Railroad Station corner Broad and Prime Streets, Philadelphia, where Abraham Lincoln boarded the train for Washington on the night of February 22, 1861.

Philadelphia, Wilmington and Baltimore Railroad Station, Baltimore, where Lincoln arrived about midnight February 22, 1861.
WAR PERIOD, 1861-65.

With the firing of the Confederate guns on Fort Sumter in the early morning of Friday, the twelfth day of April, 1861, the great war of the Rebellion began.

During the four eventful years which followed this far-reaching event, the Pennsylvania Railroad, owing to the security ensured by its central location, became a most important route for the transportation of men and stores to the seat of war. The war had hardly begun when the necessity for guarding the road from molestation by the enemy, in order that traffic should not be interrupted, was fully recognized. Soon after the surrender of Fort Sumter, the employees in every department on the line from Harrisburg to Pittsburgh were notified that they would be expected to respond promptly whenever called upon to aid in the protection of the Company’s property from the onslaughts of the Confederate troops, and it was a matter of pride among the officers then in control of the forces of the Railroad Company that the employees in every grade, from the President to the track laborer, gave loyal and willing aid to the cause of the Union. In looking back at the events that transpired during the civil war, it is interesting to recall that by various subscriptions and donations the Pennsylvania Railroad Company contributed over half a million of dollars to the Union cause.

Among the most interesting documents preserved in the archives of the Secretary’s office at Broad Street Station is a financial statement entitled “War Donations and Subscriptions of the Pennsylvania Railroad Company” extending over a period from July 5, 1861, to May 18, 1864, upon which it is shown that the amount paid from the treasury of the Company to the Union Volunteer Refreshment Saloon, to the Cooper-Shop Refreshment Saloon, to the Gray Reserves of Philadelphia, to the Pittsburgh Battery and several other military organizations, to the Soldiers’ Home at Harrisburg, and for sundry other patriotic purposes amounted in the aggregate to $577,200.

Abraham Lincoln on the way to his inauguration arrived in Philadelphia from the West over the Pennsylvania Railroad on the twenty-first of February, 1861, and repaired to the Continental Hotel, where, at a conference held that evening, he was advised of the fears of Senator Seward and General Scott, that he could not pass through Baltimore on the twenty-third, according to the published program, without peril to his life. It had been arranged that the President-elect should proceed from Philadelphia to Harrisburg on the morning of the twenty-second, to remain at the State Capitol over night as the guest of Governor Curtin, and to leave for Washington the next morning by the Northern Central Railway, on a train passing through Baltimore about midday. The staff of Pinkerton detectives who were working in concert with President Felton of the Philadelphia, Wilmington and Baltimore Railroad Company were convinced from reliable information that Lincoln would be assassinated if he attempted to pass through Baltimore at that hour. Although at first decidedly opposed to any change in the arrangement, Mr. Lincoln finally decided to proceed to Harrisburg on the twenty-second and be guided by future events.
THE PENNSYLVANIA RAILROAD COMPANY.

The President-elect had gone to Philadelphia to participate in the ceremonies of Washington's birthday; early on the morning of that day he hoisted the stars and stripes over the tower of Independence Hall and made a characteristic speech. He was then escorted to West Philadelphia Station, where he took a train arriving at Harrisburg about noon. There he was received by the Governor, his staff and both branches of the Legislature, and delivered an address at the Capitol characterized by the calm deliberation which marked all his speeches during the journey from Springfield to Washington.

At another conference after these ceremonies Lincoln refused to entertain any fears for his safety, and insisted upon carrying out the original plan. At five o'clock he dined at a hotel with Governor Curtin, Col. Thomas A. Scott, Col. Sumner, Col. Lamon, David Davis, Col. A. K. McClure and others.

While at dinner it was determined that Lincoln should return to Philadelphia and go thence by train to Washington that night. The change of route was earnestly discussed by those present. Mr. Lincoln expressed his earnest disapproval of taking such unusual precautions for his safety, and asked his friends "What would the nation think of its President stealing into its capital like a thief in the night?" It was only when the other guests were unanimous in their appeal that this was not a matter for Lincoln, but for his friends, to determine, that unwilling consent was given to the change in route. In speaking of this incident, Col. A. K. McClure says: 1

It was most fortunate that Colonel Thomas A. Scott, Vice-President of the Pennsylvania Railroad Company, was one of the guests at that dinner. He was wise and keen in perception and bold and swift in execution. The time was short, and if a change was to be made in Lincoln's route it was necessary for him to reach Philadelphia by eleven o'clock that night or very soon thereafter. Scott at once became master of ceremonies, and everything that was done was in obedience to his directions.

It was decided that only one person should accompany the President-elect to the seat of government, and Lincoln chose Colonel Lamon as his companion on account of his physical power and the sterling qualities of his character. That preliminary having been settled, Colonel Scott directed that Curtin, Lincoln and Lamon should proceed at once to the front steps of the hotel, where, in order to prevent suspicion, Curtin in a loud tone of voice ordered the coachman to drive to the Executive Mansion. The three entered the carriage and drove towards the Governor's house, but when near that place the driver was ordered to take a round-about course to the station.

Immediately after the party drove off, Colonel Scott made his way to the railroad station and proceeded to "clear the line" to Philadelphia as had been agreed upon. He then ordered a locomotive with a single car to be brought to the eastern end of the station, into which, at a few minutes before seven o'clock, Lincoln and Lamon (the latter heavily armed) stepped unnoticed by any save friends who wished them a fervent "Good-by and God protect you!" after which the engineer opened the throttle and the train proceeded speedily toward Philadelphia.

Immediately after their departure, Colonel Scott, accompanied by Colonel McClure, personally superintended the cutting of every telegraph wire of the lines entering Harrisburg.

It was arranged by the railroad officials that in case of any delay to the special train, the Philadelphia, Wilmington and Baltimore express which was scheduled to leave at eleven o'clock at night should be held until the distinguished passengers arrived.

It was a long night of great anxiety to the ten or twelve persons in Harrisburg who had knowledge of Lincoln's sudden departure. Colonel Scott kept faithful vigil during the entire night in order that there should be no restoration of the wires, and waited with anxious solitude to hear of Lincoln's safe arrival. Meanwhile the latter and his escort had arrived in West Philadelphia about ten o'clock, and were met by Superintendent Kenney 1 with

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1 Lincoln and other men of war times.

1 Now General Superintendent of the P. W. & B. R. R.
a carriage in which was seated a detective. Lincoln and Lamon entered this carriage, and Mr. Kenney mounted the box with the driver. Having arrived in advance of the leaving-time of the Baltimore train, Mr. Kenny directed the coachman to drive about on Broad Street in search of an imaginary friend, thus occupying the interval until train-time, when the carriage proceeded to the station at Broad and Prime streets. No attempt was made to disguise Lincoln or to keep him from the eyes of the public when he entered the main door of the station and passed along with other passengers to the car in which berths had been engaged.

The ride to Washington was uneventful, the train passing through Baltimore long before daybreak, arriving in Washington at six o'clock on the morning of the twenty-third, exactly on time.

Seward and Washburne, who had been notified, were at the station to meet the President-elect, and together they drove to Willard's Hotel.

Soon after the break of day, Colonel Scott at Harrisburg connected the broken telegraph wires and received the unsigned message from Washington: "Plums delivered nuts safely." He threw his hat up to the ceiling of the little telegraph office and shouted "Lincoln's in Washington!" Then he rushed to the Jones House to tell the good news to Mrs. Lincoln,1 who had been waiting all night in suspense.

