the commutation act of 1861, that the Pennsylvania Railroad should aid the construction of this line through an advance of \$100,000; receiving in return its six percent first mortgage bonds. In July, 1863, twelve and one half miles of the road between Hopewell and Bloody Run were completed and opened for traffic; the road was extended in a subsequent year to Mount Dallas, one mile. This much of the route has since been operated by the Huntington and Broad Top Mountain Railroad Company, but the forty-five mile extension from Mount Dallas to Cumberland, Md., passed into the control of the Pennsylvania Railroad; it forming their "Bedford Division."

BRANCH LINES OF THE PENNSYLVANIA RAILROAD DIVISION,
BETWEEN ALTOONA AND PITTSBURGH.

Ebensburg and Cresson Railroad Company.

Incorporated March, 1859, for the purpose of constructing a railroad from Ebensburg to Cresson. This company was one of the several aided by the Pennsylvania in accordance with the terms of the act to commute the tonnage tax. The original capital stock of this company was \$100,000, and the directors of the Ebensburg and Cresson Railroad were empowered to issue bonds up to an amount equal to the share capital of the road. Upon the completion of the road in July, 1862, it was leased to the Pennsylvania Railroad Company.

Other branches intersecting the main line between Cresson and Blairsville are:

(1) Cambria and Clearfield Railroad Company, extending from Cresson to the Clearfield coal district. Chartered--1887.

(2) Cresson, Clearfield County and New York Short Route Railroad Company. Chartered in 1882.

(3) Ebensburg and Black Lick Railroad.

(4) Cresson and Irvona Railroad Company.

Western Pennsylvania Railroad Company.

Work was commenced on the road subsequently owned by the Western Pennsylvania Railroad Company, and by it transferred to the Pennsylvania Railroad Company, under a charter granted in 1853, to the North Western Railroad Company. The capital stock was limited to \$2,000,000, and its bonded debt to the same sum. The various counties through which the road might pass, were empowered to buy stock in this company, up to an amount not to exceed ten percent of the assessed valuation thereof. The proposed line of road was from some point on the Pennsylvania or Allegheny Portage Railroad, at or west of Johnstown, via Butler to the Ohio boundary of Lawrence County, Pennsylvania. In 1854, the City of Philadelphia was authorized to subscribe for \$750,000 shareholdings in the North Western Railroad Company; which was done, and subsequently lost through the foreclosure of mortgage.

In 1856, a further issue of twenty thousand shares was legalized, it being specifically provided at that time, that any line connecting with the North Western Railroad Company might indorse its bonds to the extent of \$1,000,000. In 1859, though having done but little towards the construction of its line, the North Western

Railroad became financially embarrassed and was sold in pursuance of a decree of the Supreme Court of Pennsylvania. It was purchased by Mr. William L. Hirst, a trustee acting for the bondholders, and conveyed to a new organization, the Western Pennsylvania Railroad Company, chartered by Special Act of the State Legislature, in 1860, with a capital stock of \$3,000,000, and empowered to create a mortgage debt of \$2,000,000.

In 1861, the Pennsylvania Railroad Company appropriated \$250,000 towards purchasing six percent bonds of the Western Pennsylvania Railroad Company, and in August, 1865, further aided the latter company through purchase of stock and indorsement of bonds. In August, 1865, the section of the road lying between Freeport, on the Allegheny River, and Blairsville, was transferred to the Pennsylvania Railroad under lease.

Authority was granted to the Pennsylvania Railroad, during 1864, to dispose to any railroad incorporated by the Commonwealth, any or all sections of the western division of the Pennsylvania Canal, and to further the possibilities of consummating a sale, the vendee might increase share capital and funded debt \$1,000,000, each, in order to raise funds to make the purchase. In accordance with this legislation and

the determined desire of abandoning the western division of the canal upon the extension of the Western Pennsylvania Railroad to the Allegheny Valley Railroad, the Pennsylvania Railroad Company sold the old bed of the canal west of Lockport, and during 1866 the line was extended from Freeport to Allegheny City; in 1871, from Butler Junction to Butler; and in later years from Blairsville to Conemaugh. In the early '80s, extensive grade revisions were made on this line, and the maximum gradients reduced from one percent to four-tenths of one percent. The larger portion of through freight traffic interchanged between the Pennsylvania Lines East of Pittsburgh and the Northwest System of the Western Lines is routed via the Western Pennsylvania (West Penn as it is generally termed) from Conemaugh to Allegheny City.

It is leased for a period of fifty years ending June 1, 1933. Net earnings are paid to the lessor as rental. The Pennsylvania Railroad Company owns practically the entire share capital of the Western Pennsylvania Railroad.

Southwest Pennsylvania Railway Company.

This company was incorporated by Act of the General Assembly of Pennsylvania, dated March 16, 1871,

to build a railroad from Greensburg to some point on the West Virginia-Pennsylvania boundary line. Its southern terminus is Fairchance, Pa., and with its numerous branches, in 1890, owned one hundred and eight miles of railroad. It was leased to the Pennsylvania Railroad Company on April 1, 1873.

South Fork Railroad Company.

Chartered July 2, 1890, to construct a railroad from South Fork to Dunlo, eight miles. It was leased to the Pennsylvania Railroad Company, shortly thereafter.

Turtle Creek Valley Railroad Company.

Chartered May 7, 1886, to build a railroad from Trafford to Murrys ville, six miles. Leased to the Pennsylvania Railroad Company upon completion.

Pittsburgh, Virginia and Charleston Railroad Co.

The Pittsburgh, Virginia and Charleston Railroad Company was incorporated to construct a railroad from Pittsburgh, via Monongahela City and Brownsville, to the northern boundary of West Virginia. Work was commenced in 1871, and the line completed to Homestead in 1872; to Monongahela City in 1873, and to West

Brownsville. Later additions to the lines of this company were the Redstone Branch and the Brownsville Railroad, a seventeen mile line between Brownsville and Mount Braddock. The Pittsburgh, Virginia and Charleston Railroad Company is leased by the Pennsylvania; net surplus being paid by the lessee as rental.

Allegheny Valley Railroad Company.

This company was originally incorporated as the Pittsburgh, Kittanning and Warren Railroad Company, with power to locate and construct a railroad from the Allegheny River, at or near the borough of Franklin, to the Ohio River, near Beaver. The capital stock was authorized at from \$2,000,000, to \$5,000,000, as necessity might dictate. The charter would become null and void unless work was started within five years and completed within ten. Little progress was made during the next decade and accordingly the company, in 1847, applied to the legislature for a modification of the time limit provisions; which were made as requested. In 1852, the corporate title was changed to the Allegheny Valley Railroad Company, and a law was passed permitting those counties which would be served by the proposed route, to subscribe to the capital stock of the railroad company, up to an amount equal to ten percent of the assessed valuation of property in the respective counties. If

county bonds were given in payment for such purchases of stock, those bonds should be exempt from taxation until the railroad company was earning net profits of six percent. A further stipulation of this act of 1852, permitted an extension from Warren to the New York boundary line, and connection with any railroad of that State.

In 1854, the Allegheny Valley was empowered to issue bonds up to an amount equal to its share capital. Later, preferred stock was sold. The Allegheny Valley Railroad suffered severly from the panic of 1857, and was unable to meet its fixed charges. The extension from Kittanning to Oil City, undertaken in 1863 and completed in 1868, resulted in the Allegheny Valley Railroad being heavily burdened by current debts which exceeded \$2,000,000 on account of new construction alone, but in 1868 and 1869, the Pennsylvania, the Northern Central and the Philadelphia and Erie agreed to aid the Allegheny Valley in extinguishing this heavy incumberance, and authority was secured from the legislature, to surrender \$3,500,000 of Sunbury and Erie bonds, then held by the state, and substitute therefor, those of the Allegheny Valley, conditioned that all bonds thus substituted should have the endorsement of the three railroads first mentioned above. The same act of the legislature authorized

the issue of \$10,000,000 first mortgage bonds to finance the construction of the "Low Grade Line" from Red Bank to Driftwood, one hundred and ten miles. This line connects the Allegheny Valley with the Philadelphia and Erie Railroad, crossing the summit of the mountains on very easy gradients. From the date of its construction, to the present time, the building of a low grade line to connect Red Bank with some point on the Fort Wayne Route near the Ohio-Pennsylvania Boundary has been given periodic consideration, but nothing has been done towards actually securing such a route.

The Driftwood to Red Bank line was constructed under a charter granted to the Pittsburgh and Susquehanna Railroad Company, and was placed in operation on June 1, 1874.

On May 2, 1884, the Allegheny Valley Railroad was placed in the hands of the receivers, and seven years later the property was sold under foreclosure proceedings. The purchasers reorganized under the name of the Allegheny Valley Railway Company, on February 5, 1892.

The Pennsylvania Railroad Company controls the Allegheny Valley through ownership of stock.

NORTHERN CENTRAL RAILWAY COMPANY.

York and Maryland Line Railroad Company.

The York and Maryland Line Railroad Company was incorporated by the State of Pennsylvania in the year of 1832, to build a railroad from the city of York southward to the Pennsylvania-Maryland boundary line. The capital stock was limited to \$500,000, and in 1835, the company was empowered to borrow \$400,000. In 1837, the York and Maryland Line was declared, by the legislature, to have perpetual trackage rights between Wrightsville and York, over the Wrightsville, York and Gettysburg Railroad, providing the former would grant similar use of its line to the latter. In 1853, authority was granted to increase the funded debt, and also to subscribe to the capital stock of the Susquehanna Railroad Company.

Baltimore and Susquehanna Railroad Company.

This is the portion of the Harrisburg to Baltimore line of the Northern Central Railway, lying within the state of Maryland. The charter to this Baltimore and Susquehanna Railroad Company was granted in 1827, and its line constructed in ~~1831~~-1838.

York and Cumberland Railroad Company.

Incorporated in Pennsylvania, April, 1846, with a capital stock of \$1,500,000, and with authority to construct a line from York to unite with the Cumberland Valley Railroad at some point between Mechanicsburg and the Susquehanna River.

The Susquehanna Railroad Company.

Incorporated in 1851, to construct a railroad from a connection with the Pennsylvania or the York and Cumberland, to Sunbury, and to build extensions, if desired, to "points opposite" Williamsport and Wilkes-Barre. The capital stock was fixed at 30,000 shares of \$50. par value, but with the right to make necessary increases and also to issue, if occasion required, \$2,000,000. 7% first mortgage bonds. A charter provision required construction start within three years and be completed within eight. In 1852, the roads geographically allied with the Susquehanna Railroad Company, viz., the York and Cumberland, the York and Maryland Line, and the Wrightsville, York and Gettysburg Railroad Companies, were empowered by law to subscribe to the capital stock of the new company or to loan it a sum not to exceed \$500,000.

and in the same year the Legislature of Maryland, fully appreciating the advantages which must accrue to the city of Baltimore from the construction of the Susquehanna Railroad, authorized the City Council of Baltimore to aid the project by the loan of city bonds in a sum limited to \$500,000.

In 1854 the Legislatures of Maryland and Pennsylvania both passed Acts empowering the four companies just discussed to unite their various properties and consolidate their franchises under the title of the Northern Central Railroad Company. It was distinctly provided that obligations of the constituent companies should be assumed by the Northern Central in such manner as might be satisfactory to all. The capital stock was fixed at \$8,000,000. though the company was permitted to issue mortgage bonds in as large amounts as necessary. The Pennsylvania Act of incorporation carefully provided against possible discrimination by the new line in favor of Baltimore to the disadvantage of Philadelphia, and also stipulated that should the merger not be executed, then the Susquehanna Railroad might unite with the Sunbury and Erie, conditioned however, that in such an event, that portion of the Susquehanna Railroad's line lying

south of Dauphin should be conveyed to the York and Cumberland Railroad Company. Meanwhile the Maryland Legislature enacted that when the consolidation had been duly recorded, the Northern Central Railroad might execute a mortgage to the State of the entire line of its road, and pledge the revenue thereof to secure the annual payment of \$90,000 interest.

Provision was made for extinguishing such annuity within ten years upon full payment of \$1,500,000.

In February, 1863, the Northern Central Railway Company leased for nine hundred and ninety-nine years the Shamokin Valley and Pottsville Railroad, extending from Sunbury to Mount Carmel, a distance of 28 miles, the lessees guaranteeing the interest upon bonded debt and further agreeing to pay a 6% yearly dividend upon share capital. In May of the same year, the Northern Central leased for a like period, the seventy-eight mile line of the Elmira and Williamsport Railroad Company, agreeing to meet payments of principal and interest upon funded debt, pay 7% yearly dividends upon the guaranteed and 5% on the common stock, and in addition pay all taxes and advance a certain sum to maintain the separate organization of the lessor. In 1866,

the unexpired term of leases held by the Erie Railroad Company for the Elmira, Jefferson and Canandaigua and Chemung Railroads were assumed by the Northern Central Railway Company, the rental of the former being \$25,000, and the latter \$30,000 per annum. The leases of the latter companies proved unsatisfactory, and during 1872 the Northern Central purchased a majority interest in these railroads. To provide the funds therefore, \$2,750,000 7%, fifty year income bonds were sold. Control of Northern Central first acquired through stock ownership and later leased, by P.R.R.

Elmira and Williamsport Railroad Company.

Incorporated June 9, 1832. The line owned by this company extends from Williamsport, Pa., to Elmira, N.Y., a distance of seventy-eight miles. This road was foreclosed and reorganized in 1860, and in May, 1863, was leased to the Northern Central for a period of nine hundred and ninety-nine years.

Chemung Railroad Company.

Incorporated by the State of New York, in May, 1845, to build a railroad from the head of Seneca Lake to a connection with the Erie Railroad in Chemung County.

The line was opened in 1849, and had been leased, while under construction, to the Erie Railroad Co. for a period of ten years. Upon expiration, the lease was renewed for twenty years, but was forfeited in May, 1872, and the property passed to the Northern Central Railway, who although nominally lessee, also own a controlling interest in the Chemung Railroad. The Elmira, Jefferson and Canandaigua was acquired in identically the same way.

Shamokin Valley and Pottsville Railroad Company.

This railroad extends from Sunbury to Mount Carmel, twenty-eight miles. It was leased to the Northern Central Railroad, in January, 1863, for nine hundred and ninety-nine years, the lessees covenanting to pay six percent yearly dividends upon the company's stock, and assume its liabilities.

Lykens Valley Railroad Company and Summit Branch Railroad Company.

This last named company was formed for the purpose of operating the Lykens Valley Railroad, a twenty mile line extending between Millersburg and Williamstown. In 1880, the property came under the control of the Northern Central Railway Company.

The Union Railroad Company.

This railroad extends from Baltimore to Bay View Junction (9.62) and connects the Northern Central and the Baltimore and Potomac Railroads with the Philadelphia, Wilmington and Baltimore Railroad, and gives access to the Baltimore harbor. The Union Railroad Company was chartered in 1866, and opened for operation in 1873. The Northern Central managed this company under contract, but the terms proved severe and so the former purchased this terminal line in February, 1882.

Sodus Point and Southern Railroad Company.

Organized under the general railroad laws of New York, to build a railroad from Sodus Point, on Lake Ontario to Gorham, on the Northern Central Railway, a distance of thirty-five miles. The line was opened for operation in January, 1873, and on July 1, 1884, the entire capital stock of this company was purchased by the Northern Central.

Elmira and Lake Ontario Railroad Company.

Formed on December 31, 1886, by the consolidation of the Chemung; Elmira, Jefferson and Canandaigua; and the Sodus Point and Southern Railroads.

PHILADELPHIA AND ERIE RAILROAD COMPANY.

The mileage included in the "Philadelphia and Erie Railroad Division" of 1890 is tabulated below:

Philadelphia and Erie Railroad. Sunbury to Erie.	287.56 mi.
Sunbury, Hazelton and Wilkesbarre Ry. Sunbury to Tomhicken.	43.44 "
North and West Branch Railway. Catawiss to Wilkesbarre.	47.82 "
Pennsylvania Schuylkill Valley RR. (P. & E. Division portion) Pottsville to New Boston and branches.	16.78 "
Nescopec Railroad. Rock Glen Junction to Nescopec.	11.96 "
Lewisburg and Tyrone Railroad. (P. & E. Division portion) Montandon to Lemont.	57.84 "
Bald Eagle Valley Railroad. (P. & E. Division portion) Lemont to Bellefonte.	9.45 "
Susquehanna and Clearfield Railroad. Keating to Karthaus.	24.89 "
Ridgway and Clearfield Railroad. Ridgway to Falls Creek.	27.23 "
Johnsonburg Railroad. Johnsonburg to Clermont.	19.69 "

Total-----546.66 miles.

The Legislature of Pennsylvania, on April 3, 1837, approved an Act incorporating the Sunbury and Erie Railroad Company. The promoters of this company

sincerely hoped that by linking the Susquehanna Canals, which terminated at Sunbury, with Lake Erie, much of the trade which Pennsylvania had lost upon the opening of the canal across New York, would be regained. Nicholas Biddle, President of the United States Bank of Pennsylvania and one of the most eminent financiers of his time, threw every energy into making the Sunbury and Erie achieve the success which had been predicted. He became this railroad's first President and in addition to most capably directing its affairs, placed his personal financial strength behind the new project and enlisted the aid of his bank, through securing its subscription for six thousand shares of stock, a one-tenth interest in the railroad.

Later in that year financial distaster swept the country, completely paralyzing all corporate activities of the Sunbury and Erie. A charter provision required construction being started not later than June 1, 1838, and completion by June 1, 1847, but their fulfillment proving impossible, the respective time limits were twice extended.

Legislation of 1852 permitted municipalities to subscribe to the stock of this company, and as a

result, sufficient funds were raised to proceed with construction, which was commenced between Williamsport and Sunbury during the same year. Moreover, the act of 1852 sanctioned the building of a branch line to connect with any railway extending to Philadelphia, but it further stipulated that such an auxiliary line would not be permitted to parallel the Susquehanna River between Sunbury and Dauphin or Harrisburg, unless the Susquehanna Railroad Company failed to utilize this route within the specified time limit allowed it to do so.

The charter limited capitalization to \$6,000,000. Such a sum proved inadequate, so during 1853, the Commonwealth permitted an increase of \$2,000,000, in share issuances and a mortgage of \$4,000,000. In authorizing the incorporation of the Cleveland, Painesville and Ashtabula Railroad Company (now part of the New York Central Lines), the State of Pennsylvania commanded that it connect with the Sunbury and Erie's tracks at Erie, and that the latter road be permitted the use of the former's facilities in that city, and moreover, that the Cleveland, Painesville and Ashtabula Railroad should aid the Sunbury and Erie, through purchase of five thousand shares of the latter's stock. This was done and materially aided

the Sunbury and Erie road, though the continued need of money forced it to increase its bonded debt to \$8,000,000. later in the year (1857).

In 1858, the Sunbury and Erie purchased all the portions of the public works still remaining unsold, consisting of the Delaware Division, the Upper and Lower North Branch Divisions, the West Branch Division and the Susquehanna Divisions of the Pennsylvania Canal, for the price of \$3,500,000. Two years later the Sunbury and Erie was given the right to contract with other railroads of the State to conduct the operation of completed portions of its line and construct the remainder of the route. On March 7, 1861, the corporate title was changed to The Philadelphia and Erie Railroad Company, and at the same time it was granted additional privileges relative to financing itself.

On April 23, 1861, a state law was passed permitting one railroad to lease another, and under its provisions, the Pennsylvania Railroad, on January 6, 1862, leased the Philadelphia and Erie for a term of nine hundred and ninety-nine years, the rental being placed at thirty percent of gross earnings from operation of the lessor's line, and with the lessee promising to

complete the projected road, receiving securities of the lessor, in payment. Difficulties caused by the Civil War delayed this work seriously and it was not until late in 1864 that the road was open between the termini.

The terms of the lease proved burdensome and in 1864, they were so modified as to require payment of net operating income as rental, instead of 30% of gross revenues, as before.

UNITED NEW JERSEY RAILROAD AND CANAL COMPANY.

(1) The Delaware and Raritan Canal Company. This company was incorporated by special act of the New Jersey legislature, February 4th, 1830. The capital stock authorized was \$1,000,000. and the company was empowered to construct a canal between the two rivers named in its corporate title, as soon as subscriptions for five thousand shares (\$100 par) had been received, and \$5. per share paid in. The company was given the right to improve the river channels below the points of confluence with the canal, should it wish to do so, and was permitted to use the water of the Delaware River in its canal. This to be effected by the construction of feeder channel, four feet by thirty feet in cross section.

The uncertainties of such an enterprise led the state to granting the Delaware and Raritan Canal Company a monopoly in the operation of canals in their territory. An additional stipulation in the charter permitted the sale of five thousand more shares, to raise an extra \$500,000. should this sum be required at any time. The state reserved the right to purchase a one-quarter interest in the canal, and in such an event might choose two of the five directors. Should

only smaller holdings be acquired, then it might appoint only one director.

The State reserved the right of purchasing the canal outright, at any time within thirty years of its completion, at a price to be set by a Board of six men, half of whose members were to be chosen by each of the negotiating parties. The price was to equal the value of the canal. By a charter amendment of February, 1831, the time limit on this privilege was advanced to fifty years. This Act also provided that the Canal Company should render quarterly accounts to the State and should pay into the State Treasury a tax of eight cents per passenger, eight cents per ton of merchandise freight, and two cents per ton of low grade freight, and in consideration of payment of such a tax, should be excused from meeting other State levies.

By the Act of February, 1831, the consolidation of the stock of the Delaware and Raritan Canal Company with that of the Camden and Amboy Railroad and Transportation Company was legalized, and the shares of the two companies declared joint-stock and should, in every way, share rights and liabilities equally. This merger to be effective upon formal certification to

the Governor of New Jersey that it had been approved by a seven-eighths vote of the stockholders of each company. Dissenting minority stockholders were to have the right of receiving par value upon their stock (minus accrued interest) upon surrendering their certificates to the corporation's Treasurer. This Act of consolidation, generally termed "The Marriage Act," further specified that should one of these two companies' routes be incomplete at the termination of a specified time, then the property of both should be forfeited to the State. Other sections of the Act placed the maximum fare from New York to Philadelphia at \$3.00, and stated that the consolidation did not impair the State's right of taking over these properties.

The canal extends from Bordentown, on the Delaware, via Trenton, Princeton, and East Millstone to New Brunswick, at the Raritan River outlet. It is forty-three miles in length and cost close to three million dollars to build. There are eighteen locks required. The feeder canal extends alongside the Delaware from Raven Rock, N. J., about twenty-five miles north of Trenton, to its junction with the main waterway, at this last mentioned city.

The canal was opened for operation in 1834.

(2) The Camden and Amboy Railroad & Transportation Co. was chartered on February 4, 1830, the same day as the incorporation of the Delaware and Raritan Canal Company. A bitter fight had been waged in the New Jersey legislature between the supporters of these two companies, for each sought exclusive rights for supplying transportation services across the state. Though neither was given such a monopoly, the state, to encourage investment in the enterprises, did grant the one exclusive rights for rail, and the other, for waterborne transportation between the Delaware and the Raritan Rivers.

The capital stock was limited to \$1,000,000, the shares having a par value of \$100. The railroad to be built by this company was to extend from Camden to the Raritan Bay. Similar to provisions included in the charter of the Delaware and Raritan Company, the Camden and Amboy was given the right to increase outstanding capital stock to \$1,500,000, if necessary. The conditions regarding purchase by the state are identical in this case to those previously outlined for the Canal Company, and differ relative to purchase of

share holdings only insofar as to provide that if the State of New Jersey had not taken advantages of its subscription opportunities by January 1, 1831, its entrance as a stockholder thereafter was conditioned upon consent of a majority vote of the holders of shares.

The traffic tax to be exacted of the Camden and Amboy was placed at ten cents per passenger and fifteen cents per ton of freight, this to be removed in the event of the State ever chartering a competing New York to Philadelphia line. Construction of the road must be commenced within two years and completed within nine or charter became null and void.

The original act was amended in February, 1831, and in lieu of the State subscribing to the stock of the company, it was to transfer to the State, one thousand shares of stock, paid for by the Camden and Amboy Company. The State to hold the certificate for this stock and to receive dividends thereon, ~~and~~ might elect one director, but was to enjoy no other privileges. These shares were to be returned to the Company as soon as any competing line might be constructed.

Under the act providing for the consolidation

with the Delaware and Raritan Canal Company, one thousand shares of stock in the consolidated company were to be given to the State under conditions similar to the former ones. It was further provided that no competing roads would be chartered during the corporate existence of the Camden and Amboy Railroad and Transportation Company, but that the New Jersey Railroad and Transportation Company and laterally intersecting roads were not to be considered as being competitors. The Act required the Camden and Amboy to build a line from the Raritan Bay terminus to New Brunswick to connect with the line from the latter point to the Hudson River, this branch to be completed as soon as the Jersey City - New Brunswick line might commence operations.

Construction of the Camden and Amboy's line was started from a point near Bordentown in the latter part of 1830 and had been completed to South Amboy by the end of 1832. The extension southwestward to Camden was placed in service on the first day of January, 1834. During the previous year, a through route from New York to Philadelphia had been provided by the use of steam boats from South Amboy to New York and from Philadelphia to Bordentown (operated in the interests of the railroad)

in conjunction with the railroad extending from Bordentown to South Amboy.

The famous locomotive, "John Bull", was placed in service on the Camden and Amboy Railroad in 1831, and so has the distinction of being the first one in use on any constituent part of the present Pennsylvania System.

In 1837, the United Delaware and Raritan Canal and Camden and Amboy Railroad and Transportation Companies were authorized to build a line from New Brunswick to Trenton, and from Trenton to Bordentown. A traffic tax was to be exacted of business carried over this new line; the charges being identical in amount and subject to same limitations as for South Amboy to Bordentown regulations. The passenger tariffs between points on this New Brunswick Trenton - Bordentown line should not exceed five cents per mile. The Act of 1837 was contingent upon acceptance by the Directors of the two united companies, but to provide additional incentive for so doing, the company in such an event, would be released from the obligation to construct the South Amboy - New Brunswick branch.

In 1842, differences of opinion regarding the tax arose, but were settled by the New Jersey legislature deciding that the State was entitled to receive fifteen cents for every ton of freight and ten cents for each passenger carried from the Delaware to the Raritan, but not for traffic between intermediate points. During February 1848, the United Companies were granted the right to subscribe for any amount up to ten thousand shares of the capital stock in the Belvidere Delaware Railroad Company.

Though mentioned in greater detail in the discussion of the corporate activities of the Philadelphia and Trenton Railroad Company, it may none the less be advisable to note here that in 1836, an agreement had been entered into between that company and the United Companies whereby the profits of the two companies were to be divided, share and share alike.

(3) The New Jersey Railroad and Transportation Company. Incorporated by special charter dated March 7, 1832. Its franchise covered the construction of a railroad from New Brunswick to Jersey City and valuable ferry rights and terminal privileges at the latter point. In describing the route which the line should take, the Act included Woodbridge and "a point within half a mile

of the Elizabethtown Market House" among the places through which the line should pass, while the terminus was to be located at some convenient spot on the west bank of the Hudson River, opposite New York City. The tracks, here, to be not less than fifty feet above mean high water.

Tariffs were limited to six cents per ton mile and per passenger mile, and the maximum legal fare between New York and New Brunswick was set at \$1.25. Upon completion, the State was to be given a true and full account of construction costs, since it had reserved the right to purchase the road at a sum equal to the true value, any time during the first thirty years of the company's existence. In setting the purchase price, the original construction expenses plus value of additions and betterments were to be the determining factors. To deal with this matter, the charter provided for a Board of six men, each party being represented by three.

The tax requirements of the act of incorporation are; (1), After the completion of the road, or after five years from the date of chartering the company, a tax of one-quarter of one per cent upon the capital stock of the New Jersey Railroad and Transportation

Company must be paid to the State. (2) After the expiration on ten years, this tax was to be increased to one-half of one percent. (3) In the event of this company forming a through route, in conjunction with other lines, to western and southern points, then the State would exact a tax of twelve cents per ton of freight and eight cents per passenger, This being in addition to the capital stock taxes, though the New Jersey Railroad and Transportation Company was exempted from all state assessments except those mentioned above.

The State of New Jersey reserved the customary right of making a subscription to the capital stock of the railroad company, subject to the limitations that such a purchase should not exceed twenty-five percent of the company's authorized share issuances and that unless made within three years after the formal filing of the location plans of the line, the privilege lapsed. Should the State avail itself of making the maximum purchase of shareholdings, it was then entitled to elect three directors. Up to January, 1837, the State had not purchased the \$275,000 block of stocks set aside for it, and the company being in urgent need of funds, requested the State to relinquish its hold upon these shares, and moreover to lend the New Jersey Railroad and Transportation Company

\$100,000. at six per cent interest per annum, with the understanding that anytime within seven years this loan might be convertible at par, into stock.

The charter authorized \$1,500,000. as the maximum limit of stock issuances, and this amount to be sold only if cost of building the line, forced doing this. In November, 1837, having received formal sanction, the capital stock was increased to \$2,000,000.

Operation of the road between Jersey City and Elizabeth commenced in 1834, and towards the end of the following year, through to New Brunswick. To remove the possibility of the New Jersey Railroad and Transportation Company building competing lines through the territory controlled by the United Delaware and Raritan Canal and Camden and Amboy Railroad and Transportation Company, the latter proposed to the former that it join with them in building the Bordentown to New Brunswick, line, which was to be via Trenton. An agreement to this effect was consummated in 1836, and in 1837, the franchise for this route was secured. It was commenced between Trenton and Bordentown in September, 1837, and completed the following year. The construction of the Trenton to New Brunswick portion occupied the last six months

of 1838, thereby forming an all-rail route from Camden to Jersey City, upon completion of that link.

About 1840, dispute relative to the terms of the traffic tax arose, but the difficulties were settled by the Supreme Court of New Jersey, in an opinion issued in 1842, which provided that the State was entitled to receive eight cents for every passenger and twelve cents for every ton of freight carried between Jersey City and New Brunswick, for five years beginning January 1st, 1839, and after the expiration of that time, the capital stock tax in addition.

In 1846, the Act pertaining to the transit dues was amended to provide that the railroad company pay a tax of eight per cent upon all receipts from taxable traffic (that passing over the entire line from New Brunswick to Jersey City) beginning at a specified date in 1849, meanwhile a yearly payment of \$4000. was ordered to be paid to the State in lieu of taxes on traffic. This change did not effect the stock tax.

Capitalization was increased \$500,000. in the year of 1848. It was specified by the State that this stock should be allotted ratably to present stockholders, in order to give equal opportunities to purchase additional holdings.