A messenger was hastily dispatched to the Executive Mansion, and soon spread the glad tidings that Lincoln had safely made his midnight journey to the National Capital.

From those early days in February, 1861, when Lincoln as President-elect passed over the Pennsylvania Railroad on his way to the inaugural ceremonies in Washington, until the day when his dead body2 was carried over a portion of the same route after Lee's surrender, a little more than four years later, the Pennsylvania Railroad Company was constantly associated with the stirring events which, having passed into history, can be referred to here after a lapse of over thirty years, without giving offense, even to those to whom the martyr President sent a message of forgiveness "with malice toward none and charity to all."

The appointment of Thomas A. Scott, while Vice-President of the Company, in April, 1861, to the important place of Assistant Secretary of War in charge of all military movements by railway throughout the United States, was a tribute to the skill and training obtained on this railroad, then scarcely fifteen years old; while many other employees who volunteered to enter the service of the United States in the humbler capacities, some of whom still survive, were able to point with pride to gallant service rendered on the battlefield of Gettysburg, when the invaders threatened both the Capital and the Metropolis of the State. During the whole of the war the headquarters of the operating department of the railroad at Altoona, a central point in the State, were constantly in communication with the military authorities at Harrisburg and Washington.

The patriotic spirit roused by the firing on Fort Sumter on the previous Friday is indicated by the action of Monday, April 17, when the Board unanimously resolved, "that the Treasurer procure suitable flags of the stars and stripes of the United States to be placed at the principal stations along the line of the road," viz.: Pittsburgh, Philadelphia, Altoona, Harrisburg and Lancaster.

A few days later Vice-President Scott was summoned to Washington by Edwin M. Stanton, Secretary of War, and a few days later he was appointed Assistant Secretary of that Department.

Major Anderson, who had surrendered Fort Sumter on the 16th day of April, passed over the road from Philadelphia to Pittsburgh on May 16th, in a special train under the charge of G. C. Franciscus, Superintendent of the Philadelphia Division, and made an address from the second floor of the Passenger Sta-

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1 Mrs. Lincoln proceeded to Washington on the afternoon of the twenty-third over the Northern Central Railway.

2 The funeral car in which President Lincoln’s body rested had been constructed for his private use a short time before his assassination, but was never used by him.
tion at Harrisburg, to the people who had come to welcome him.

The policy of the Company in encouraging its employees to engage in the defence of the nation, was further evinced when, on June 26, "the Road Committee was directed to make a donation of one hundred and fifty dollars for the uniforming of a rifle company composed of employees in the shops at West Philadelphia," also on the 25th of September an additional sum of one hundred dollars was granted to this Rifle Company to enable them to complete their equipment, and "the subject of a donation to the Philadelphia Light Cavalry, Colonel Rush, Commanding, was referred to the Road Committee."

The following communication from Colonel Thomas A. Scott was received by the Board on the 21st of August, 1861:

To the President and Directors of the Pennsylvania Railroad Company.

Gentlemen,—In consequence of my protracted absence from Philadelphia, I deem it my duty to make a frank statement for your information and action under the circumstances as to you may seem advisable. In April last, at the time when our National Capital was supposed to be in imminent danger, I was summoned to Washington City by the Secretary of War.

I responded to the call, and found on my arrival that my services were desired by the Government to take charge of the railroads and telegraph in order to get troops there for the defense of the Capital, and believing that my services were of value to the country at large, and of material consequence to the interests of our own company, I remained by consent of the President, from time to time. A few weeks since it was determined by Congress to create the position of Assistant Secretary of War, and which I was solicited by the Secretary of War and other heads of departments to take charge of, at least for a short time. After a full consultation with our President, I accepted the position with the distinct understanding that I could retire by the first of October, if desired by myself or the Pennsylvania Railroad Company, from which I had no idea of separating.

This brief statement will explain to the Board the exact position in which I am placed. I have endeavored by my labors at Washington to aid our struggling country, and at all times, when possible, have been careful to protect the interests of our Company.

I should be glad to have an expression from the Board in regard to the course I have pursued.

Respectfully,

THOMAS A. SCOTT, Vice-President.

After the reading of the letter, the Board of Directors unanimously adopted the following:

Resolved, That the communication of Thomas A. Scott, Esquire, Vice-President, explaining his relations as Assistant Secretary of War to be temporary, be received and entered on the minutes, and that the Board express its approval of his prompt response to the demand of the Government, and its gratification that he does not contemplate any severance of his connection with this Company.

On the twenty-fifth of the following month the Board again took similar action in regard to the absence of Colonel Scott, when, in compliance with the request of General McClellan, leave of absence was granted to the Vice-President "for such period as his services may be considered of essential importance to the Government at Washington."

The amount received for transporting troops during the year was $145,158.

General Superintendent Lewis in his annual report for 1861, refers to the increased traffic on account of the movements of soldiers and munitions of war as follows:

The amount of military transportation has been very large, and was principally moved by means of special trains, and out of the large number of men thus carried over the line not one received a personal injury which was not directly caused by his own negligence. These special trains were moved with but little derangement of the regular passenger trains, which have been run with a good degree of regularity and with a large exemption from serious accident.

The cost of additional guards to bridges, etc., for the year in consequence of the rebellion in the South was $28,797.18.

1862.

Unfortunate as the war was to the country at large it brought great prosperity to the Pennsylvania Railroad Company in 1862 and the years which immediately followed it.

The summer of 1862 brought great discouragement to the Union Armies.

The Peninsular Campaign and the seven days battles before Richmond had resulted in
the defeat of the forces under General George B. McClellan, a native of Philadelphia, and throughout the North the feeling of uncertainty as to the result of the war was as great as after the defeat at Bull Run the year before.

The patriotic interest taken by the Pennsylvania Railroad Company in aiding the State of Pennsylvania to furnish her quota of the 300,000 troops called out by President Lin-

Whereas, It is officially declared by the Executive of the State of Pennsylvania that a public emergency demands the prompt expression of financial aid from the people of this State to enable the Government to insure just and efficient security to the citizens of this commonwealth against the varied contingencies incident to the prevailing Civil War, and

Whereas, The interests of this Company and the protection of its property, as well as that of the citizens of Pennsylvania are directly involved in the perfect maintenance of such public security, therefore,

coll during this emergency is shown by the following action of the Board during these eventful months.

The Treasurer was directed on July 9, 1862, to pay to Caleb Cope, Treasurer of the United States Sanitary Commission, the sum of five hundred dollars a month for three months as a donation from the Company in appreciation of the valuable services rendered the country by that Commission.

On July 23 the following resolution was unanimously adopted, after full discussion, by the various members of the Board:

Be it Resolved, That the President of the Pennsylvania Railroad Company be and he is hereby authorized to advance, from time to time, as the same as may be needed, to the Executive of the State of Pennsylvania, or such agents as may be recognized by him for the disbursement of bounty funds contributed by the people of the State of Pennsylvania, the sum of $50,000 to be applied to the payment of bounties to soldiers enrolling in the services of the Government.

It having been reported that there were certain men in the employ of the road who were believed to be disloyal to the General
Government, the following preamble and resolution was adopted on August 18:

Whereas, The General Government had prescribed a form of oath of allegiance for the officers and employees in the service thereof and to be taken by the Directors, officers and employees of this Company to enable each to set forth distinctly their position, so far as it relates to their loyalty to the General Government. It is therefore

Resolved, That such Directors and officers of the Company shall take the oath of allegiance to the General Government, and the General Superintendent and other heads of departments be and they are hereby instructed to require the employees in

he might deem best, so as not to interfere seriously with the working of the road. It was also provided that the wages of these men should continue during such time as might be used in working hours.