Notwithstanding their agreement concerning the building and operation of the New Brunswick - Trenton - Bordentown line, the United Companies and the New Jersey Railroad and Transportation Company were extremely antagonistic to each other. This condition became more and more pronounced until finally it became apparent that compromises must be made by both, which were effected through consolidation legalized February 27, 1867, but ~~dated~~ as valid on the first day of January, preceding. In brief, the United New Jersey Railroad and Canal Company was formed through the above enactment, the purpose of this organization being to secure proper coordination of its four constituent companies. In becoming part of the United New Jersey Company, the New Jersey Railroad and Transportation Company retained its separate organization, but was managed by a Board of Directors on which the four member companies of the former had equal representation.

(4) The Philadelphia and Trenton Railroad Company. Incorporated by special act of the Pennsylvania Legislature, February 23, 1832, to build a road from Kensington (Philadelphia) to Morrisville, Pennsylvania

which town is located opposite Trenton. The capital stock of this company was provisionally set at \$600,000, with the right to increase the issuance up to \$1,000,000. if the additional funds were required by this enterprise. To prevent interference with the Philadelphia to Bristol canal, the location of the railroad was not to be made until the former had been selected by the Pennsylvania Board of Canal Commissioners. The charter limited dividend payments to twelve percent per annum, and placed an eight percent tax upon all such payments in excess of six percent.

The entire line from Philadelphia to the western end of the Delaware River Bridge between Trenton and Morrisville was in operation in 1835. The Philadelphia and Trenton Railroad Company had soon acquired a majority control of the Trenton Bridge Company and the Trenton and New Brunswick Turnpike Company and so loomed as a very dangerous rival to the United Delaware and Raritan Canal and Camden and Amboy Companies. To meet this condition, Captain Robert F. Stockton of the United Companies, purchased large holdings of Philadelphia and Trenton stock, and so caused the two companies to enter into an

an agreement whereby one management directed both properties; profits being shared equally. This contract was signed during 1837.

The Philadelphia and Trenton was lessee of several properties which are mentioned on subsequent pages.

The United New Jersey Railroad and Canal Company. The constituent companies are:- The Camden and Amboy Railroad and Transportation Company, Delaware and Raritan Canal Company, New Jersey Railroad and Transportation Company, and the Philadelphia and Trenton Railroad Company and the various subsidiary companys of the above named organizations. As has been stated, the United Company was formed by Act of the New Jersey Legislature dated February 27, 1867, but effective January 1st, 1867. The entire properties were managed by one Board of Directors, to which each company elected nine members. Profits were equally distributed among the **constituent corporations.**

At the time of the consolidation, the paid up capital stock of the four companies aggregated \$13,000,000, while part paid and "scrip" issuances brought this total to \$16,250,000. The total debt

of all the companies was about \$11,250,000. The United New Jersey controlled 104 miles of double track and 61 miles of single track railroad, together with fifty-five miles of sidings and yard tracks. Canals, totalling sixty-five miles in length, were included among its properties. The rolling stock and floating equipment owned, was as follows: One hundred and ten locomotives, one hundred and eighty passenger cars, forty mail and baggage cars, and fourteen hundred freight cars, Thirty-one steamboats, fifty schooners, and sixty coal barges. The terminal properties at Jersey City, New York, Camden, Philadelphia, Trenton, and South Amboy were valued at more than \$4,000,000, and yearly gross earnings exceeded \$8,500,000, which resulted in earnings of twelve and four-tenths per cent upon total share capital. Canal traffic in the year 1866, for which the above figures also apply, was three million tons, and by rail, eight hundred and twenty-five thousand tons of freight were moved. Four million five hundred thousand passengers were carried by the constituent companies in '66.

Through being lessee of the Connecting Railway Company, extending from Frankfort to West Philadelphia, a direct connection with the Pennsylvania

Railroad was secured, thereby giving a through route from New York to the central west. The associated companies by the medium of stock ownership controlled the following companies: Belvidere Delaware Railroad Company (99.5% of stock held by U.N.J.), Flemington Railroad (76.67%), West Jersey Railroad Company (80.33%), Camden and Burlington County Railroad Company (51%), Freehold and Jamesburg Agricultural Railroad Company (75%), Millstone and New Brunswick Railroad Company (47.0%), Perth Amboy and Woodbridge Railroad Company (52.5%), and the Trenton and Delaware Bridge Company, (\$94,655.56 par value of share holdings.)

During the years of 1867 and 1868, the United New Jersey invested over \$3,500,000. in its roadway and equipment. This money was secured both from surplus and through increasing the company's debt. During this time the state had commuted the transit duties which so seriously hampered its freight traffic, but required in lieu of such taxes, the payment of \$300,000. per year to the State Treasurer. This permitted the United Company to stimulate freight business through charging only moderate rates, heretofore impossible. In 1868, the Company purchased from the State of New Jersey, the Harsimus Cove

property, favorably situated along the Jersey City water front, and containing seventy acres in all. The purchase price was \$500,000, a very reasonable figure, for land fronting 1300 feet on the Hudson directly opposite New York. Large sums of money were spent in improving this area.

Between 1866 and 1870, capital stock outstanding increased more than \$6,000,000. but earnings advanced only \$325,000. To continue dividend payments of ten percent, the company was forced to draw on its surplus. This alarmed many of the stockholders, and since the monopoly held by the United Companies seemed destined to end soon, and they were in a mood which was quite receptive to the Pennsylvania Railroad's proposition of leasing their properties. In making this offer, the Pennsylvania keenly desired to have its own Jersey City outlet. It met with considerable opposition for many contended that the declining earnings (relative to capitalization, of course) were caused by the failure of the Pennsylvania to live up to the terms of the contract for traffic interchange via the Connecting Railway with the United Companies. The opponents of the lease used many arguments in their attempt to prove that the managers

of the United Railroads and Canals could operate the properties at greater profit to the stockholders than might be expected through a lease to the Pennsylvania, but were unsuccessful; though they succeeded in delaying the actual leasing until two years after negotiations had first begun.

The lease was finally approved by the stockholders of the United New Jersey Railroad and Canal Company in May, 1871, and was ratified by the Pennsylvania on June 30, 1871. Dissenting stockholders of the former company obtained injunctions against occupancy by the lessee, and so prevented transferral taking place until December 1st, 1871, but were none the less compelled to meet a deficit of \$930,238.23 which had accumulated meanwhile.

The terms of the lease provided for the Pennsylvania Railroad Company paying 10% yearly dividends upon the \$19,000,000. (approximately) outstanding capital stock of the United Companies, assuming the liability to meet principal and interest payments of funded indebtedness, and assuming all current obligations of the lessor. The lease expires in the year 2870.

The Belvidere Delaware Railroad Company.

The line of railroad owned by this company extends from Trenton to Manunka Chunk, New Jersey. It was chartered by the State of New Jersey, March 2, 1836, but construction was not commenced for fifteen years. November 5, 1855, it was placed in operation between Trenton and Belvidere, and in 1864 extended to Manunka Chunk.

This company acquired the Flemington Railroad and Transportation Company. The Belvidere Delaware Railroad Company transferred all its owned and leased property to the United New Jersey Railroad and Canal Company under lease. Later the lessee assigned its rights and obligations to the Pennsylvania Railroad Company, under agreement of March 7, 1876. Capital stock (1872)--\$995,800.

The Flemington Railroad and Transportation Company.

This road extends from Lambertville, N.J., to Flemington, N.J., a distance of twelve miles. Leased to Belvidere Delaware Railroad Company; with eventual assignment by lessee to Pennsylvania Railroad Company. Capital stock (1872)--\$150,000.

Trenton Bridge Company.

Chartered jointly by the States of New Jersey and Pennsylvania in the year 1798. The bridge across the Delaware, erected by this company, was completed in 1806, at a cost of \$180,000. In 1839, the bridge was altered to accommodate the use of it by the trains of the Philadelphia and Trenton Railroad Company. Previous to this time, the latter company had acquired a majority interest in the Bridge Company.

During 1874-76, a new bridge was constructed between Trenton and Morrisville. In 1891, a second bridge was built alongside, on the same piers, they having been originally built to accommodate a four track structure.

Camden and Burlington County Railroad Company.

This railroad extends from a point of connection with the Camden and Amboy, near Camden, to Pemberton, (twenty-four miles) and also owns branch lines from Mount Holly to Burlington (7.13 miles) and from Ewensville to Vincentown. This road is leased to and operated by the Pennsylvania Railroad Company as lessee of the United New Jersey Company.

Freehold and Jamesburg Agricultural Railroad Company.

The road controlled by this company extends only from Monmouth Junction to Freehold, seventeen miles, but it also operates the properties of the Squankum and Freehold Company, from Freehold to Farmingdale (seven miles), and the Farmingdale and Squan Village Railroad Company, which goes from Farmingdale to Sea Girt, nine miles. Leased to the Pennsylvania Railroad Company by an agreement which provides for the payment to the lessor of all net earnings arising through operation of the property.

Mercer and Somerset Railroad Company.

The originally projected line of this company was twenty-two miles in length, but only the five miles between Somerset Junction, on the Belvidere Delaware line, to Pennington had been built when it was leased to the Pennsylvania Railroad Company, and operated for several years as part of the Belvidere Division, and then the lease was disposed of. At present this company is part of the Philadelphia and Reading System.

Millstone and New Brunswick Railroad Company.

This line diverges from the main route between New York and Philadelphia, at Mile Run Junction, near New Brunswick, and extends to East Millstone, a distance of 6.65 miles. This road was owned by the New Jersey Railroad and Transportation Company and was transferred by them under the lease of 1871, to the Pennsylvania Railroad Company.

Mount Holly, Lumberton and Medford Railroad Company.

This road was constructed from Mount Holly to Medford, six and one-half miles, and upon completion was leased in perpetuity to the Camden and Amboy Railroad Co., the lessees agreeing to pay as rental a 6% dividend upon the share capital of \$95,650. and meet all necessary payments of principal and interest upon the funded debt. The original cost of construction of this road, exclusive of equipment, is given as \$170,650.

Perth Amboy and Woodbridge Railroad Company.

This company formed through agreement of consolidation dated December 19, 1890, and filed with the Secretary of State of New Jersey, January

27, 1891, entered into between the Perth Amboy and Woodbridge Railroad Company and the Perth Amboy and Long Branch Railroad Company. The latter had been incorporated during 1890, and had done nothing more than to acquire some property. The first Perth Amboy and Woodbridge Railroad Company had been incorporated by Special Act of the New Jersey Legislature, March 9, 1855, and had built a railroad from Perth Amboy Junction, on the main line of the New Jersey Railroad Company, near Rahway to Perth Amboy, six miles distant. In 1864, this company leased its line to the New Jersey Company, and seven years later this lease was turned over to the Pennsylvania Railroad Company. By an agreement dated June 26, 1889, the Pennsylvania Railroad Company assumed the operation of the Perth Amboy and Woodbridge Railroad Company as agent for the United Railroads of New Jersey. The reorganized Perth Amboy and Woodbridge Railroad Company continued to be operated in accordance with the contract of 1889.

The New York Bay Railroad Company.

This company was formed by consolidation of the Waverly and New York Bay Railroad Company

and the Waverly and Passaic Railroad Company. The agreement is dated January 30, 1890. This company owns thirteen miles of line in the State of New Jersey, extending between Waverly and Greenville and Waverly and Meadows, and certain small branches.

The two merging companies had been formed during February, 1889, in the interests of the Pennsylvania. Construction of their lines had started during that year and was completed a year or two later. The Pennsylvania commenced operating the New York Bay Railroad Company on a rental basis, March 15, 1890.

Pemberton and Hightstown Railroad Company.

The road constructed under the charter of this company extends from Pemberton to Hightstown, twenty-two miles, is leased and operated by the Pennsylvania Railroad Company as a branch line of the United Railroads of New Jersey. The lease provides for payment of six percent yearly dividends upon the capital stock of the lessor (about \$350,000 then outstanding) and the customary provisions for funded obligations.

Rocky Hill Railroad and Transportation Company.

This company's railroad extends from Monmouth

Junction to Kingston and Rocky Hill, about five miles away. Upon completion the road was leased to the Camden and Amboy Railroad, the lease being later assigned to the Pennsylvania Railroad Company. The yearly rental is six percent upon the cost of the road, \$45,654.16.

Frankford and Holmesburg Railroad Company.

The road built under the charter of this company, from Holmesburg Junction (within the city of Philadelphia) to Bustleton, Pennsylvania, was opened for business in March 1870, and was then leased to the Philadelphia and Trenton Railroad Company, by whom the lease was assigned to the Pennsylvania Railroad Company, in 1871. The terms provide payment of three percent dividend per annum upon \$100,000 full-paid capital stock, and assuming the funded liabilities.

The Connecting Railway Company.

There being no rail connection between the Philadelphia terminals of the Pennsylvania Railroad and the Philadelphia and Trenton Railroad, western freight being sent to or from Jersey City and New York had to be routed via Allentown, between New

York and Harrisburg and so was detrimental to the interests of both those companies. April 4, 1863, the Connecting Railway Company was chartered by the State of Pennsylvania to construct a railroad from some point on the Philadelphia and Trenton Railroad Company to a junction with the Pennsylvania Railroad at Mantua (about one mile west of the present West Philadelphia Station). The charter provided that the Connecting Railway should cross the Schuylkill River above the Girard Avenue Bridge, and if any railroads were crossed at grade, they must be permitted to effect a junction with the Connecting Railway, so as to further facilitate interchange of traffic. The capital stock was limited to \$100,000 (\$50 par value per share) but 6% mortgage bonds might be issued to secure any additional funds needed. Until the road was in operation, the Pennsylvania guaranteed \$1,000,000. of such bonds.

Surveys commenced in 1863, and by October 1867 the line was in operation. It extended from Frankfort to Mantua, six and seventy-five one hundredths miles. Upon completion, the Connecting Railway was leased to the Philadelphia and Trenton and Camden and Amboy Railroad Companies, for legal

interest upon the total cost. The lease was transferred to the Pennsylvania Railroad Company in 1871.

Constituent roads of this group of the New Jersey Lines of 1890, not included in foregoing discussion:

Philadelphia and Long Branch Railroad Co.

Princeton Branch.

New York and Long Branch Railroad Co.

(trackage rights)

Long Beach Railroad Company.

Kensington and Tacony Railroad Co.

Columbus, Kinkora and Springfield RR. Co.

Philadelphia, Germantown, and Chestnut Hill

Railroad Company.

and certain others of negligible size and importance.

LINES IN SOUTHERN NEW JERSEY.

The Camden and Atlantic Railroad Company.

This company operates eighty miles of line, which includes a railroad between Camden and Atlantic City (via Winslow Junction), certain branches in Atlantic City, ferries from Camden to Philadelphia, and the twelve mile railroad of the Philadelphia, Marlton and Medford Railroad Company.

The Camden and Atlantic Railroad Company was incorporated by special act of the New Jersey legislature, March 19, 1852. The authorized capitalization of \$500,000 (in shares of \$50 par) was increased to \$1,000,000. by subsequent amendment. The line between Camden and Atlantic City was opened in July, 1854. A seven mile branch line between May's Landing and Egg Harbor was acquired through lease in 1872 and in January of that year the road purchased the Cooper's Point and Philadelphia Ferry Company at a cost of \$76,800. January 1, 1883, the entire properties owned and controlled by the Camden and Atlantic passed into the hands of the Pennsylvania Railroad Company.

Philadelphia, Marlton and Medford Railroad Co.

Line extended from Haddonfield to Medford, 11.71 miles. The company was chartered November 11, 1881. Its railroad is operated by the Camden and Atlantic Railroad Company under contract.

Cooper's Point and Philadelphia Ferry Company,
and the Kensington and New Jersey Ferry Company.

Both of these ferry companies were acquired by the Camden and Atlantic through purchase; the former in January, 1871, and the latter in May, 1880.

West Jersey Railroad Company.

The West Jersey Railroad Company was incorporated by special act of the New Jersey legislature, February, 1853, with the authority to build a line from Camden to Bridgeton, 37.36 miles. This railroad was placed in service July 25, 1861.

In April, 1868, the West Jersey Railroad Company consolidated its share capital with that of the Millville and Glassboro Railroad Company, which owned a railway between those two cities. In effecting this agreement, a premium of \$184,000 was paid to the Millville and Glassboro Company. Two months

later the West Jersey Company leased the Cape May and Millville Railroad and the Salem Railroad, while in October, 1869, it similarly acquired the Swedesboro Railroad Company. Through exchange of stock, the Ocean City Railroad passed into the control of the West Jersey Railroad in 1885, and on December 23, 1877, the Woodstown and Swedesboro, Maurice River, Salem and Swedesboro, and West Jersey Terminal were merged with the West Jersey Railroad Company. In 1888, the Anglesea Railroad was added to the list of subsidiary companies.

Other railroad companies, variously acquired by the West Jersey system, are the Pleasantville and Ocean City Railroad Company (purchased January 1, 1883), Sea Isle City Railroad Company (constructed by the West Jersey in 1881-82), Ocean City Railroad Company (opened in 1884, merged with the West Jersey in 1885), West Jersey and Atlantic Railroad (built during 1880 and operated by the West Jersey as agent for owning company) and the Alloway and ~~Rumton~~ Runtun Railroad Company (opened in 1891, and controlled by West Jersey Railroad.)

The United Railroads of New Jersey controlled a majority of the stock of the West Jersey Company, and so with the lease of the former to the Pennsylvania,

Railroad Company, the lessee also secured the West Jersey.

The West Jersey Ferry Company.

Established 1802; incorporated January 31, 1849; passed into the control of the Pennsylvania Railroad Company, January 1, 1884. The West Jersey Ferry Company operates ferry-boats between Philadelphia and Camden.

Camden and Philadelphia Steamboat Ferry Company.

Operates between Philadelphia and Camden. Incorporated March 5, 1836; acquired by Camden and Amboy Railroad in 1863, and transferred to the Pennsylvania Railroad Company through the lease of 1871.

PHILADELPHIA, WILMINGTON AND BALTIMORE RAILROAD CO.

Three distinct organizations have borne the corporate title of Philadelphia, Wilmington and Baltimore Railroad Company.

The first company. On April 2, 1831, the legislature of Pennsylvania incorporated the Philadelphia and Delaware County Railroad Company, with an authorized capital stock of \$200,000, and power to construct a railroad from Philadelphia to the Pennsylvania-Delaware line. During the first few years nothing was done by this organization save make surveys for the projected line and prepare estimates of its cost. Additional capital was needed, so the legislature was petitioned to grant such an increase which was done through formal action dated March 14, 1836. At the same time, the corporate title was changed to the Philadelphia, Wilmington and Baltimore Railroad Company. Construction was soon started and was completed in 1837.

The second company. The new organization was formed on February 6, 1838, through the merger of the Wilmington and Susquehanna and the Baltimore and Port Deposit Railroad Companies with the (first)

Philadelphia, Wilmington and Baltimore Railroad Company.

Wilmington and Susquehanna Railroad Company.

The Wilmington and Susquehanna Railroad Company was incorporated by Delaware, January 18, 1832, for the construction of a line across the northern part of the State of Delaware. Its originally authorized share capital was \$400,000. The line between Wilmington and the Maryland boundary was formally opened on July 4, 1837, but this company did nothing towards the construction of a link between Wilmington and the tracks of the (first) Philadelphia, Wilmington and Baltimore Railroad Company at the Pennsylvania state line, and on November 11, 1837, ceded its franchise rights to that line, to the last named company, which quickly threw construction forces into the field, and on January 15, 1838, trains were first run between Philadelphia and Wilmington. The new line provided a through route to Baltimore, for trains were regularly placed in service between that city and Wilmington on July 22, 1837.

Delaware and Maryland Railroad Company.

This company was chartered by the State of

Maryland, March 14, 1832, to build a railroad from the Susquehanna River to the Delaware boundary line. Its capital was limited to \$3,000,000. Construction was started during 1835. The line extends from Perryville through Elkton to a connection with the Wilmington and Susquehanna's line, between Newark, Delaware, and Iron Hill, Maryland. April 18, 1836, the Delaware and Maryland Railroad Company merged with the Wilmington and Susquehanna Railroad Company, the consolidated organization retained the latter's title.

Baltimore and Port Deposit Railroad Company.

Incorporated by the legislature of Maryland, March 5, 1832. Capital stock authorized--\$1,000,000. Franchises granted for a line between Baltimore and the Susquehanna River, at Havre de Grace. Construction started in 1835, line opened in 1836.

The third company. A consolidation of the (second) Philadelphia, Wilmington and Baltimore Railroad Company, with the New Castle and Frenchtown Turnpike and Railroad Company, the New Castle and Wilmington Railroad Company, and Southwark Railroad Company, effected March 28, 1877.

New Castle and Frenchtown Turnpike and RR. Co.

In 1827, the State of Maryland chartered the New Castle and Frenchtown Turnpike Company, while two years later Delaware incorporated the New Castle Turnpike Company. The highway built by these organizations extended from New Castle on the Delaware River, to Frenchtown, Md., on the Susquehanna. The two companies were authorized by their respective states of incorporation, during 1829, to build a railroad to supplement their turnpike. The available records are not definite concerning the line actually built by these companies, but it seems as though, their railroad alone, never formed a complete link between the Susquehanna and the Delaware Rivers. During the early '30s, the New Castle Turnpike and Railroad Company and the New Castle and Frenchtown Railroad and Turnpike Company (as they were termed after 1829) merged to form a second New Castle and Frenchtown Turnpike and Railroad Company.

New Castle and Wilmington Railroad Company.

Chartered February 9, 1839. Line opened in 1852 between the cities of New Castle and Wilmington.

Southwark Railroad Company.

This company was chartered by Pennsylvania, April 2, 1831. It owns a short line of road in the city of Philadelphia. This property was leased to the Philadelphia, Wilmington and Baltimore Railroad (second company) in August, 1853, for six per cent per annum on its construction cost, as rental. In the formation of the third Philadelphia, Wilmington and Baltimore Railroad Company, the Southwark Railroad was one of the merging organizations.

In 1881, the Pennsylvania Railroad Company purchased 217,819 out of a total issue of 235,901 shares of the capital stock of the Philadelphia, Wilmington and Baltimore Railroad Company (the second company). The purchase-money totalled \$17,032,879.25 for holdings having a total par value \$10,890,950. To simplify the organizational structure, the newly acquired company, together with its leased lines, was consolidated, as has been discussed, to form the third Philadelphia, Wilmington and Baltimore Railroad Company.

Other lines controlled by the Philadelphia, Wilmington and Baltimore Railroad Company (1890) but not consolidated with it, are as follows:

Philadelphia and Delaware County Railroad Co.

Incorporated during 1890, but its line was not opened until 1894. This company owns the railroad extending from Fernwood to Newton Square.

Cambridge and Seaford Railroad Company.

This railroad extends from the Delaware-Maryland state line, near Oak Grove, Del., to Cambridge, Md., 27.24 miles. It was constructed by the Dorchester and Delaware Railroad Company (incorporated February 6, 1866) which was sold under court order for foreclosure and reorganized as the Cambridge and Seaford Railroad Company. It is operated by the Philadelphia, Wilmington and Baltimore, for the payment of net earnings in lieu of rental.

Delaware Railroad Company.

This company's directly owned lines extend from Shellpot Crossing to Delmar, on the southern boundary of the state; from Clayton to Smyrna; from Seaford to Oak Grove, and from Townsend to Massey's, Md. This company was chartered June 20, 1836. Its main line was placed in operation during 1860. On January 1, 1857, the Philadelphia, Wilmington and Baltimore Railroad leased the properties of the Delaware Railroad.

Queen Anne's and Kent Railroad Company.

The first charter to the Queen Anne's and Kent Railroad Company was granted by the State of Maryland, March 6, 1856. This was subsequently repealed by Act of March 21, 1867, which rechartered the company with certain changes in the corporate powers granted. The line of road extends from Massey to Centerville. It was sold under foreclosure proceedings, in 1876. The road was attached to the Delaware Division of the Philadelphia, Wilmington and Baltimore Railroad Co., October 1, 1881, which company owned a majority of the capital stock of the Queen Anne's and Kent Railroad Company, and operated the line as agent.

Delaware and Chesapeake Railway Company.

The line owned by this company was built by the Maryland and Delaware Railroad Company (chartered May 10, 1854) between Clayton, Del., and Oxford, Md, and placed in service during 1857. The Maryland and Delaware Railroad Company was sold by court order, December 20, 1877, and was purchased by first mortgage bondholders, who conveyed the property to the Delaware and Chesapeake Railway Company. The Philadelphia Wilmington and Baltimore Railroad Company owns the

entire share capital of the Delaware and Chesapeake Railway Company, and operates the line as agent.

Delaware, Maryland and Virginia Railroad Co.

The Delaware, Maryland and Virginia Railroad Company is a consolidation of the Junction and Breakwater Railroad (chartered in 1857), the Breakwater and Frankford (chartered in 1835, rechartered 1871) and the Worcester Railroad of Maryland (chartered 1853), effected June 1, 1883. The road owned by the company extends from Harrington to Rehoboth, and from Georgetown, Del., to Franklin City, Virginia. Under agreement effective July 1, 1885, the Philadelphia, Wilmington and Baltimore Railroad Company assumed control of the Delaware, Maryland and Virginia Railroad Company.

Baltimore and Potomac Railroad Company.

This company was incorporated by the State of Maryland, May 6, 1853, to build a railroad from Baltimore via Bowie, to Pope's Creek, and also construct a line from Bowie to the District of Columbia. Construction within the District was permitted by Act of the Congress, February 5, 1867. The capital stock the Baltimore and Potomac Railroad Company was originally limited to \$4,000,000.

The continued refusal of the Baltimore and Ohio Railroad to make any arrangements for the interchange of through traffic, at Baltimore, destined to and from Washington, forced the Pennsylvania to secure its own line between those cities. Accordingly the Northern Central Railway Company, through the efforts of Colonel Thomas A. Scott, of the Pennsylvania Railroad, secured control of the franchises issued to the Baltimore and Potomac, and built its several authorized lines. The Pennsylvania Railroad financed the extensions.

Construction was started in 1869, and with the exception of the long tunnel under the city of Baltimore, was completed during 1872. June 29, 1873, the entire railroad was in operation.

In the year 1890, the Baltimore and Potomac Railroad maintained its own corporate individuality, viewed from legal, accounting, and organizational standpoint, though its officials were appointees of the Pennsylvania Railroad Company. In the following year, an agreement was made for the operation of the Baltimore and Potomac by the Philadelphia, Wilmington and Baltimore, and subsequently was merged with the latter to form the Philadelphia, Baltimore and Washington Railroad Company. Though logically not in the category of a Philadelphia, Wilmington and Baltimore controlled property, in 1890, the fact that the Baltimore and Potomac Railroad became such so soon after the close of that year, and had been a Pennsylvania subsidiary for some time, makes it most advantageously catalogued under that heading.

Philadelphia and Baltimore Central Railroad Co.

Incorporated by the State of Pennsylvania,
March 17, 1853. Authorized capital stock - \$2,000,000.
On June 20th, 1854, the Philadelphia and Baltimore
Central Railroad combined with the Baltimore and
Philadelphia Railroad (incorporated by Maryland)
and thereby secured franchises for a line from West
Chester/Junction, near Philadelphia, to Octoraro, Md.,
on the Susquehanna River. Though portions of the
line had been in operation for some time previous,
it was not entirely placed in service until 1869.
The Philadelphia and Baltimore Central is lessee of
the Chester Valley Railroad, which extends from Lam-
okin to Lenni.

The Philadelphia, Wilmington and Baltimore (1890)
operated the property of the Philadelphia and Balti-
more Central Railroad at cost, paying over net earn-
ings to the letter.

Though leased to the Pennsylvania Railroad
Company, the West Chester and Philadelphia Railroad,
together with the latter's subsidiary, the West Ches-
ter Railroad, is operated as part of the Philadelphia
and Baltimore Central Railroad.

PITTSBURGH, FORT WAYNE AND CHICAGO RAILWAY CO.

The Pittsburgh, Fort Wayne and Chicago Railway Company was formed on February 26, 1862, through the reorganization of the Pittsburgh, Fort Wayne and Chicago Railroad Company after the latter company had been sold under foreclosure proceedings. It had been formed, August 1, 1856, by consolidation of the Ohio and Indiana Railroad Company, the Ohio and Pennsylvania Railroad Company, and the Fort Wayne and Chicago Railroad Company.

Ohio and Pennsylvania Railroad Company.

The Ohio and Pennsylvania Railroad Company was incorporated by the State of Ohio, February 24, 1848, and on April 11, 1848, the Legislature of Pennsylvania passed a special act ratifying the Ohio charter into a law of Pennsylvania, insofar as it could apply to the Commonwealth. The State of Pennsylvania required that the Ohio and Pennsylvania Railroad should connect with the Pennsylvania Railroad at or near the city of Pittsburgh, and that the gauge of the two lines should be identical. Special acts of both Pennsylvania and Ohio permitted counties and municipalities to subscribe to the stock of this new company, and in addition, the former permitted the

Ohio and Pennsylvania Railroad Company to borrow money at any rate of interest, not in excess of that which might be authorized by the State of Ohio. An Act of Pennsylvania, dated April 14, 1852, empowered the Pennsylvania Railroad Company to subscribe to the capital stock of the Ohio and Pennsylvania Railroad Company, and another of May 4, 1854, authorized the Pittsburgh and Erie Railroad Company to transfer all rights and franchises for construction south and east of New Castle, and the subscription made by Lawrence County to its capital stock, to the Ohio and Pennsylvania Railroad Company, provided the latter would build a branch to New Castle and comply with certain other conditions. This the Ohio and Pennsylvania refused to do. December 14, 1854, the Commonwealth formally permitted the erection of a bridge across the Allegheny River to enable making a connection with the Pennsylvania Railroad and the Pennsylvania Canal. Supplementary legislation of April 16, 1856, confirmed the consolidation of the various interests between Chicago and Pittsburgh into the Pittsburgh, Fort Wayne and Chicago Railroad Company.

Previous to the year 1862, the legislation of Pennsylvania had, as a rule, merely supplemented that of Ohio, but after that time, the reorganized Pittsburgh,

Fort Wayne and Chicago Railway Company became a corporation under the laws of the Commonwealth, and henceforth sought its corporate privileges principally from the Assembly of that state. In chartering the new organization, Pennsylvania authorized it to take over the franchises and property of the Pittsburgh, Fort Wayne and Chicago Railroad Company and to assume the latter's obligations and make proper adjustments with the shareholders of the old corporation which had been sold by judicial order to meet the claims of the bondholders.

The railroad built by the Ohio and Pennsylvania Railroad Company extended from Federal Street Station, Allegheny, Pennsylvania, via Rochester, Alliance and Canton to Crestline, Ohio, a distance of one hundred and eighty-nine miles. The location was approved by the company's directors during September, 1850, and the line was opened for operation on the eleventh of April, 1853.

Ohio and Indiana Railroad Company.

On March 20, 1850, the State of Ohio, incorporated

the Ohio and Indiana Railroad Company to construct a railroad from Crestline to the western boundary of the State and thence to Fort Wayne, Indiana. The authority given in this act was fully confirmed by the State of Indiana on January 15, 1851.