On the same day the Treasurer was instructed to pay to the Union Refreshment and Relief Society, one hundred dollars as a donation towards supplying the troops with proper food while passing through Philadelphia, to and from the seat of war.

Two days later the battle of Antietam was fought, resulting in the checking of Lee who

then retired into Virginia. Pennsylvania was saved from invasion and Washington was again freed from immediate danger of attack.

At the time of this battle, September 12, 1862, W. Hasell Wilson was summoned by Governor Curtin to assist in building fortifications for the protection of the city of Harrisburg. Of his experience with several officers of the regular army, who were present at a conference, concerning the proposed action, Mr. Wilson has published the following statement:

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\text{PENNSYLVANIA RAILROAD ENGINE No. 233. }
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10-WHEEL FREIGHT LOCOMOTIVE BUILT BY THE ROGERS LOCOMOTIVE WORKS IN 1862.

| Cylinders 18 inches Diameter by 22 inches Stroke. |
| Drivers 48 inches Diameter, Iron Tires. |
| No Record of Grate Area or Heating Surface. |
| Weight in Working Order, 69,500 Pounds. |
| Weight on Drivers in Working Order, 47,725 Pounds. |
| Weight on Truck in Working Order, 21,775 Pounds. |
I was very desirous that something should be done for the protection of the city and railroad, and offered my services on behalf of the Pennsylvania Railroad Company, to supervise the construction of any works that might be determined upon. Not being a military engineer, I was unwilling to submit any plans, but felt confidence in my ability to carry out the designs of the army officers. There was, however, an evident disinclination on the part of those gentlemen to take any action; they had no faith in volunteers, and expressed the opinion that it would be useless to attempt the construction of any works unless it could be done in a regular way, and with regular troops to man them. I urged that something should be done, but remonstrances produced no effect, and I returned to my office discouraged and disappointed. Fortunately the invading army was turned back at Antietam, and the danger was for a time averted.

The Board at their meeting December 2, passed the following resolution:

Resolved, That the letter from Jay Cooke, asking in regard to Government fortifications and improvements be referred to the Finance Committee with power to act, and that, in the opinion of this Board, if the Finance Committee can devise a plan by which these improvements can be obtained, to be paid for by the Government to the extent of $500,000 without increased expense to this Company, it should be done.

A letter from Governor Curtin was also considered at the meeting on December 31, in which he stated that after full consideration, he found it necessary to decline to receive the fifty thousand dollars appropriated by the Company for the purpose of paying bounties to volunteers, as the money could not be disbursed through any official channel, nor by him in person. He suggested, however, that the money be appropriated to the use of the volunteers from Pennsylvania then in the service, in such a manner as would promote their efficiency and comfort.

The following paragraph is quoted from his letter:

It is eminently proper that I should take this opportunity of expressing my thanks for the consideration and active support you have given the Government since the commencement of the Rebellion, as citizens and representatives of your corporation.

The following communication was addressed to Governor Curtin in reply:

To His Excellency Andrew G. Curtin, Governor of Pennsylvania.

Sir.—Your letter of the 4th of October last was duly received and referred to the Board of Directors of this Company. After a careful examination of the suggestions made by your Excellency, they recommend that the fifty thousand dollars transferred to you in July last by this Company for the purpose of paying bounties, and which cannot be received by you for the reasons stated in your letter, should be appropriated as part of a fund for the establishment of a Soldiers' Home at or near Harrisburg, or as an annuity for the same to provide for the comfort of disabled volunteers from our noble commonwealth. Should either of these suggestions meet your approval, it will afford the highest gratification to the Board of Directors of this Company to aid you in carrying it into effect.

Very respectfully, your obedient servant,

THOMAS A. SCOTT.

The amount received for the transportation of troops during 1862 amounted to $379,400.

1863.

The favorable effects of the war upon the traffic of the Pennsylvania Railroad Company continued during the year 1863 notwithstanding the fact that the presence of the Confederate army within the borders of the State during the early summer caused the through freight traffic to be suspended. The passenger business was also very much curtailed for several weeks. The whole property of the Company, however, escaped untouched and unharmed, although it was considered prudent to remove the rolling stock temporarily from the Middle Division. As soon as the danger was removed operations were resumed.

At the meeting of the Board of Directors held on April 20 it was resolved “That this office will be closed on Thursday, the 30th inst., being the Fast Day appointed by the President of the United States, “to invoke Divine aid for the Union Armies.”

The General Superintendent was authorized to make a donation of the sum of $500 on account of the Company to the subsistence committee of the city of Pittsburgh, to aid in supplying meals free of charge to soldiers passing through that city, and on June 24, it
was resolved to donate the sum of $500 to the battery organized in the city of Pittsburgh, under the direction of the Committee of Public Safety, to enable them to feed the horses and pay other necessary expenses, provided the said battery would move to any point on the line of the Pennsylvania Railroad, where their services might be needed.

At the same meeting, a memorial to the President of the United States "in reference to the defence of the harbor of Philadelphia" was read.

![Pennsylvania Railroad Engine No. 60](https://example.com/prr-engine60.png)

**Pennsylvania Railroad Engine No. 60.**

*Eight-Wheel Passenger Locomotive Built by the Baldwin Locomotive Works in 1863.*

- Cylinders 17 inches Diameter by 24 inches Stroke.
- Drivers 95 inches Diameter, Freedom Tires.
- Grate Area, 17.3 Square Feet.
- Total Heating Surface, 901.4 Square Feet.

- Weight in Working Order, 69,100 Pounds.
- Weight on Drivers in Working Order, 43,000 Pounds.
- Weight on Truck in Working Order, 26,100 Pounds.

When the Confederate forces began the invasion of Pennsylvania in the spring of 1863, several regiments of militia under the direction of General Couch, then in charge of the Department of the Susquehanna, began the construction of earthworks on the western side of the river, opposite Harrisburg, and it became necessary to construct block houses near the entrances to the larger bridges, and preparations were made for blowing up the western end of the Susquehanna River Bridge and also the bridge of the Northern Central Railroad a mile further up the river.

In June, a company of scouts, composed of picked men from the service of the Pennsylvania Railroad Company was, at the direction of Enoch Lewis, General Superintendent, organized and placed under the command of Alexander Lloyd of Hollidaysburg, who by scouting the country along the southern boundaries of the State, was able to communicate with Altoona over the line of telegraph along the turnpike between Chambersburg and Bedford, which was managed by a corps of operators selected from the Railroad force. A volunteer company, composed of employees from the Railroad Shops at Altoona were shortly before the battle of Gettysburg, stationed at Mount Dallas in Bedford County, under the directions of Colonel Coppée.

During this exciting period all of the able-bodied employees at Altoona were assembled on Saturday afternoons and drilled according to the military tactics of the United States Army, and at the general call for volunteers, which Governor Curtin made in June, a regiment, composed principally of Pennsylvania Railroad employees, enlisted for service and were sent to the front.

At a special meeting held June 30, "to take action in reference to the pay of employees of the Company enlisted in the defence of
the State,” a special committee was appointed with full power and authority to arrange the pay of employees of the Company enlisting in the service of the State and to retain their places for them until their return from military service.