On February 13, 1851, the State of Ohio authorized the transfer to the Ohio and Indiana Railroad Company of the capital stock of the Great Western Railroad Company, in order to consolidate these companies under the corporate title of the former. (The Great Western Railroad had been incorporated during 1848, to construct a railroad from Mansfield, via Marion and Lima to the Indiana boundary line.) Later in the year, these provisions were carried out.

The Ohio and Indiana Railroad Company placed the line in operation, throughout its entire length from Crestline to Fort Wayne, on November 1, 1854.

Fort Wayne and Chicago Railroad Company.

The Fort Wayne and Chicago Railroad Company, of Indiana and Illinois, was organized under the general law of Indiana on May 11, 1852, and on September 22, 1852, filed articles of association. It was empowered to construct a railroad from the western terminus of

of the Ohio and Indiana Railroad, at Fort Wayne, Indiana, westwardly across the state to a point on the boundary line, near the city of Chicago. On February 3, 1853, the Illinois legislature authorized the extension of the line into Chicago.

Construction progressed westward from Fort Wayne and by February, 1856, the line was in use between that point and Columbia City. Later in the same year it was opened up for the additional distance to Plymouth, but trains were not run into Chicago over the Fort Wayne and Chicago Railroad Company's line until the first day of the year 1859.

Pittsburgh, Fort Wayne and Chicago Railroad Co.

The stockholders of the three foregoing companies agreed to consolidate their properties into a single corporate organization, which assumed the title of Pittsburgh, Fort Wayne and Chicago Railroad Company, upon formation under the general laws of Illinois, Indiana, and Ohio and a special act of Pennsylvania, dated April 16, 1856. During May, June, and July, 1856, the formalities attendant to the merger were carried out.

In March, 1856, prior to the consolidation,

Mr. J. Edgar Thomson, President of the Pennsylvania Railroad Company, had entered into an agreement with the chief executives of the constituent lines of the Fort Wayne route providing for such a consolidation and for advances to be made by the Pennsylvania Railroad.

The records of the Secretary of the Pennsylvania System; Lines West of Pittsburgh state that "at the date of the consolidation the portions of the road from Columbia City to Chicago and from Federal Street Station, Allegheny City, to the passenger station of the Pennsylvania Railroad in Pittsburgh, were unfinished. The consolidated company opened the road as far west as Plymouth November 10, 1856, from which point Chicago was reached via the Cincinnati, Peru and Chicago and the Michigan Southern Roads, the traffic being carried under contract by those companies. The road was completed and opened for operation from Plymouth to Chicago, January 1, 1859."

Through additional purchases of the securities of the Pittsburgh, Fort Wayne and Chicago Railroad Company by the Pennsylvania Railroad, the former company was enabled to erect a bridge over the Allegheny and secured an entrance into Pittsburgh,

in September, 1857. The City of Pittsburgh attempted to exact of the Fort Wayne Company, certain conditions precedent to permitting it to make an actual connection with the Pennsylvania's tracks. These were ignored but the workmen engaged in laying the former's rails, were arrested. An injunction to restrain the city authorities from further interference was granted on March 10, 1858, and on that day the tracks were placed and the passenger trains of the Pittsburgh, Fort Wayne and Chicago Railroad began to use the Pennsylvania's passenger terminal facilities.

The capital stock of the companies which merged to form the Fort Wayne Company is tabulated below:

	Authorized. ---	Issued.
Ohio and Penna.-----	\$3,000,000.	\$2,688,100.
Ohio and Indiana.-----	\$2,000,000.	\$1,504,377.
Fort Wayne and Chicago--	\$2,500,000.	\$1,797,484.

The share capital of the new organization was set at \$16,000,000. As the estate, property and franchises of the several companies were relatively of unequal value, it was stipulated that in the conversion of stock of the original companies into that of the consolidated one, the stockholders of the Ohio and

and Pennsylvania should receive \$120 in the new stock for each \$100 of the old, while the shareholders of the other two companies converted theirs at par.

The road soon became financially embarrassed and decrees of foreclosure were entered by several United States Circuit Courts, during June and July, 1861. An order of sale was issued September 7, 1861, and on October 24, 1861, the entire road was sold at public auction in Cleveland, Ohio, for \$2,000,000, to J. F. D. Lanier, J. Edgar Thomson, Samuel J. Tilden, Louis H. Meyer, and Samuel Hanna, the purchasing committee. The road was transferred to this committee by deed of February 18, 1862, and was in turn conveyed to the Pittsburgh, Fort Wayne and Chicago Railway Company, on March 2, 1862, and on December 31, 1863, it received the franchises of the former organization.

Pittsburgh, Fort Wayne and Chicago Railway Co.

This company was formed by reorganization of the Pittsburgh, Fort Wayne and Chicago Railroad Co. under the authorities of the laws of the four states through which its line passes. The trustees who had purchased the property of the bankrupt Fort Wayne

Company, received \$5,250,000 first mortgage bonds, \$5,160,000 second mortgage bonds, \$2,000,000 third mortgage bonds, and \$6,500,000 capital stock of the Pittsburgh, Fort Wayne and Chicago Railway Company upon conveyance of the title in the roadway and equipment to the latter corporation.

In December, 1862, the Fort Wayne Company entered into an agreement with the Cleveland and Pittsburgh Railroad Company, relative to the joint occupancy of the track between Pittsburgh and Rochester and a subdivision of earnings therefrom. On July 1, 1865, the company purchased of George W. Cass and John W. Marvin, the Cleveland, Zanesville and Cincinnati, previously purchased by these gentlemen at a judicial sale; and at the same time a lease was effected of the New Castle and Beaver Railroad, extending from New Castle to Homewood. A company was incorporated in April, 1864, by the Legislature of Pennsylvania for the purpose of building a road from Mahoningtown, in Lawrence County, to the Ohio State Line. This company was styled the Lawrence Railroad and Transportation Company, and was authorized to connect with other railroads. Two months later, another company of the same name was formed in Ohio to build a line from Youngstown, southeastwardly

to the state line. These two railroads were consolidated in August, 1865, under the name of the Lawrence Railroad Company, which operated the road until 1869, when it was leased for ninety-nine years to the Pittsburgh, Fort Wayne and Chicago Railway Company, the lessees agreeing to properly maintain and operate the road, meet all taxes and to pay the lessors forty percent of gross earnings, with a minimum payment per year of \$45,000. In June, 1869, the Fort Wayne leased the Massillon and Cleveland Railroad, extending from Massillon to Clinton.

From the beginning, it had been the policy to aid connecting lines of the parent company (i.e.,- Pennsylvania Railroad) but acquisition of properties west of Pittsburgh met with spirited opposition from some of its directors. Large holdings of Fort Wayne securities soon dwindled to the point where the Pennsylvania was no longer dominant in that company. Jay Gould, casting about for western tributaries for his Erie Railroad, gained control of the Pittsburgh, Fort Wayne and Chicago Railway Company before the Pennsylvania had an opportunity to make a counter attack. Aided by the legislature of the Commonwealth, through an adroit coup it regained the lost ground, and

at once effected a lease of the Pittsburgh to Chicago line. This experience had a very salutary effect upon those who had previously objected to acquisitions of central western railroad properties, and from that time on, expansion was almost as rapid upon the Lines West of Pittsburgh, as in the case of those East.

This lease was effective June 27, 1869. It provided for the transferral of all owned and controlled property of the lessor to the lessee; assuming the lessee's obligations of all kinds, and the payment of a yearly rental of \$1,380,000; interest at seven percent per annum upon the \$19,714,286 stock of the lessor. The lessee also covenanted to pay all taxes and expenses of keeping up the organization of the lessor, in addition to those chargeable to the New York agencies for the transfer of stock and the registry of bonds; to maintain the road in good condition and to properly operate the railway. In 1871, the Pennsylvania Railroad transferred to the Pennsylvania Company, the control and operation of the Pittsburgh, Fort Wayne and Chicago Railway Company, and other railroads west of Pittsburgh, in which it had been previously interested.

Cleveland and Pittsburgh Railroad Company.

The road of this company is situated partly in Ohio and partly in Pennsylvania, and the special acts relative to its location and construction were obtained from the legislatures of both States. The original charter, procured in Ohio bears the date of March 14, 1836, and under its provisions a company was incorporated to build a railroad from Cleveland, via the most direct route, to some point on the Ohio-Pennsylvania border line, in the direction of Pittsburgh. Unless construction should be commenced within three years and finished within fifteen, the charter privileges became null and void. Practically nothing was done during the first decade of the organization's existence and accordingly, in March, 1845, a supplementary act was passed, reviving and amending the original legislation of 1836. By this last named act, the company was empowered to construct its line as above specified and was authorized also to connect with any other railroad constructed at some point southeastwardly of the city of Cleveland, on the east side of the Cuyahoga River. In February, 1849, permission was given to construct branches to any place within the limits of the counties through which the main line of the Cleveland and Pittsburgh Railroad passed: The following

year, the State of Ohio authorized the building of a branch from Bayard to New Philadelphia, and the Commonwealth of Pennsylvania sanctioned the extension to Pittsburgh. In February, 1851, the Cleveland and Pittsburgh Railroad Company was permitted to build the so-called Akron Branch, or to subscribe to the stock of any company that might construct a railroad along the route proposed for that line. (See the history of the Cleveland, Mount Vernon and Delaware Railroad Company)

December 15, 1862, the Cleveland and Pittsburgh Railroad Company entered into an agreement with the Pittsburgh, Fort Wayne and Chicago Railway Company for a subdivision of gross earnings upon a basis of twenty-six and one-half percent to the former and seventy-three and one-half percent to the latter, from operation of the Fort Wayne's line between Pittsburgh and Rochester, Pa., which was thereafter to be used jointly by the two companies. Under this contract, which was for twenty-five years duration, the Cleveland and Pittsburgh agreed to pay a monthly rental of \$7083.33, for the use of the Fort Wayne Route east of Rochester, and also meet one-half of the maintenance charges for this section of line. In 1866, this agreement was modified insofar as division of gross receipts

was concerned, but the other details remained unchanged.

In 1871, the Cleveland and Pittsburgh was leased to the Pennsylvania Railroad Company, and on April 14, 1873, it was sub-leased to the Pennsylvania Company. The terms of the lease of October 25, 1871, effective December first of that year, provide for payment of \$786,795 per annum to meet the requirements of seven percent interest upon the lessor's capital stock; assumption of all the obligations of the lessor, and agreeing to continue the lease of track between Pittsburgh and Rochester. In addition, the lessee covenanted to pay \$10,000 per year towards defraying the organizational expenses of the Cleveland and Pittsburgh Company. The term of the lease is for nine hundred and ninety-nine years.

In addition to those lines which have already been mentioned, the Cleveland and Pittsburgh owned an extension from Bellaire to Yellow Creek, 43 miles.

Cleveland, Mount Vernon and Delaware R.R. Co.

In February, 1851, a special charter was obtained from the Ohio legislature for constructing a branch railroad from some convenient point on the Cleveland and Pittsburgh Railroad, in Hudson, through Akron to Wooster,

or some other point on the Ohio and Pennsylvania Railroad (later P.Ft.W.&C.Ry.Co.). Authority was given to construct with any railroad running to Columbus, and the Cleveland and Pittsburgh Railroad was empowered to increase its capital stock one million dollars to aid in the prosecution of this work, which was officially known as the Akron Branch of the Cleveland and Pittsburgh Railroad Company. Under this charter, and with a distinct organization, the road from Hudson to Millersburg was built and operated as the Akron Branch until 1853, when the corporate name was changed by court order to Cleveland, Zanesville and Cincinnati Railroad Company. Between 1861 and 1864, the road was operated by a receiver, with sale at public auction in November, 1864, to J. J. Marvin and G. W. Cass. The following year, the road was conveyed to the Pittsburgh, Fort Wayne and Chicago Railway Company, and in 1869, was transferred to the Pennsylvania Railroad Company.

In May, 1869, a company was incorporated under the general railroad law of the state for building a line from Orrville, through Columbus,

to London, Ohio. This company assumed the title of the Pittsburgh, Mount Vernon, Columbus and London Railroad Company, and having purchased, in November of that year, all that portion of the old Springfield, Mount Vernon and Pittsburgh Railroad, extending east from Delaware through Mount Vernon to Millersburg, subsequently bought from the Pennsylvania Railroad Company and the Pittsburgh, Fort Wayne and Chicago Railway Company, the entire Hudson to Millersburg line of the Cleveland, Zanesville and Cincinnati Railroad Company, in consideration of \$1,100,000 in paid-up capital stock of the vendee and also the latter's assumption of the vendor's various obligations, totalling about \$150,000. December 20, 1869, in compliance with a court order, the corporate title was changed from Pittsburgh, Mount Vernon, Columbus and London Railroad Company to the Cleveland, Mount Vernon and Delaware Railroad Company.

The Pennsylvania Railroad Company held a controlling interest in the stock of the Cleveland, Mount Vernon and Delaware Railroad, but completely lost this through the foreclosure and sale of the road in 1882. The road was reorganized as the Cleveland, Akron and Columbus Railroad in 1886.

Erie and Pittsburgh Railroad Company.

The history of the lines owned by this company, begins with the incorporation of the Pittsburgh and Erie Railroad Company, by the Legislature of Pennsylvania on April 21, 1846. This charter permitted the construction of a road from some point in Allegheny County, Pennsylvania, on the Baltimore and Ohio Railroad, or from Pittsburgh, to the city of Erie. In a supplement to the incorporating act, the Pittsburgh and Erie Railroad was prohibited from making connection with any east and west railroad, at its northern terminus, save the Cleveland, Painesville, and Ashtabula Railroad, conditioned however that this latter company should carry freight and passenger traffic originating on the former, over its lines at the same rates as were in force on the Pittsburgh and Erie; and vice versa.

In 1852, the state authorized certain counties to make subscription to the capital stock of the Pittsburgh and Erie Railroad Company. May 4, 1854, the old charter privileges, which had lapsed because of non-conformance with the time limit requirements, were renewed; the company was authorized to mortgage its property, and to transfer its rights and franchises

for construction south and east of New Castle to the Ohio and Pennsylvania Railroad Company, but the latter refused to accept these privileges, in view of certain other terms of the offer. An Act of May, 1855, authorized the Pittsburgh and Erie Railroad to make any agreement with any road between its proposed termini similar to the one in the previous case, and in May, 1857, it made such a disposition of its franchises for Crawford and Mercer Counties to the Meadville Railroad Company.

The charter again became nullified through corporate inaction, but was revived in February, 1859. The company then did some work on the projected line, but failed before construction was completed. The purchasers of the bankrupt line conveyed it to a new corporation, the Erie and Pittsburgh Railroad Company, incorporated April 1, 1858. This organization completed the work started by its predecessor between Greenville and Sharpsville, and continued beyond these cities until the entire railroad was in operation. It extends from New Castle to Girard Junction, where a connection is made with the Lake Shore and Michigan Southern Railroad, over which the Erie and Pittsburgh Railroad has trackage rights into Erie.

Some of the construction north of Jamestown had been started by the Erie and North East Railroad Company; an organization which seems to have been affiliated with the Pittsburgh and Erie Company. The owner company, with its possessions, became a part of the Erie and Pittsburgh Railroad Company, and the work was promptly resumed, and completed to Girard Junction, in 1864, the point of connection with the Lake Shore and Michigan Southern Railroad. The Dock Branch, from Dock Junction to Erie was built during 1863, '64 and '65, and includes the yards and piers and miscellaneous terminal facilities at Erie, in addition to the actual line mileage (3.47 miles) of the extension. In 1870, the Erie and Pittsburgh Railroad Company leased its railroad to the Pennsylvania Railroad Company, for nine hundred and ninety-nine years; the lessee agreeing to pay as rent, \$140,000 per annum, equal to a seven percent dividend upon the \$2,000,000 capital stock of the lessor; and in addition, make a yearly advance of \$2,500 to the Erie and Pittsburgh Company, in order to enable it to maintain a separate corporate organization. The lessee naturally assumed all liabilities of the lessor company and the familiar provisions for reimbursement of the former with the securities of the latter, for all improvements made upon the line.