It must be borne in mind that at this time the southern army had advanced on Gettysburg, and on the 3d day of July (the last day of that important battle), at a special meeting for the purpose of “considering the expediency of this Company aiding in the formation of regiments for State defence” it was unanimously resolved that the President be authorized to make the following donations to the regiments being raised in this city for State defence: To the two regiments first reported fully organized, $2,500 each; to the next regiment so reported, $2,000; the next $1,500, and to each succeeding regiment fully organized, $1,000 each.

It was provided that this offer should hold good until July 14, and only to such regiments as should be prepared to depart by that time.

At a meeting of the Board held September 16, it was resolved that the sum of $1,000 be “donated to the Regiment of Gray Reserves, and the same amount to the Regiment of Blue Reserves, who went to Harrisburg in the month of July last for State defence; provided the amount so donated shall be used in defraying regimental expenses then incurred.”

In July the bridges which had been burned and the tracks which had been destroyed upon the Cumberland Valley Railroad during the invasion of the previous month were rebuilt and placed in repair under the direction of J. A. Wilson, Engineer.

The following letter was read at the meeting of the Board of Directors on September 2, and ordered to be entered upon the minutes:

Huntingdon, July 31, 1863.

To the President and Directors of the Pennsylvania Railroad Company.

Gentlemen.—Having been in the capacity of an assistant to the Adjutant-General of this State, at Mount Union during part of the late rebel invasion, and in a position to know the service rendered to your road by the faithful discharge of military duty by Capt. W. Wallace and the men under his command, I deemed it a duty to obtain from him the names of his men that I might transmit them to you.

He went out at the first alarm with a company of militia from Huntingdon and remained in service with the men named by him until June 24. On that day the rebels started from Mercersburg under the belief that no opposing force was between them and Mount Union and intending to push in that direction. Capt. Wallace, learning this, went with his little squad upon the mountain, and as he very modestly relates, checked the advancing force. It had the effect of checking that advance, producing the impression that it was but the advance of a larger force, when in truth no other armed force was then in the field on their road to Mount Union. Had it not been for this check the road might, and probably would, have been cut at that point.

In addition to the service thus rendered to the road, they have the merit of drawing the first rebel blood that was spilled in the invasion of Pennsylvania, and as they are all young men (one of them, Mr. Moorehead, now a clerk in the Company’s employ), I have deemed it but an act of justice to them, that their names should be where you can have access to them, and know who they were. . . .

Respectfully yours,

JOHN SCOTT.

The following statement accompanied this letter:

List of men under Capt. Wallace who “prevented a rebel force from injuring the road of this company near Mt. Union” on June 24, 1863:

3. I. H. O. Corbin, Atty.,
4. James R. Moorehead,
5. Samuel Steel,
6. Benson W. Conrad,
7. Matthew H. Taylor,
8. Harry P. Decker,
9. Henry Willoughby,
10. Thomas King,
11. James Long,
12. Samuel Hatfield,
13. John Hatfield,
14. John Showalter,
15. James Leo,
16. M. Kelly,
17. John Miller, Mill Creek.
18. Seley M’Carthy,
21. Samuel Heather, "
22. Richard Hudson, "
23. Dyson Fraker, Fort Littleton.
24. M. Taylor, "
26. Wm. Leishter, "

In a letter to Mr. Scott speaking of the behavior of his men, Captain Wallace said:

The best evidence of the manner in which they sustained themselves in the encounter which ensued consists in the admission of the enemy, who acknowledge a loss of five killed and wounded (variously estimated from twelve to thirty). The enemy, by throwing out a heavy force of skirmishers, dislodged us and obliged us to withdraw, which I am happy to say we accomplished "without the loss of a man."

Upon the reading of this communication the thanks of the Board of Directors "were unanimously tendered to Capt. Wallace and his men for their noble and patriotic efforts on the 24th day of June last in preventing a rebel force from injuring the road near Mount Union."

Sundry communications requesting aid to regiments that went to Harrisburg in the month of July for the defence of the State, and also for aid to regiments of colored troops were submitted and referred to a special Committee for report.

The maintenance of way department was seriously hampered by the effects of the war "owing to the derangement in business caused by the invasion of the State and the consequent calling out of the militia," which made it impossible for the contractors to fulfill their engagements.

1864.

While the war increased the traffic over the lines in which the Pennsylvania Railroad was interested, it was by no means an unmixed blessing.

In common with other transportation organizations that Company found the management of its line during the year 1864 attended with unprecedented difficulties.

The expenses of operating the road for 1864 show a marked advance in every department, owing to the continued increase in the cost of labor and material and the necessity of employing untried men on the trains, in the shops and on the track.

The condition of the currency in 1864 was such that the cost of construction and equipment on all of the lines controlled by the Pennsylvania Railroad Company far exceeded the estimates upon which the work was undertaken.

Although its property was not threatened during the year by the enemy the Company continued to pursue its policy of liberality towards the men who had gone to battle for the Union.

At a meeting of the Board, held January 20, a communication was received from the First Regiment of Infantry, Gray Reserves, thanking the Board for their aid "contributed to the funds of the Regiment, to enable them to take part in the defence of the State during the last summer and fall."

At this same meeting $200 was donated to the Cooper-Shop Volunteer Refreshment Saloon "to enable them to continue their good work, in refreshing weary and hungry soldiers passing through the city in going to and returning from the seat of war."

Again on February 3, an additional $300 was donated to the Union Volunteer Refreshment Saloon and Hospital, "to aid them in the work of feeding soldiers passing through the city."

A petition was read at the Board meeting of February 17, from a committee of citizens of Altoona, asking for subscription to the "bounty fund to volunteers so as to avoid the coming draft." At the same meeting $100 was donated to the Battery of Artillery in Philadelphia, commanded by E. Spencer Miller.

A communication received on March 23, from the Committee at Pittsburgh, asking for permission to use the warehouse at the corner of Liberty and Water streets, in which to
DONATIONS TO SANITARY FAIR AND HOSPITALS.

hold a fair, beginning on the 10th of May, under the auspices of the Sanitary Fair Association was favorably acted upon.

The Board on April 6, donated the sum of $1,000 to the Second Regiment Reserve Brigade (Blue Reserves of Philadelphia), towards a fund for procuring new uniforms for the men of the regiment; it being understood that the regiment would "at all times holp itself in readiness to defend the property of this city and Company, when required," and an additional sum of $2,000 was also donated to the Committee for recruiting Colored Regiments.

A donation of $5,000 was likewise made to the United States Christian Commission "to be applied to the purchase of Hospital stores and supplies for the sick and wounded soldiers."

At the same meeting $10,000 was appropriated to the Pennsylvania Hospital "in consideration of its past services, to assist that institution in meeting the present emergency, and as an aid in perpetuating its beneficial influences for the future, in which this Company is so much interested."

When the Directors convened on the 6th of July, a letter from Governor Curtin was read in which he informed the Board of the action of the last Legislature in regard to the disbursement of the donation by the Company for the benefit of Pennsylvania Volunteers.

The letter, dated Executive Chamber, Harrisburg, July 1, 1864, addressed to President Thomson, is as follows:

I have made arrangements under which the fifty thousand dollars so patriotically and liberally do-

PENNSYLVANIA RAILROAD ENGINE No. 110.

6-WHEEL SHIFTING LOCOMOTIVE BUILT BY BALDWIN LOCOMOTIVE WORKS IN 1864.

Cylinders 15 inches Diameter by 18 inches Stroke.  
Drivers 44 inches Diameter, Chilled Tires.  
Grate Area, 11.9 Square Feet.  

Total Heating Surface, 567.5 Square Feet.  
Weight In Working Order, 61,000 Pounds.
nated by your Company for the benefit of the volunteer soldiers of Pennsylvania in 1862 can be disbursed and for an object so proper that it cannot fail to gratify the gentlemen of your Board of Directors.

The Legislature at the last session passed an act to receive the money, and directed the Governor of the State to expend it for the relief of destitute orphans of Pennsylvanians who died in the service.

I appointed Hon. Thomas H. Burrowes to superintend the disbursement and to submit a plan which we might expect to be adopted by the next Legislature. His plan has been submitted, and after full consultation has been adopted, and we are now prepared to commence the work.

The original of which was designed, built and equipped by Frank Thomson, now a Vice-President of the Company, was exhibited at the Pennsylvania Railroad Building in Chicago during the World's Fair in 1893.

The war had created such a scarcity of skilled labor, that on September 7, 1864, the President was authorized "to select an Agent and send him to Europe for the purpose of securing skilled labor for the service of this Company."

At the last meeting of the Board, held in

Emigrant Car fitted up for Ambulance Purposes by Frank Thomson during the War of 1861-65.

The money can be paid through me or directly into the treasury of the State, and will be drawn out as required and settled by the Auditor-General. A printed copy of the manner in which it is proposed to execute the trust will be sent you next week.

Very respectfully,

Your obedient servant.

A. G. CURTIN, Governor.

Geo. W. I. Ball was September 7, appointed Military Agent in charge of accounts for transportation for the United States Government.

A communication was read from the General Superintendent, in reference to the building of four Hospital Cars for the transportation of sick and wounded soldiers. This was referred to Vice-President Lombaert with power to act. The model of one of these cars, the year 1864 (December 28), the sum of $4,000 was donated to the Union Volunteer Refreshment Saloon of Philadelphia "to aid them in continuing their work of furnishing meals free of charge to soldiers passing through the city."

Fortunately for the country the war was drawing to a close. From the date of the appointment of General Grant to the command of all the military forces of the United States, in March, 1864, victory rested upon the banners of the Union Army almost continuously. Sheridan's success at Winchester and in the valley of the Shenandoah, which defeated the last attempt to threaten Washington, was followed in November by Sherman's triumphant march from Atlanta to the sea, which cut the Confederacy in twain and
removed all opposition to the Union cause west of Virginia, to which State the seat of war was now transferred.

Lincoln's re-election to the Presidency in November when General McClellan met with ignominious defeat at the polls, demonstrated that the Northern States were united in supporting Lincoln and his Generals in the conduct of the war.

1865.

The advent of the New Year brought with it the dawn of peace. The end of the war was hastened when Sheridan, after cutting the railroad north of Richmond, encamped with his army before Petersburg. Early in February Sherman broke camp at Savannah and marched northward through the Carolinas at the same time that Stoneman, with thousands of cavalry, advanced eastward from Tennessee through the passes of the Alleghenies, and in March three armies, comprising over 100,000 men, united on the banks of the Neuse.

With all avenues of retreat cut off, Lee's condition was desperate. The defeat of the Confederate forces at Fort Stedman, March 25, and at Five Forks on April 1; the capture of Petersburg on the 2d; and the evacuation of Richmond the same night, were followed a week later by the surrender of Lee at Appomattox Court House on Sunday the 9th day of April, when all that remained of the Army of Northern Virginia laid down its arms.

After a struggle of nearly four years, during which the national debt had been increased to $2,850,000,000, and a million of able-bodied men had been slain or rendered unfit for active life, the country was again at peace.

In the midst of the universal rejoicing at the end of the war, the assassination of President Lincoln, on the night of Good Friday, April 14, cast a gloom over the whole nation.

Many of the officers of the Pennsylvania Railroad Company had been brought into close official and personal intercourse with President Lincoln during these eventful months, and his untimely death came to them as a personal bereavement. It was eminently fitting that the Directors of a Company, whose interests were so closely allied to the welfare of the State and nation during the previous years of strife and carnage, should take official action upon this far-reaching calamity.

At the meeting of the Board on the 18th of April, the following preamble and resolutions were unanimously adopted and ordered to be spread upon the minutes:

Resolved, That the Board of Directors of the Pennsylvania Railroad Company profoundly sympathizes with the great grief which so deeply stirs the national heart upon the removal, by violent death, of his Excellency, Abraham Lincoln, late President of the United States, whose noble patriotism and wise and unselfish devotion to the public interest had, under God, led us through the perils which had encompassed our nation almost to their termination, and who has now parted from among us when his administration, deriving fresh lustre from the crowning achievements of his armies, was made all the more glorious by the wise and fraternal magnanimity, and who, in the hour of perfect victory, yet triumphed over himself, so "that he who ruleth his own spirit is greater than he who taketh a city."

Resolved, That out of the depth of our hearts we reverently thank the Almighty God that a life so illustrious for its virtues and its public services was spared until the last stronghold of this foul and treacherous rebellion had yielded to the national power which Mr. Lincoln so ably controlled and directed, and the flag which symbolizes the freedom and integrity of the republic waved in triumph over the cradle of the rebellion.

Resolved, That the foul and wicked murder should intensify the determination of the American people that treason and its guilty cause must wholly depart from the land, and the authority of the Constitution and the law be implicitly submitted to, and the integrity of the United States maintained.

Resolved, That the several officers of the Company be closed on Wednesday the 19th instant, the day of the interment of Mr. Lincoln, and that such officers and employees of the Company as can safely be relieved on that day shall not be required to attend to their duties.

After the adoption of these resolutions, the President read a copy of the dispatch sent on the 17th to Governor Oglesby, Senator Yeates and Representative Arnold, offering to the committee the use of the road "for the
conveyance of the remains of the lamented Chief Magistrate and those who may accompany them on their mournful journey to Illinois."

The funeral train, moving under special schedule, left Washington, April 22, passed over the Baltimore and Ohio Railroad to Baltimore and thence over the Northern Central Railway to Harrisburg, from which point the train was brought over the Pennsylvania Railroad, arriving in Philadelphia at half past six o'clock in the afternoon of Saturday, April 22, when the body of the illustrious dead lay in state in Independence Hall.

The journey of the funeral cortege to Springfield, Illinois, was marked by popular demonstrations of sorrow in every city and hamlet through which the train, draped with emblems of mourning, passed. Strangely enough, the car in which the catafalque was erected had been completed only a few days before the assassination; although specially constructed for the President's personal accommodation, it had never been used by him until it served as a hearse to bear his remains to their last resting place.

The capture of Jefferson Davis, President of the Confederate States, by United States troops, May 10, at Irwinsville, Georgia, was the last important event of the struggle. The greatest war of modern times thus passed into history.

During the remainder of the year the disarmament and disbanding of troops necessitated the return of many of the former employees on the various railways of the country to their legitimate occupations. The receipts for the transportation of United States troops at the close of the war amounted to nearly $1,279,000, and the total receipts of the Penn-
sylvaria Railroad and its branches in 1865 was nearly $17,500,000, almost three times the total earnings in 1860, the year before the war.