New Castle and Beaver Valley Railroad Company.

The railroad constructed under the charter of this company extends from New Castle to Homewood, and in 1865, was leased to the Pittsburgh, Fort Wayne and Chicago Railway Company, for ninety-nine years. This lease provides for a payment of forty percent of gross earnings from operation of the lessor's lines to that company; with a minimum amount of such a rental set at \$40,000.

The road was placed in service on October 3, 1863. During the period of construction, the New Castle and Beaver Valley Railroad purchased the bankrupt Pittsburgh, New Castle and Cleveland Railroad Company's property and franchises, and placed its tracks, over a distance of four and one-half miles, on the subgrade prepared by the latter company.

Upon the acquisition of the Fort Wayne Company's properties by the Pennsylvania Railroad, the lease of the New Castle and Beaver Valley Railroad was assigned to Pennsylvania Railroad Company, with subsequent transferral to the Pennsylvania Company, in 1871.

Massillon and Cleveland Railroad Company.

Incorporated in the State of Ohio, October 3, 1868. Its line extends from Clinton to Massillon, 12.23 miles.

and was opened for operation during the year, 1869.

during 1869, it leased its road to the Pittsburgh, Fort Wayne and Chicago Railway Company for a term of ninety-nine years, effective upon the final completion of the line. Delivery took place on June 22, 1869.

The lessor receives forty percent of gross earnings, with a guaranteed minimum of \$20,000 per annum.

The lease was subsequently transferred to the Pennsylvania Railroad; with later conveyance to the Cleveland, Mount Vernon and Delaware Railroad Company, and finally to the Pennsylvania Company.

Ashtabula, Youngstown and Pittsburgh Railroad Co.

This company was incorporated by the State of Ohio, with authority to construct a railroad from Youngstown, on the "Lawrence Branch" of the Pittsburgh, Fort Wayne and Chicago Railway Company, to Ashtabula Harbor, on Lake Erie. In August, 1871, the Ashtabula, Youngstown and Pittsburgh Railroad Company purchased five and one-half miles of the line built by the Liberty and Vienna Railroad Company. The property thus acquired extended from a junction with the Lawrence Railroad, in Youngstown, to the crossing of the Cleveland and Mahoning Railroad, near Girard, Ohio.

Pittsburgh, Youngstown and Ashtabula Railroad Co.

Formed on July 22, 1887, through the consolidation of the Ashtabula, Youngstown and Pittsburgh Railroad, the Alliance, Niles and Ashtabula Railroad, the Lawrence Railroad, and the New Brighton and New Castle Railroad Companies. The Pittsburgh, Youngstown and Ashtabula Railroad Company is leased to the Pennsylvania Company for net earnings. The lessor companies, prior to the merger, had been affiliated roads of the Pennsylvania System.

Terminal properties of the Pittsburgh, Fort Wayne and Chicago Railroad Company, in Chicago, Ill., in the year 1890.

(1) Calumet River Railroad. Chartered, 1883. Its line extends from Hyde Park to Hegewisch, 4.43 mi. Still under construction in 1890.

(2) South Chicago and Southern Railroad Co. Chartered September 13, 1881; in operation October 15, 1887. Total mileage (1890)--10.25 miles.

(3) State Line and Indiana City Railroad Co. This road extends from the Illinois State Line to East Chicago, Indiana, 3.36 miles.

THE PENNSYLVANIA COMPANY.

The Pennsylvania Company directly controls all the Pennsylvania Lines West of Pittsburgh. "The stocks, bonds, leases, contracts and agreements of the lines west of Pittsburgh are placed under the control of the Pennsylvania Company, and all liabilities of the western lines are provided for out of their own earnings and revenues." (x) The policy pursued by the Pennsylvania Railroad Company, throughout the early stages of its history, had been to give aid through stock subscriptions and other material guarantees to roads west of Pittsburgh which might become valuable feeders to the main line. Through such aid, judiciously and seasonably rendered, the Pittsburgh, Fort Wayne and Chicago and the Pittsburgh, Cincinnati and Saint Louis Railroad Companies were enabled to emerge successfully from the pressure of financial embarrassment and take rank among the leading transportation lines of the nation, but in 1869, such determined attempts were made by rival interests to secure control of certain western lines affiliated with the Pennsylvania Railroad, that an immediate change of policy was necessary, and negotiations were entered into, whereby the connecting lines to Chicago, Saint Louis, Cincinnati, Indianapolis, Cleveland and Louisville passed under the immediate

(x) Quoting from page 1, volume 1, series "A"---
"Corporate History of the Pennsylvania Lines West of
Pittsburgh." Compiled by S. H. Church, Asst. Secy.

control and management of the Pennsylvania Railroad Company. The operations of these western lines, controlled either by direct lease, or guaranty, showed during the first year of management by the parent company, only a very slight aggregate profit, and so it was deemed advisable, in order to secure greatest simplicity, efficiency, and economy in the operation of this large property to form a separate organization to care for their needs and interests.

To carry out such purposes, the Pennsylvania Company was incorporated by special act of the Legislature of Pennsylvania April 7, 1870. Its authorized capital stock was \$100,000. On January 26, 1871, the shareholders of the new corporation authorized an increase to \$12,000,000; one-third being common stock and two-thirds, preferred. By 1880, the Pennsylvania Railroad Company having become the owner of the entire issue, the distinction of common and preferred shares became needless, and the preferred stock was retired, through exchange for an equal amount of common. The following year, the capital stock was increased to \$20,000,000.

PITTSBURGH, CINCINNATI, CHICAGO AND SAINT LOUIS
RAILWAY COMPANY.

This company's properties comprised the group of lines known as the Southwest System, until March, 1920, when with the adoption of regional operation, its railroads east of Columbus, Ohio, were transferred to another district. The Pittsburgh, Cincinnati, Chicago and Saint Louis Railway Company was formed by the consolidation of the Pittsburgh, Cincinnati, and Saint Louis Railway Company, the Chicago, Saint Louis, and Pittsburgh Railway Company, the Jefferson, Madison and Indianapolis Railroad Company, and the Cincinnati and Richmond Railroad Company. The new company was incorporated, during 1890, in the states of Pennsylvania, West Virginia, Ohio, Indiana, and Illinois. It was a merger which involved the franchise and property rights of fifty-seven primary companies. The authorized capital stock of the new organization was \$75,000,000; of which \$30,000,000 was preferred and \$45,000,000 common stock.

Pittsburgh, Cincinnati and Saint Louis Ry. Co.

The Pittsburgh, Cincinnati and Saint Louis Railway Company was formed on April 20, 1868, through the consolidation of the Pan Handle Railway

Company, the Holliday's Cove Railroad Company and the Steubenville and Indiana Railroad Company.

(1) Pittsburgh and Steubenville Railroad Company.

A charter was granted to this company, by the State of Pennsylvania, on March 24, 1849, and under its provisions a railroad was constructed from Birmingham (now part of Pittsburgh) to Colliers, a point on the Pennsylvania-Virginia (now West Virginia) boundary, in the general direction of Steubenville, Ohio. The capital stock of this company was set at \$800,000 but necessary increases were permissible. In 1852, an extension into Pittsburgh and the right to connect with railroads at its western terminus, were permitted. Subsequent acts were passed which dealt with the company's finances. The work of construction was commenced under the auspices of the Pittsburgh and Steubenville Railroad Company; but difficulties appear to have been experienced in the expeditious prosecution of the enterprise, and consequently in December, 1857, the Pittsburgh and Steubenville Railroad Company entered into a contract with the Western Transportation Company (incorporated in Pennsylvania, March 15, 1856) providing for a lease of the Pittsburgh & Steubenville Railroad's franchises

and property; it being understood that the Western Transportation Company upon completion of said railroad, should operate it as lessees for a period of twenty years thereafter, paying forty percent of gross earnings as rental. It was further agreed that at the expiration of the lease, the Pittsburgh and Steubenville Railroad Company would purchase from the lessor, all equipment used by it in operating the road. It was found that the work was very heavy and could not be completed within the time limit specified by the act of incorporation, and in 1859, application was made for an extension of ten years. This request was granted. Great delay was experienced in tunnelling under the city of Pittsburgh, in bridging the Monongahela at that city and the Ohio at Steubenville, and the road was not opened for traffic until 1865. Owing to the large construction costs and small business done by the road, when placed in operation, net earnings were insufficient to meet interest charges, and the mortgages were foreclosed and the road sold during 1867. The Pennsylvania Railroad Company was the holder of the greater portion of the Pittsburgh and Steubenville's securities, and so purchased the road, and conveyed it to the Pan Handle Railway Company, an organization

created to manage the properties thus acquired.

(2) Holliday's Cove Railroad Company.

The main line of the Pittsburgh, Cincinnati, Chicago and Saint Louis Railway Company, across what is known as the Fan Handle of West Virginia (seven miles) was constructed under a charter granted to the Holliday's Cove Railroad Company, by the State of Virginia, in March, 1860. The company was empowered to build a road from the western boundary of the State of Pennsylvania, near the village of Collier, Pa., to a point on the Ohio River near Steubenville; and the right to construct a bridge across that river was affirmed. In 1865, the receiver of the Pittsburgh and Steubenville Railroad Company, the Steubenville and Indiana Railroad Company, and the Holliday's Cove Railroad Company entered into an agreement for unifying their properties under one management, as the Pittsburgh, Columbus and Cincinnati Railroad Company.

(3) Steubenville and Indiana Railroad Co.

The Steubenville and Indiana Railroad Company was incorporated February 24, 1848, to construct a railroad from Steubenville, via the Connotton or Stillwater Creeks to Mount Vernon, Ohio, and thence

to the Indiana boundary line, at any point between Wilshire and Fort Recovery. March 12, 1849, a line from Coshocton to Columbus, via Mount Vernon or Newark was authorized, as well as the erection of a bridge over the Ohio River at its eastern terminus, provided the supplementary sanction of Virginia could be secured. Subsequent acts permitted certain towns and counties to assist the project through subscriptions to its securities.

The line was opened from Steubenville to Newark on April 11, 1855. The Ohio River Bridge was not placed in service until 1865; and as has been previously mentioned, this work was done by the Western Transportation Company, lessee of the Pittsburgh and Steubenville Railroad Company. The Steubenville and Indiana Railroad Company also built a short feeder line to Cadiz, from a junction point with the main line, eight miles distant.

In 1859, the company became financially embarrassed, and a suit having been brought for a foreclosure of the mortgage and a sale of the road, a receiver was appointed by the court. Mr. Thomas L. Jewett, president of the insolvent company acted in that capacity. A plan of reorganization was pre-

pared, but before negotiations with the creditors and stockholders had made any real progress, certain holders of the mortgage bonds became impatient and secured a court decree for the sale of this road, which was carried out in February, 1864. It was purchased by representatives of the mortgagees, but the sale was never confirmed by the court and operation of the lines continued in the hands of the receiver.

March 14, 1864, the Central Ohio Railroad Company (now part of the Baltimore and Ohio Railroad Company) sold an undivided one-half interest in the Newark to Columbus line, to the Steubenville and Indiana Railroad Company; the purchase price being \$775,000. October 1, 1865, the Steubenville and Indiana Railroad Company combined with the two allied properties lying between Pittsburgh and Steubenville, forming, as has been previously stated, the Pittsburgh, Columbus and Cincinnati Railroad Company. In 1868, this latter company became part of the Pittsburgh, Cincinnati and Saint Louis Railway Company. In conclusion, it may will be noted that the sale of the Steubenville and Indiana Railroad, made by court order in 1864, was set aside in 1869, through formal legal action,

and with subsequent settlement of all the receivers' accounts; wherefor he was discharged from the obligations of his trust.

The Pittsburgh, Cincinnati and Saint Louis Railway Company, between the date of its formation and 1890, built the following extensions to its lines:

(1) New Cumberland Branch. Opened from New Cumberland Junction to a point on the eastern bank of the Ohio River, opposite East Liverpool, O., during 1893; but having been sanctioned by vote of the stockholders, during 1888, mention of it is quite appropriate.

(2) Bridgeville, McDonald, and Miller Run Extensions. Feeder lines in Pennsylvania, built to serve coal mines.

(3) Several short branches in Ohio, likewise constructed to reach mines.

The railroads leased by the Pittsburgh, Cincinnati and Saint Louis Railway Company include:- the Jeffersonville, Madison and Indianapolis Railroad Company, the Cincinnati and Muskingum Valley Railway,

the Little Miami, the Columbus and Xenia Railroad, the Dayton and Western Railroad, Cincinnati Street Connection Railway, the Dayton, Xenix and Belpre Railroad, the Pittsburgh, Wheeling and Kentucky Railroad, and the Chartiers Railway Company. In addition, the Pittsburgh, Cincinnati, and Saint Louis has large interests in various terminal companies, and controls several companies through stock ownership.

Chicago, Saint Louis and Pittsburgh R.R. Co.

Of all the constituent lines of the Pennsylvania System, the Pittsburgh, Cincinnati, Chicago and Saint Louis Railway Company offers the greatest difficulties for treatment such as characterizes this "Corporate History." That organization is composed of seemingly numberless original corporations chartered by all the central western states, each of which invariably suffered financial reverses with consequent foreclosures and reorganizations; which process was, in many instances, oftentimes repeated. Almost without exception, the original security holders lost every penny of their investment, but were nevertheless, adequately, though indirectly, repaid in full, through the greatly enhanced property

values resulting from the coming of the railroad.

The history of the Chicago, Saint Louis and Pittsburgh Railroad Company properly begins with the incorporation of the Columbus, Piqua and Indiana Railroad, by the State of Ohio, February 23, 1849, with powers to construct a railroad from Columbus, via Urbana and Greenville to the western boundary of the state. The line was built only as far as Union City when the company became financially embarrassed, and was placed in the hands of the receivers until 1863, when a reorganization had been effected, and the property and franchises of the former company were transferred to the Columbus and Indianapolis Railroad Company.

In 1864, the Columbus and Indianapolis Railroad Company purchased the road of the Richmond and Covington Railroad Company, extending from Bradford Junction to the Indiana State Line, between New Paris, O., and Richmond, Ind., paying \$644,000 therefor. In August of the same year, the Columbus and Indianapolis Railroad merged with the Indiana Central Railroad, the consolidated company assuming the corporate title of Columbus and Indianapolis Central Railway Company. In 1867, the latter line

consolidated with the Toledo, Logansport and Burlington and the Union and Logansport Railroad Companies, under whose acts of incorporation the roads from Logansport to the Illinois State Line, near Chicago, and from Union City to Logansport had been constructed. The certificate of consolidation was filed in the office of the Secretary of State of Ohio, September 16, 1867; and in it, the new enterprise was styled the Columbus and Indiana Central Railroad Company.

In February, 1868, articles of consolidation between the Chicago and Great Eastern Railway Company of Indiana and of Illinois, consolidated with the Columbus and Indiana Central Railroad Company, a corporation of Ohio and Indiana, were filed with the Secretary of State of Ohio. The Columbus, Chicago and Indiana Central Railway Company was formed through this merger, and in the following year it leased its entire properties to the Pittsburgh, Cincinnati and Saint Louis Railway Company, for a term of ninety-nine years, with an interminable privilege of renewal. In lieu of rental, the lessee guarantees the payment of thirty percent of gross earnings, after deduction of taxes. This proved onerous, and it was soon adjusted to a more equitable basis. The Pennsylvania Railroad Company is a guarantor

of this contract.