Below is a statement of the monies appropriated for “war donations and subscriptions of the Pennsylvania Railroad Company,” furnished by the secretary:

July 5, 1861.—Subscription to new State Loan. ...........................................$300,000
Sept. 11, 1861, to May 17, 1865.—Sundry donations to Union Voluntary Refreshment Saloon, $300, $200, $500, $300, $500, $250. ..........................1,560
Sept. 11, 1861, to May 17, 1865.—Sundry donations to Cooper-Shop Refreshment Saloon, $200, $200, $200, $200, $250 ...............1,050
Sept. 25, 1861, to July 3, 1863.—Donations to Employees’ Rifle Company, for muskets, $1,500, $1,000 ...........................................1,600
Jan. 9, 1862, and Sept. 16, 1863.—Donations to Gray Reserves, $500, $1,000 .................................1,500
July 9, 1862.—Sanitary Commission, $500 for a month for three months ..........................1,500
December 17, 1862.—Subscription to $200, 000 5-20 U. S. Bonds ...........................................200,000
December 31, 1862.—Pennsylvania Soldiers’ Home, Harrisburg ...........................................50,000
June 24, 1863.—Pittsburgh Battery ...........................................500
September 16, 1863.—Donation to Blue Reserves on account of expenses in State service .................1,000
February 17, 1864.—Donation to Battery of E. Spencer Miller ...........................................100
April 20, 1864.—Donation to aid committee on formation of colored regiments to sustain free military school in Philadelphia ..........................2,000
April 20, 1864.—Subscription to Sanitary Fair ...........................................10,000
April 20, 1864.—Donation to Blue Reserves for new uniforms ...........................................1,000
May 18, 1864.—Christian Commission, donations for hospital stores ...........................................5,000
May 18, 1864.—Donations to Citizens Volunteer Hospital ...........................................300

$577,200

A continually increasing business had to be conducted by inexperienced men on account of the draft upon the employees by the Government to fill the armies and man the military railways. For a time it was almost impossible to procure even a sufficient number of unskilled hands to conduct the business, and the necessity of introducing into important positions untried men, together with the frequent changes involved in order to secure the best service, became “a strain upon the endurance of the officers and faithful employees of the Company as harassing and unpleasant as it was destructive to the machinery of the road.” As a result, many accidents occurred, “arising from the inferior workmanship and material that the great demand for locomotives and cars has induced, which there is no practicable means of obviating when all that can be produced has heretofore been insufficient to meet the demands of the Government and the railway companies.”

During the latter part of the war the New York trunk lines encouraged the establishment of fast freight expresses, and by careful management and strict attention to the prompt movement of cars and relieving customers of all trouble in connection with the procurement of through way bills, etc., they developed a large business. To this matter President Thomson alludes in his report for the year 1865:

After many years of unsuccessful efforts to induce the New York trunk lines to abandon their policy of committing a share of their freight business to private freight expresses, the Pennsylvania Railroad Company, for the purpose of counteracting the diversion of traffic from its route caused by these organizations and to provide at least equal facilities for the merchants of Philadelphia, assented to the introduction of similar lines upon your railways. The cars can be provided at the expense of the transporters, and of a compromise gauge, that they might reach all points in the West or Northwest without transshipment. These fast freight lines maintain agents in all the Western cities, who personally superintend the prompt and proper delivery of freight, and see to the settlement of claims for damages or delays. The result has been to secure a class of business, without interfering with the ordinary tonnage of the Company, that has not heretofore been reached.

The commercial and manufacturing interests of Philadelphia have been largely promoted by the operations of the Pennsylvania Railroad Company in the establishment by it of rates of freight already far below those anticipated when the work was undertaken. But this is not the only thing required to center the commerce in this city, as seems to be
THE PENNSYLVANIA RAILROAD COMPANY. 400

general belief. The rates of freight have really but little to do with this question, provided they are fixed so as to meet fully the efforts of competing avenues to divert traffic from her route. The large receipts of the Company are the best evidence that such diversion has not taken place. Mercantile enterprise must seize hold of the products of the West, so abundantly flowing over this avenue, and by its activity, aided by capital, purchase or secure by actual consignment and ship them to other markets. There is no other way to add to the commerce of Philadelphia, and any movement to that end will meet the hearty co-operation of this Company.

If the advantages of locality possessed by this city are permitted to pass by unimproved by her merchants, they must not complain that those of the West seek other markets to sell and buy in. The Pennsylvania Railroad Company has offered every facility to bring to the city the products of the Great West, as well as for their storage while here, and will feel deeply interested in any corresponding effort upon the part of our merchants and capitalists to avail themselves of the advantages thus provided.

1861.

The following events which bear no direct relation to the War of the Rebellion (1861-1865) have been grouped for convenience of reference.

Nothing worthy of note transpired during January save that a general feeling of uncertainty prevailed, owing to the agitation of political issues.

The Directors' report for the year 1860 was read and adopted at the annual meeting of stockholders on the fourth of February, 1861, when it was decided to appoint thereafter a committee of seven stockholders to select the names of the gentlemen to be voted for as directors.

A special committee was appointed at this meeting "to examine into the condition and general policy of the Company."

A communication was read to the Board on February 20, 1861, from the Chicago Board of Trade, tendering thanks for the courtesy of the road, during the recent visit of that body to Philadelphia, and on March 6 the President was authorized to enter into an arrangement with the Tyrone and Lock Haven Railroad Company under the provisions of the act for the supplying of iron rails and spikes at cost for the line to be laid down from Tyrone to Lock Haven, for a sum not to exceed two hundred thousand dollars, provided the first mortgage on the whole line should not exceed four hundred thousand dollars.

A special meeting of the Board was called on March 7 to consider the question of the tonnage tax.

The provisions of the act of Assembly were accepted by the Directors and it was decided that a written contract be executed, under the corporate seal of the Company, with the Commonwealth of Pennsylvania, for the cancellation of its indebtedness to the commonwealth, incurred in the purchase of the Main Line. According to the terms of this agreement the Company was to pay into the State Treasury on the 31st day of January and July in every year until 1890, inclusive, such "a sum in addition to the interest on its bonds owned by the State and in addition to the annual liabilities contracted by the purchase as would increase the amount of the purchase to $230,000."

It being believed that the time had now come when the establishment of a line of steamships between Philadelphia and Liverpool was demanded by the needs of the Company and that "the interests of the city of Philadelphia would be materially benefited by the arrangement," the fact was entered upon the minutes.

By resolution adopted April 17 the President was instructed "to inform the members of the Committee appointed at the late meeting of the stockholders, that the Board of Directors of the Pennsylvania Railroad Company desired to afford every facility for the examination of the condition and general policy of the Company and to lay before the said Committee all contracts and other papers which might aid them."

An agreement with the West Chester and Philadelphia Railroad Company for the use
the transportation of passengers, freight, or from Philadelphia to and from all points of competition, accessible or convenient to the routes of both parties, by all rail shall be equal.

Aforesaid fund or delay shall be made in the transportation of passengers, freight, or from Philadelphia to and from all points of competition, accessible or convenient to the routes of both parties, by all rail shall be equal.

Agreed: That the party of the second part shall keep an accurate account of all the business receipts and expenses arising from the aforesaid property, and their books relating thereto shall be subject to the examination of the President of the party of the first part, or any other person duly authorized by them to examine the same, and the party of the second part shall furnish to the party of the first part, monthly statements of all the gross receipts, and an accurate account of all the said business, expenses, and receipts.

Waith: That if any dispute shall arise in relation to this contract and lease between the parties herein, each shall present a Referee of experiences and skill in railway management, and such and Referee shall select another of the skill and experience, and the three so chosen shall meet and decide such differences, and their decision, on that are a majority of them, shall be final and conclusive upon the said parties.

That the terms of the lease and rent shall be exactly as hereinafter set forth, during the continuance of the said lease, and especially at such time as the said Railroad shall be completed and ready for use, and operation as above mentioned, twenty-one thousand, two hundred and one hundred dollars, of which twenty shall be paid in the first month, and the balance of the annual rent paid at the end of each year, during the continuance of the lease, and shall be paid to and by the party of the second part, and the said rent, and all other rents, shall be payable in cash, at the place where the premises are situate, or such other place as the party of the second part, or party of the first part, or their agents, may direct from time to time, by order of the party of the first part, and shall be secured to the party of the second part, or the party of the first part, by the mortgage herein, executed by the party of the second part, or the party of the first part, as the case may be.

IN WITNESS WHEREOF, the said parties have hereunto, in pursuance of the resolution of the Directors of the Pennsylvania Railroad Company and the present agreement, signed by the President of this company and the Secretary of the said corporation, respectively, the day and year first above written, we hereunto set our hands.

Sealed and Delivered
OF THE PRESENCE OF

[Signature]

[Signature]
of its tracks in the 24th Ward, Philadelphia, was made on the 12th of June.

The most important event of the year occurred on June 17, when the lease of the Philadelphia and Erie Railroad Company for a period of 999 years was agreed to.

Under a charter procured from the Legislature in 1860 the Pennsylvania Railroad Company in connection with the Philadelphia, Wilmington and Baltimore Railroad Company and the Philadelphia and Reading Railroad Company, in August organized the Junction Railroad Company. The object of constructing this new line was to connect these three railroads by a continuous line along the west bank of the Schuylkill, from the Reading Railroad, near Peter’s Island bridge to the junction with the Philadelphia, Wilmington and Baltimore Railroad at Gray’s Ferry, the new road to intersect the Pennsylvania Railroad near the wire bridge at Fairmount Park. By this means the interchange of freights between these lines could be effected without passing through a populous portion of the city.

The Pennsylvania Railroad Company subscribed to the stock of this new company to the extent of one hundred and seventy shares.

In September, 1861, under the provisions of the new law concerning the tonnage tax, the sum of $75,000 was advanced to the Tyrone and Clearfield Railroad Company. Contracts were also entered into between the Bali Eagle Valley Railroad Company and the Ebensburg and Cresson Railroad Company.

The President reported to the Board on October 9, 1861, that he had appointed Mr. Lombaert, Acting Vice-President, during the absence of Thomas A. Scott.

It was then also decided that the Pennsylvania Railroad Company should endorse $3,800,000 of the new mortgage bonds of the Philadelphia and Erie Railroad Company.

Beginning with the 1st of January, 1861, the maintenance of way department of the Pennsylvania Railroad took charge of the Harrisburg and Lancaster Road, in accordance with the terms of the lease, and the Brandywine and Waynesburg Road, seventeen miles long, extending from Downingtown to Waynesburg, was leased to the Pennsylvania Railroad Company, the latter company taking possession November 4; the West Chester Railroad had been leased to the Company in the year 1859.

During the year 1861 the entire track between Eleventh Street and the Schuylkill river bridge at Philadelphia was renewed, a new pattern of rail being laid, and the shops at Parksburg were abandoned, the machinery having been removed to the Harrisburg shops.

The masonry for the new bridge over the Schuylkill river, which had been partially completed in 1860, was entirely finished in November, and the raising of the iron superstructure, which was commenced September 13, 1861, was completed early in January, 1862, and the track was laid to connect with the main line of the Pennsylvania Railroad at the iron bridge, from which point to the connection at Washington Street was about one and three-quarters miles.

A tunnel was constructed through the hills near Carpenter’s station, about twenty miles from Pittsburgh, in 1861. It was 550 feet in length, twenty-two feet high, and twenty-four feet wide, the total cost being $25,000.

Six new locomotives were added to the equipment of the road in 1861, and 14,863 tons of iron were laid for the maintenance of the track.

The extension from West Philadelphia to the Delaware river was completed and put in successful operation in the spring and a proposition was made to lease the city railroad on Market Street for a nominal sum, but it was not acted on by the city government before the close of the year.

The increased freight business of the road during 1861 made it necessary for the Company, in addition to the purchase of six new freight locomotives, to hire eight first-class locomotives from the Philadelphia and Reading Railroad during November and December.
The total earnings of the Company from all sources were $7,300,000; the total expenses were $3,653,062, leaving a net earning of $3,646,938, which was an increase of $1,350,535 over the previous year. This increase of revenues was derived almost entirely from the transportation of eastbound freight to meet the European demand for breadstuffs.

The Board of Directors decided to charge $958,500 to profit and loss, that being the amount subscribed in 1858 to the stock of the Marietta and Cincinnati, and the Springfield, Mt. Vernon and Pittsburgh Railroads, which were never finished.

During the latter part of the year, the Mississippi river being closed as a commercial avenue, there was a large increase in traffic over the road. In the annual report the President asserts his belief that “as the Mississippi river cannot long continue closed to commerce, it would not be prudent to treat revenues thus temporarily acquired as a legitimate source of dividend by the Company whose line is unfinished.” Hence the Board, after declaring the usual dividends, preferred to invest the surplus net revenue in the extension of the road to the Delaware river, and in the erection of a grain elevator with wharves and depots at that terminus, and in increasing the equipment of the line.

1862.

The Special Committee on the Philadelphia and Erie Railroad made a formal report to the Board on the 4th of January. Mention was made of a plan for a more general settlement by said Company with its creditors, preliminary to a formal execution by each Company of the pending contract and lease. The Board in pursuance of a resolution adopted by the stockholders, approved the contract, and it was decided that the bill of sale proposed to be executed by the Philadelphia and Erie Company should be accepted.

On the 1st of February the Company took possession of the Philadelphia and Erie Railroad, in accordance with the terms of the lease, and Joseph D. Potts was appointed Superintendent.

At the stockholders' annual meeting held in February, 1861, a special committee as previously noted had been appointed to “make a full examination into the general policy of the Company.” This committee, which consisted of Hon. J. R. Ingersoll, Alexander Fuller, Henry Cope, James Crissy, C. H. Fisher, William Divine and James Page, after making a careful examination, submitted a set of resolutions, at the stockholders' meeting held February 2, 1862, of which the following form a part:

Resolved, That from the inquiries and examination of the committee into the condition and management of the Company, they are satisfied that it is in a prosperous condition, and that the present system and regulations for the freight and forwarding business are calculated to promote the interests of the stockholders and the accommodation of the public.

Resolved, That this committee is convinced of the integrity, ability and fidelity of the management of the Company.

Resolved, That this committee, exercising the discretion invested in them by the resolution of the stockholders, do not deem it expedient to call a meeting of the stockholders to submit a report, and that the above resolutions be presented to the next annual meeting of the stockholders.

The above report, signed by all the members of the committee except Mr. Page, was discussed at the annual meeting of 1862 and referred to the incoming Board “with instructions to report upon the whole subject.” The minority report, submitted by Mr. Page, questioned “the integrity of the majority of the committee,” and severely criticised the management, commenting upon the finances of the Company. This minority report closed with the recommendation:

1. That the real estate, equipment, and construction accounts should be closed.
2. That the dividends should be suspended until the track and outfit were restored to undoubted efficiency, and that the Board should be instructed not to make any dividends in future unless earned.
3. That the Board be directed hereafter to consider Philadelphia and Pittsburgh the termini of the road, and that they should not cripple the local trade of the road.