Indiana Central Railroad Company.

The Indiana Central Railroad Company was formed in 1861 by the creation of a new organization out of the directors who had formerly been associated with the Terre Haute and Richmond Railroad Company, to assume the franchises which it controlled east of Indianapolis, and to build the line from that city to Richmond. In 1864, the Indiana Central Railroad merged with the Columbus and Indianapolis Company to form the Columbus and Indianapolis Central Railroad.

Toledo, Logansport and Burlington Ry. Co.

The Logansport and Pacific Railroad Company, was incorporated by the State of Indiana, May 5, 1853. The name was soon changed to Logansport and Pacific Railway Company, then to Logansport, Peoria and Burlington Railway Company, and next to the Toledo, Logansport and Burlington Railroad Company. The latter company was sold and reorganized as the Toledo, Logansport and Burlington Railway Company, which was one of the companies merging on September 11, 1867, to form the Columbus and Indiana Central Railway Company.

Union and Logansport Railroad Company.

The Marion and Mississinewa Valley Railroad Company and the Marion and Logansport Railroad Company (both incorporated during 1853) consolidated on November 21, 1854, as the Marion and Mississinewa Valley Railroad Company; its line extending from Union City to Logansport. In turn the property and franchises vested in the latter were sold to the Union and Logansport Railroad Company, on January 9, 1863.

Chicago and Great Eastern Railway Company.

The Chicago and Cincinnati Railway Company of Indiana was incorporated in September, 1857, to construct a road from Logansport to Valpariso, and in January, 1865, consolidated with the Chicago and Great Eastern Railway, which in turn had been formed through merger of the Galena and Illinois River and the Chicago and Great Eastern Railroad Companies. The title of the latter was retained through all these corporate enlargements.

At the same time, the Cincinnati and Chicago Air Line Railroad Company merged with the Chicago

and Great Eastern Railway Company. The former organization controlled the line between Richmond and Logansport, and its sundry corporate predecessors included the Cincinnati, Cambridge and Chicago Short Line Railway Company, the Cincinnati, New Castle and Michigan Railroad Company, the Cincinnati and Chicago Railroad Company, the New Castle and Richmond Railroad Company, the Cincinnati, Logansport and Chicago Railroad Company, and a second Cincinnati and Chicago Railroad Company.

The Columbus, Chicago and Indiana Central Railway Company, composed of all the recently mentioned companies, during 1883, reorganized to form the Chicago, Saint Louis and Pittsburgh Railroad Company of Indiana and the Chicago, Saint Louis and Pittsburgh Railroad Company of Illinois; the two new companies taking over the lines of their predecessor within their respective states. The next year, these two organizations combined to form a corporation of the same name; which was incorporated in both previously named states. The principal corporate activities consisted in building the "Logansport Cut Off", acquisition of additional

terminal lines in Chicago and Kokomo, Indiana, and contracting for trackage rights between the latter city and Indianapolis.

Kokomo Belt Railroad Company.

Incorporated during 1888; road placed in operation the following year. The Kokomo Belt Railroad Company serves a number of the manufacturing establishments of Kokomo, Indiana. It was built by the Chicago, Saint Louis and Pittsburgh Railroad Company, for the owning company, upon payment to the former of a consideration of \$12,000. Upon repayment of that sum, to the owning company, the franchises and property of the Kokomo Belt Railroad were conveyed to the Chicago, Saint Louis and Pittsburgh Railroad Company, by deed of January 27, 1890.

Englewood Connecting Railway Company.

This company, incorporated in 1885, owns a short line of road in the city of Chicago. It is leased to the Chicago, Saint Louis and Pittsburgh Railroad Company for net earnings, in lieu of rental. The lessee owns the entire capital stock of the Englewood Connecting Railway Company.

Chartiers Railway Company.

This company was originally incorporated as the Chartiers Valley Railroad Company, by a special act of the Pennsylvania Legislature, in February, 1853, with the power to construct a road from Pittsburgh, via Canonsburg, to Washington, Pa. The capital stock authorized was \$500,000, but the company was permitted to make increases, from time to time, as might be necessary. Towns along the route were given the right to purchase the securities of the new company, and to aid financing, the state permitted the company to pay a 6% yearly dividend, during the years in which the road was being built; with such outlays chargeable to construction. By supplements and amendments to the original charter, the road was empowered to build to the western boundary of the state, and there connect with any railroad in the state of Virginia, and also to further finance itself through issuance of preferred stocks and creation of a mortgage debt, not to exceed the share capital of the company. It was finally determined to build the road from what is now the city of Carnegie, to Washington, 22.5 miles. Prior to commencing construction, the company had been reorganized, and the formation of the Chartiers Railway Company resulted. This company is

leased to the Pittsburgh, Cincinnati, Chicago and Saint Louis Railway Company for payment of net earnings to the lessor, in lieu of stated rental.

Waynesburg and Washington Railroad Company.

The Waynesburg and Washington Railroad Company owns a narrow gauge line extending from Waynesburg, Pa., to Washington, Pa. It was chartered in May, 1875, and opened for operation during the latter part of 1877. In 1885, the Waynesburg and Washington Railroad passed under the control of the Pennsylvania Company through lease to the Chartiers Railway Company.

Pittsburgh, Wheeling and Kentucky Railroad Co.

Line of road---Wheeling Junction, West Virginia, (opposite Steubenville, Ohio) through Wheeling to Benwood, West Virginia---a distance of twenty-eight miles. This company was chartered July 15, 1868, but the road was not opened to Wheeling until February 25, 1878, and to Benwood until 1883. In 1878, the company was leased to the Pittsburgh, Cincinnati and Saint Louis Railway (later P.C.C.&St. L.Ry.Co.) for payment of net earnings, as rental.

Ohio Connecting Railway Company.

Chartered November 20, 1886, in the interests of the Pennsylvania System, for the construction of a bridge across the Ohio River at a location, about two miles below "The Point", Pittsburgh, to connect the Fort Wayne and Pan Handle lines. The Ohio Connecting Railway was opened in October, 1890; and is leased to the Pittsburgh, Cincinnati, Chicago and Saint Louis Railway Company.

The Pittsburgh, Cincinnati, Chicago and Saint Louis Railway Company has a joint interest in many terminal companies at different cities which its lines serve.

Jeffersonville, Madison and Indianapolis RR. Co.

The history of this company is very complicated for it involves not merely the original charters of the Madison and Indianapolis and the Ohio and Indianapolis Railroad Companies, but also certain state legislation relative to an extended system of internal improvements. It appears that in 1838 the legislature of Indiana passed an act providing for a general system of public works, and in accordance with the scope of this act, commenced among other railroads, one from Madison to Indianapolis. But in January, 1842, after that one had been built between Madison and Vernon (twenty-two miles), the legislature determined to surrender to private associations, organized under certain legal restrictions, the further prosecution of these public improvements. Under this act, approved January 28, 1842, it was provided that when any number of persons were desirous of associating themselves together for the purpose of constructing any of said public ways, or any part thereof, the governor should appoint commissioners to receive stock subscriptions, and determine what sum should constitute a share in the stock of such association. The commissioners were instructed, as soon as \$10,000 had been paid in, on the capital stock of any company

so formed, to convene a meeting of its shareholders to elect directors, and it was further enacted that before the board, thus elected, should proceed to exercise any of its functions a full and complete statement of all its transactions, together with the corporate title assumed by the association, should be sent to the Secretary of State of Indiana. Provision was made for publishing in the weekly newspapers the governor's proclamations relative to the legal organizations which might be so formed, and their full and satisfactory acceptance of the provisions of the act; and it was stipulated that when the governor's proclamation had been made, all the rights, privileges, franchises and immunities intended to be conferred by the act should vest as fully and completely in such an association, as if it had been formed through a special act of incorporation. Charters so granted were to be limited to fifty years' duration, and it was conditioned that at the expiration of such period the works should not revert to the state, unless it should refund to the companies all money actually expended on construction and the amount they paid for state bonds without interest. Due provision was made by the state for the acceptance of its own bonds, in lieu of purchase money,

for the work already completed under public auspices, and in the event of the company not becoming the owner of the finished portion of such work, a certain disposition was to be made of the portion of rents and profits accruing to the state, and it was conditioned that the agent having charge of the state interest should invest annually the net proceeds arising from the state's part of the work in payment of stock of such association as might be completing the balance of the work.

The Madison and Indianapolis Railroad Company appear to have availed themselves of the act alluded to, and in January, 1843, a special act was passed surrendering to them, the Madison and Indianapolis Railroad as then constructed by the state. The new company had difficulty in procuring funds, so in January, 1845, authority was granted for it to borrow money, and it was provided that an abatement of the annual rental to the state should be allowed for eight years from and after the passage of the act, provided the company should complete its road to Edinburgh within one, and to Indianapolis within three years thereafter; failing in this, the concession became null and void and the stipulated

rental would be required yearly, beginning from the date of incorporation. In April, 1851, a \$600,000 issue of seven percent convertible bonds was sold to provide funds for purchasing additional equipment and making general improvements to roadway. All the while the company had been in a precarious financial condition. In October, 1853, its directors, under plea of consolidation with the Indianapolis and Peru Railroad attempted to float mortgage bonds of \$600,000 in total amount, and part of the issue was sold, but the sum so secured did not prove much of a relief. In 1855, the courts held the merger, mentioned above, illegal and dissolved it.

In March of 1855, the financial plight of the Madison and Indianapolis Railroad Company had become so serious as to warrant the conclusion that the indebtedness to the state would be entirely lost unless some compromise was effected, and the governor with two trustees was appointed a Board of Commissioners to fully investigate the company's condition, and effect a settlement, conditioned that the sum to be paid to the state be not less than \$75,000. It appears, however, (this statement subject to inaccuracy)

that the entire indebtedness to the state was cancelled. In 1858, the Madison and Indianapolis effected a second mortgage to permit its meeting interest charges and refund the maturing principle of certain obligations, but little relief seems to have been gained by this action, for in 1861, suit for foreclosure was brought in the circuit court, with the subsequent issuance of an order for sale of the road. It was purchased by representatives of the bondholders, and reorganized in their benefit as the Indianapolis and Madison Railroad Company.

The original capital stock of the Madison and Indianapolis Railroad Company had been one million six hundred forty-eight thousand and fifty dollars; whereas the share capital of the new corporation was but eight hundred and fifty thousand dollars, half common and half preferred.

In 1861, the Indianapolis and Madison Railroad determined to avail itself of the act authorizing railroad companies to consolidate their stock with that of other companies, and accordingly it entered into negotiations with the Jeffersonville Railroad Company, with such an object in view. The latter company had been incorporated by special charter in

January, 1846, under the title of the Ohio and Indianapolis Railroad Company, with an authorized capital stock of one million dollars and the power to construct a railroad from Jeffersonville, Ind., to Columbus, Ind. The same act permitted the directors of the company to borrow one half a million dollars, and issue one million dollars additional capital stock, if necessity demanded so doing. Authority was given to intersect and unite with any railroad running north from Madison to Indianapolis, and to make arrangements for running the cars of the Ohio and Indianapolis (later Jeffersonville) Railroad over that portion of the line. In January, 1849, the corporate title was changed to Jeffersonville Railroad Company, the new company was to retain all its predecessors rights and privileges and properties, and was also granted additional privileges relative to financing itself.

In 1866, the Jeffersonville and the Indianapolis and Madison Railroad Companies consolidated under the title of the Jeffersonville, Madison and Indianapolis Railroad Company. The capital stock of the consolidated company was placed at two million dollars, subdivided into shares of \$200 par value,

and it was stipulated that of this stock, 14,952 shares should be awarded the stockholders of the Jeffersonville Railroad Company, and 5,048 shares to holders of Indianapolis and Madison Railroad Company stock. In the distribution of the latter, due regard was paid to the difference in value between the common and preferred shares of Indianapolis and Madison Railroad stock.

In October, 1866, the Jeffersonville, Madison and Indianapolis Railroad Company issued \$3,000,000 seven percent, first mortgage bonds, terminable October 1, 1906. During the same year, the company contracted, conjointly with the Columbus and Indiana Central Railroad Company, for the construction of a line from Rushville to Cambridge City, for the Lake Erie and Louisville Railroad Company. Bonds of the latter were to be given in payment for the work. Through agreement dated August 28, 1866, the Jeffersonville, Madison and Indianapolis Railroad undertook the operation of the Rushville to Cambridge City Line, and continued to do so under its terms, until June 26, 1890, when in consideration of cancellation and surrender of the \$347,000 outstanding bonds of the Lake Erie and Louisville Railroad Company, held by the former, it came into full possession of that

section of its line, which has been the subject of our discussion. It is perhaps worth while to note, that the Lake Erie and Louisville Railroad Company, had lost all properties other than the route lying between Rushville and Cambridge City, as a result of foreclosures and sales during 1871.

In the latter part of 1871, the Pennsylvania Railroad Company acquired the capital stock of the Jeffersonville, Madison and Indianapolis Railroad Company; and on December 26, 1871, the latter leased its properties to the Pittsburgh, Cincinnati and Saint Louis Railway Company for nine hundred and ninety-nine years from August 1, 1871, the rental to be equivalent to the interest and sinking fund upon the funded debt and a dividend of seven percent upon the \$2,000,000 capital stock. In consequence of some legal objections urged by stockholders of the lessee, the agreement was subsequently annulled, and on January 1, 1873, the lease was assigned to the Pennsylvania Company, under similar terms and conditions. For purposes of operation, the Jeffersonville, Madison and Indianapolis was consolidated with the Pittsburgh, Cincinnati, Chicago and Saint Louis Railway Company.

Little Miami Railroad Company.

The history of this company, whose road proper and leased lines forms part of the Pan Handle Route (P. C. C. & St. L. Ry. Co.) involves the records of four distinct charters, to wit; those of the Little Miami, the Columbus and Xenia, the Dayton and Western, and the Dayton, Xenia and Belpre Railroad Companies.

The Little Miami Railroad Company was incorporated by special charter in March, 1836, with power to construct a railway from any eligible point near the town of Springfield, through Xenia, and down the valleys of the Little Miami and Ohio Rivers to Cincinnati. The company was also empowered to make contracts with the Mad River and Lake Erie Railroad, relative to the interchange of traffic. The Little Miami Railroad was also obligated to complete its line within seven years, but this condition was not enforced.

In December, 1853, a contract of partnership was entered into between the Little Miami and the Columbus and Xenia Railroad Companies, whereby the two properties were to be operated as one, with equal division of profits. These jointly operated companies leased the Dayton and Western and the Richmond and

Miami Railroads, during January, 1865; and a month later acquired the Dayton, Xenia and Pelpre, through purchase.

In December, 1868, the agreement of 1853, between the Little Miami and the Columbus and Xenia Railroads was dissolved by mutual consent, and the road of the latter company, was leased to the former for a period of ninety-nine years. In December, 1869, the Little Miami Railroad Company entered into an agreement (which was guaranteed by the Pennsylvania Railroad Company) with the Pittsburgh, Cincinnati and Saint Louis Railroad Company, whereby the former leased for a term of ninety-nine years, but renewable forever, all its road and franchises. The rental provided for payment of eight percent dividends upon the lessor's capital stock, and with the customary arrangements for assumption of the liabilities and fixed charges of the lessor.

Columbus and Xenia Railroad Company.

Incorporated by special charter, March 1844, with authority to build a road from Columbus to Xenia. It was leased to the Little Miami Railroad Company, during January, 1865.

Dayton and Western Railroad Company.

Incorporated by special charter, February, 1846, to build a road from Dayton to any point upon the state line between Ohio and Indiana, as the directors might determine. The capital stock was originally fixed at \$300,000, but within five years it had been increased to \$1,000,000. A charter provision permitted the issuance of bonds. In January, 1865, the Dayton and Western Railroad leased from the Richmond and Miami Railroad Company that portion of its road lying between Richmond, Indiana, and the Indiana Ohio State line., at an annual rental of \$5,500, it being understood that the trains of the Eaton and Hamilton Railroad would have the right of using this line, conjointly with the lessee. In February, 1865, a perpetual lease of all property, franchises, and rights was made to the Little Miami, Columbus and Xenia Railroad Company, with the understanding that the lessee should assume all obligations of the lessor, and that should the debt upon its property ever be extinguished by the lessee, the lessor should convey the property to it, in fee simple.

Dayton, Xenia and Belpre Railroad Company.

This company was chartered in 1867, and later constructed the line extending from Dayton to Xenia, sixteen miles. The road became financially embarrassed and was purchased at public sale, by the Little Miami, Columbus and Xenia Railroad Company, for \$415,000.

Cincinnati, Richmond and Chicago Railroad Company.

The original charter under which this company was constructed from Hamilton to Eaton, twenty-eight miles, was granted by the Ohio legislature to the Eaton and Hamilton Railroad Company, on February 8, 1847. Four years later the company was authorized to continue its line northwestwardly to the state border, and there connect with any other railroad. On November 1, 1864, the Eaton and Hamilton Railroad Company leased from the Richmond and Miami Railway Company, the latter's road from the Indiana-Ohio State Line to Richmond, about two miles in length. During 1865, the Eaton and Hamilton Railroad was placed in the hands of the receivers. In April, 1866, the reorganization was effect and the property was transferred to the new company which was styled the Cincinnati, Richmond and Chicago Railroad Company. In February, 1869, the

latter was leased, in perpetuity to the Cincinnati, Hamilton and Dayton Railroad Company, but in 1888, the lessee transferred the property to the Chicago, Saint Louis and Pittsburgh Railroad Company, in consideration of certain payments in cash and securities and the granting, by the transferee, of valuable trackage privileges.

Cincinnati and Muskingum Valley Railroad Co.

The Cincinnati, Wilmington and Zanesville RR. Co. built a line of railroad from Morrow, on the Little Miami, to Zanesville. This company soon became financially embarrassed, and during 1864, was reorganized, having been operated by a receiver for the seven years previous. The new organization styled itself the Cincinnati and Zanesville Railroad Company. It suffered the fate of its predecessor, and in 1870, was once more reorganized; assuming the title of Cincinnati and Muskingum Valley Railroad Company. The Pennsylvania Company controls the Cincinnati and Muskingum Valley Railroad through ownership of a majority of its capital stock.

GRAND RAPIDS AND INDIANA RAILROAD COMPANY.

The Grand Rapids and Indiana Railroad Company is a consolidation of the Grand Rapids and Indiana, the Grand Rapids and Southern, the Grand Rapids and Mackinaw, and the Grand Rapids and Fort Wayne Railroad Companies. The Grand Rapids and Indiana Railroad Company, proper, was incorporated by special act of the Michigan legislature in January, 1854. Consolidation with the Grand Rapids and Southern Railroad was effected August 28, 1855, with the Grand Rapids and Mackinaw Railroad, June 26, 1857, and with the Grand Rapids and Fort Wayne Railroad on June 26, 1857. The company formed through the several consolidations retained the title of Grand Rapids and Indiana Railroad Company.

The greater portion of the lines of this company were built by the Continental Improvement Company, to whom, as the road progressed the Grand Rapids and Indiana Railroad Company turned over its valuable land grant, amounting to more than one million acres, together with \$5000 per mile of stocks, and \$25,000 in bonds for each mile of line built. The Continental Improvement Company operated the line until construction had been completed, and during that period paid the interest upon the funded debt of the railroad company.

Cincinnati, Richmond and Fort Wayne Railroad Co.

This company is successor to the Cincinnati and Fort Wayne Railroad Company, which was incorporated under the general railroad law of the state of Indiana in May, 1852. For many years after its organization, in February, 1853, the Cincinnati and Fort Wayne was considered a failure; but in 1866, the project was resuscitated, and the company, under the new title of Cincinnati, Richmond and Fort Wayne Railroad Company, energetically undertook the construction of its line between Fort Wayne and Richmond. Upon completion, in 1871, the road was turned over to the Grand Rapids and Indiana Railroad Company, under the terms of a ninety-nine year lease, which provided for payment of interest on funded debt, as rental.

Muskegon, Grand Rapids and Indiana Railroad Co.

Organized under the general railroad law of Michigan, February 26, 1886. Road opened, December 1, 1886, between Muskegon and Grand Rapids, 36.9 miles. Leased to Grand Rapids and Indiana Railroad for ninety-nine years, for payment of net earnings as rental, with a guaranteed minimum sufficient to meet payment of funded debt of the lessor.

Traverse City Railroad Company.

The line of this company extends from Traverse, Mich., to Walton, Mich., 26 miles. The company was organized October 30, 1871, and the road was opened December, 1872. On January 1, 1883, it was leased for fifty years to the Grand Rapids and Indiana Railroad, with payment of net earnings as rental; bond interest to be the guaranteed minimum.

Bay View, Little Traverse and Mackinaw RR. Co.

The line constructed by this company extends from Kegonic to Harbor Springs, Michigan, and was purchased by the Grand Rapids and Indiana Railroad during 1888.

Through advances and guarantees made by the Pennsylvania Railroad Company, control of the Grand Rapids and Indiana and its affiliated lines is secured, and vested in the Pennsylvania Company.

Toledo, Waldhoning Valley and Ohio Railroad Co.

This company, which is directly leased by the Pennsylvania Company and operated as part of the Fort Wayne Route should have been included in that portion of this volume, but was carelessly omitted.

The Toledo, Waldhoning Valley and Ohio Railroad

was formed, during the early part of 1891, through the merger of the Northwestern Ohio and the Waldhoning Valley Railway Companies. The former company owned the line from Toledo Junction, on the Pittsburgh, Fort Wayne and Chicago Railway Company's line, near Mansfield, Ohio, to Toledo, a distance of eighty miles. The Waldhoning Valley Railroad had franchises for the construction of a line from Mansfield, through Loudonville and Coshocton, to Powhatan, Ohio, a town located on the Ohio River. Only that section of the line between Loudonville and Coshocton has been built to date (1921). The Toledo, Waldhoning Valley and Ohio Railroad Company was subsequently reorganized to form the Toledo, Columbus and Ohio River Railroad Company.

SAINT LOUIS SYSTEM.

The following lines are included within the scope of the Saint Louis System: (1890)

(1) Terre Haute and Indianapolis Railroad Company. (Indianapolis to Terre Haute.)

(2) Saint Louis, Vandalia and Terre Haute Railroad Company. (Saint Louis to Terre Haute)

(3) East Saint Louis and Carondelet Railroad Company. (An East St. Louis terminal property.)

(4) Indianapolis and Vincennes Railroad Company. (Indianapolis to Vincennes.)

Terre Haute and Indianapolis Railroad Co.

This company was organized during 1847, under the general railroad law of the State of Indiana, as the Terre Haute and Richmond Railroad Company, to build a route between the two cities named in the corporate title. At the former, a connection was effected, upon construction, with the Saint Louis, Alton and Terre Haute Railroad Company (later discontinued), and at the latter, the Terre Haute and Richmond Railroad was empowered to join

its tracks with those of the Columbus and Indiana Central Railroad Company.

In 1851, the Terre Haute and Richmond Railroad Company was reorganized, and the Terre Haute and Indianapolis Railroad formed to take over the franchises for the railroad between the two cities last named. Construction of this line was promptly started.

In 1870, the Terre Haute and Indianapolis Railroad Company leased the Saint Louis, Vandalia and Terre Haute Railroad Company.

Prior to 1870, the Terre Haute and Indianapolis and the Saint Louis, Alton and Terre Haute Railroad Companies had provided the only route between Saint Louis and Indianapolis. The former company was affiliated with the Pennsylvania System, while the latter was owned by a group of eastern trunk lines, which also controlled the Indianapolis and Saint Louis Railroad Company. This latter organization was formed for the purpose of leasing both the preceding corporations, and in 1867, did lease the Saint Louis, Alton and Terre Haute Railroad. However, the combination of interests discriminated

against the Pittsburgh, Cincinnati and Saint Louis and the Chicago, Saint Louis and Pittsburgh Companies, so in self defense, the Pennsylvania determined to acquire its own line between Indianapolis and Saint Louis. This was done through gaining control of the Terre Haute and Indianapolis Railroad by ownership of a majority of its stock, and by financially aiding the Saint Louis, Vandalia and Terre Haute Railroad, then building from Saint Louis, via Effingham to Terre Haute, and later effecting a lease of it to the former company. Upon completion of this "Vandalia Line", the Terre Haute and Indianapolis Railroad discontinued handling freight destined to and from the Saint Louis, Alton and Terre Haute Company, and accordingly its lessee, the Indianapolis and Saint Louis Railroad Company, having so signally failed to acquire the Terre Haute and Indianapolis, was forced to build a railroad paralleling the latter's line. The Pennsylvania interests were in the anomalous position of controlling the Terre Haute and Indianapolis Company and the Saint Louis, Vandalia and Terre Haute Railroad, and possessing a minority interest in the two organizations which were such

keen rivals of the former companies. In such a connection, the following incident is worthy of note. As has been mentioned, the Terre Haute and Indianapolis, to better serve its own (and the Pennsylvania's) competitive interests, severed traffic relationships, of some years' standing with the Saint Louis, Alton and Terre Haute Railroad, once the Vandalia Line was in operation, yet as a member of the Saint Louis, Alton and Terre Haute--Indianapolis and Saint Louis syndicate, the Pennsylvania was required to make its pro rata subscription towards financing the Indianapolis to Terre Haute Line of the Indianapolis and Saint Louis Railroad Company; such having been a provision of previous agreements relative to the plan of action to be taken in the event of the Terre Haute and Indianapolis Railroad Company taking the course which it did. Shortly afterwards, the Indianapolis and Saint Louis Railroad, with its leased lines, became definitely affiliated with the Vanderbilt lines, though the interest of the Pennsylvania System in that company, was not disposed of, for some time.

Saint Louis, Vandalia and Terre Haute
Railroad Company.

Construction of this road, which extends

from East Saint Louis to the Indiana-Illinois state line, one hundred and fifty-eight miles, was begun in the fall of 1867, under franchise rights granted some years before. Upon completion, during 1870, the railroad built by the Saint Louis, Vandalia and Terre Haute Company was leased in perpetuity to the Terre Haute and Indianapolis Railroad Company.

East Saint Louis and Carondelet Railway Company.

The East Saint Louis and Carondelet Railway Company owns twelve miles of terminal lines in the city of East Saint Louis, Illinois, and certain adjacent towns. It is principally used for the interchange of traffic between the roads terminating at East Saint Louis.

In 1890, the East Saint Louis and Carondelet Railroad was controlled by the Pennsylvania Lines West of Pittsburgh, but this interest was later (1902) relinquished to the Terminal Railroad Association of Saint Louis, upon the entrance of the Vandalia Line into that syndicate as a member company.

Indianapolis and Vincennes Railroad Company.

This company was incorporated under the

a general railroad law of Indiana, September 29, 1865, with a capital stock of \$2,000,000; and empowered to construct a line from Indianapolis to Vincennes, a distance of 117 miles. The road was projected by a group of men, including General A. E. Burnside, of Civil War fame, with the purpose of securing a short line from Indianapolis to Cairo, Illinois, and render the traffic of eastern Tennessee, Arkansas, Texas, and Oklahoma, tributary to the city of Indianapolis. To provide the route across southern Illinois to Cairo, the Cairo and Vincennes Railroad Company was incorporated.

In 1872, the Pennsylvania Company leased the Indianapolis and Vincennes Railroad Company. The lessee had previously acquired control of the latter through stock ownership. Though at one time, the Pennsylvania Company was considering, very seriously, the leasing of the Cairo and Vincennes line, it finally abandoned this idea.

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- S. H. Church---"Corporate History of the Pennsylvania Lines West of Pittsburgh."
- A. J. County---"Incorporation and Organization of the Pennsylvania Railroad Company."
- "The Work of the Organization of the Pennsylvania Railroad Company."
- P. R. R. Co.---"Railway Transportation Lectures."
- P. R. R. Co.---Annual Reports for the years 1846 to 1890, inclusive.
- Poor's-----"Manual of Railroads." 1888-89-90-91.

I have made use of various annual reports, issued by certain constituent companies of the Pennsylvania System, and moreover, in the preparation of this thesis, have examined numerous leases, operating agreements, and documents of miscellaneous nature which seemed of consequence to my subject.

APPENDIX "A".

PENNSYLVANIA RAILROAD COMPANY. Lines East of Erie and Pittsburgh directly operated. (x)

Statements of Gross Income, Expenses and Net Earnings. 1850-1890.

Year	Mileage Operated.	Gross Earnings.	Net Earnings.
1850	No	\$339-	\$167-
1852		1,943-	617-
1854		3,512-	1,462-
1857	Record.	4,855-	1,854-
1860	367.	5,932-	2,296-
1865	856.	19,533-	4,619-
1870	927.	20,675-	7,083-
1875	1631.	34,464-	13,369-
1880	1875.	41,260-	16,635-
1885	2316.	45,615-	16,135-
1890	2500.	66,202-	21,221-

(Note: Last 000 omitted)

Freight Traffic Statistics. 1864-1890.

Year	Tons.	Ton-miles.	
1864.	3,189-	436,591-	
1870	7,041-	1,014,652-	(Note: Last 000 omitted.)
1875	15,772-	2,026,190-	
1880	26,051-	3,239,432-	
1885	39,481-	4,446,470-	
1890	66,648-	6,994,332-	

Passenger Traffic Statistics.

Year	Passengers	Passenger-Miles	
1864	2,952-	163,094-	
1870	5,014-	169,972-	(Note: Last 000 omitted)
1875	14,456-	344,234-	
1880	16,575-	382,787-	
1885	27,642-	568,664-	
1890	43,810-	778,818-	

(x) Does not include, Northern Central, P.W.&B., Cumberland Valley and other railroads owned or controlled but not directly operated.

THE PENNSYLVANIA COMPANY. Lines directly operated.
 (Note: This does not include P.C.C.&St.L.Ry.,
 G. R. & I. RR. Co., and the St. Louis System.)

Statements of Gross Income and Net Earnings.
 1872-1890.

Year	Mileage Operated	Gross Earnings	Net Operating Income
1872	921.66	\$15,721-	\$7,875-
1875	1295.03	14,595-	6,553-
1880	1299.39	17,153-	8,012-
1885	1349.93	14,294-	4,641-
1890	1142.59	19,455-	6,633-

(Note: Last 000 omitted)

Freight Traffic Statistics.

Year	Tons.	Ton-miles.	
1872	6,382-	717,290-	(Note: Last 000 omitted.)
1875	7,433-	720,340-	
1880	11,399-	1,161,660-	
1885	14,896-	1,397,638-	
1890	23,600-	1,953,954-	

Passenger Traffic Statistics.

Year	Passengers	Passenger-miles.	
1872	3,397-	125,913-	(Note: Last 000 omitted.)
1875	4,366-	127,908-	
1880	4,816-	148,603-	
1885	6,033-	186,250-	
1890	8,135-	183,071-	