4. That a committee of investigation should be appointed to examine into the affairs of the Company in the manner adopted by the Committee of the New York Central Company, by passing over the whole track on a hand car, examine the condition of the locomotives, cars, and all property.

By the adoption of these recommendations, it was stated that the Company and its road could be "redeemed from its present condition," and made to pay better dividends.

In reply to these criticisms the Board of Directors issued a special report, consisting of six pages, in which these recommendations were taken up and replied to one by one as follows:

The first proposition supposes that the road has reached its full capacity, and nothing is required but to finish its double track to render it complete.

In this limited view of the future operations of the line the Board do not concur, and to provide for the enlargement of the business of the road, have made, and are making, large additions to their accommodations at Pittsburgh as well as at Philadelphia. It will be observed, however, by a careful examination of the accounts of the Company for several years past, that these expenditures have been met from the profits of the road after paying dividends, without materially augmenting the debts of the Company.

The second simply assumes that the track and machinery of the Company have greatly deteriorated, where the facts are that as a whole this property is much more valuable than when it was first brought into use.

The third recommends that policy which has always been pursued by your Board.

The fourth provides for a Perambulating Committee, such as the New York Central once created, which committee, after attempting to fulfill its duties as instructed, candidly reported that their investigations were of no practical value, as they did not understand the anatomy of the subject examined.

Your Board in this connection will state that it is believed that by the termination of next year, under the operation of the sinking fund created for the extinguishment of the obligations of the Company, the second mortgage bonds will be provided for when they fall due in 1875. The debt of the Har-"
At this meeting Thomas A. Scott was unanimously re-elected Vice-President.

At the same meeting it was decided that Josiah Bacon should act as President pro tempore during the absence of Mr. Thomson in Europe. The Treasurer was instructed to act as Secretary during the absence of Edmund Smith.

The establishment of a line of steamships to Liverpool was further considered at this meeting and a resolution authorizing the subscription of $125,000 to the bonds of such a Steamship Company was agreed upon, (this action was reconsidered on the 27th of March, 1863.)

Beginning with June 11, 1862, the minutes are in the writing of Thomas T. Firth.

The bridge at Middletown having been damaged by the spring freshets during the month of June, the Philadelphia and Reading Railroad Company furnished facilities for running Pennsylvania Railroad freight over their road while the bridge was being rebuilt.

1. Craig Miller, having resigned as a Director on July 3, Joseph B. Myers was unanimously elected to take his place.

On August 16, it was decided that a complimentary ticket over the Pennsylvania Railroad be presented to William R. Thompson, for life, in recognition of his services in building up and developing the road. Mr. Thompson had recently tendered his resignation as director.

On June 11 James P. Laird was appointed Master of Machinery.

Among the many nominations submitted by W. Hasell Wilson, Chief Engineer, at this meeting were the following: A. J. Cassatt, Engineer of the Eastern Division; Joseph N. Wilson, Assistant Engineer; John Riley, Chief Clerk, Maintenance of Way Department; Roger Hendley, Clerk and Draftsman; Henry Pettit, Rodman.

Nearly all of these gentlemen afterwards became prominently identified with the interests of the road.

William Martin, a member of the Board of Directors, died about the middle of October.

William J. Howard was appointed attorney by the special committee at Pittsburgh on October 8, and on the 22d it was decided that after June 1, 1863, the office at Baltimore should be conducted by the Northern Central Railway Company.

The General Superintendent was, on October 28, authorized by the Board "to advance the wages of the employees of the Company to such an extent, and for such a period, as, in their opinion, circumstances may seem to
require." A letter was also read from S. B. Tales, presenting the Board of Directors with a colored lithograph of the Union Volunteer Refreshment Saloon, at the foot of Washington Street—a colored reproduction of this lithograph, in miniature forms one of the illustrations of this book.

A communication, dated October 19, from the Cambria Iron Company, offering to furnish rails to the Company, was considered November 5 by the Directors.

The following report was read and adopted at the meeting on December 2:

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Trip Pass issued by Enoch Lewis, General Superintendent. 1862.
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The Special Committee, to whom was referred the subject of the early completion of the Pennsylvania Railroad between Blairsville and the Junction of the Allegheny Valley Railroad near Freeport, recommend the following proposition: That the first mortgage bonds for the sum of three hundred thousand dollars, bearing interest at the rate of six per cent per annum, be executed on that part of the road of the Western Pennsylvania Railroad Company extending from Blairsville to the point of connection with the Allegheny Valley Railroad near Freeport (about 35 miles), and that the said bonds be deposited with the trustees, to be approved by the Pennsylvania Railroad Company.

That the construction of that portion of the line above the river be commenced as early as practicable.

That the whole amount of the said bonds, $500,000, shall be used in defraying the cost of the right of way and land damages and to the completion of the charge of Edmund Smith, Secretary," and that the President was authorized to organize the methods of conducting the business there "in such manner as will best serve the interests of the Company."

On the same day a contract was approved for the lease of the Bald Eagle Valley Railroad for a period of three years.

Messrs David Solomon, Hugh Craig and Sylvester J. Megargee, were elected Directors in the Company, on behalf of the city of Philadelphia for 1863.

The total earnings for 1862 reached $10,305,000, of which $379,400 was for the transportation of troops. The net earnings for that year amounted to $4,873,200.
During the year the amount paid on account of lease to the Philadelphia and Erie Railroad amounted to $132,000, the amount received from the thirty per cent of the earnings of that road, according to the terms of the contract, making a net loss of about $14,000 in operating it. The amount paid to the "commutation railroads" including the West Pennsylvania according to the act of Legislature, was $454,000.

The sum of $987,000 was paid out in dividends to shareholders of the Pennsylvania Railroad Company, and $198,000 was expended in the erection of a grain elevator and freight sheds at the Delaware river terminus.

During the year a branch railroad was constructed to the Philadelphia gas works.

During the latter part of the year 1862, several communications concerning the purchase of property at Liberty Street, Pittsburgh, were considered by W. J. Howard, Solicitor.

In 1862 the councils of the city of Pittsburgh passed the necessary legislation to enable the Company to secure the real estate and right of way in order to relieve Liberty street from the large amount of traffic east of the Pittsburgh, Fort Wayne and Chicago Railroad connection, and $400,000 was expended in the purchase of ground and the removal of tracks.

The President in his annual report covering 1862 makes the following complimentary statement concerning the officers in control of the road:

The operations of the road have been managed by its judicious General Superintendent, Enoch Lewis, Esquire, aided by his vigilant Division Superintendents, G. C. Franciscur, S. D. Young, Andrew Carnegie and Robert Pitcairn, with much economy, success and exemption from serious accidents, notwithstanding the immense tonnage that has so rapidly accumulated on the line.

An additional officer was added to the maintenance of way department on the 1st of January, 1863, who was designated as "Engineer of Bridges and Buildings."

At a meeting of the Board, held January 14, 1863, the President reported that he purchased, while in London, 2,500 shares of the stock of the Northern Central Railway Company, for which he gave seventy sterling bonds of the Philadelphia and Erie Company, £200 each, at ninety per cent, receiving in exchange £100 in cash.

At the meeting held on January 20 a special committee was appointed to examine and report on the desirability of securing the control of the line from Williamsport to Buffalo in connection with the use of the Philadelphia and Erie line.

On February 13, a contract was entered into between the Buffalo, New York & Erie Railroad Company, the Erie Railway Company, the Elmira & Williamsport Railroad Company, the Northern Central Railway Company, and the Pennsylvania Railroad Company, by which a general agreement concerning passenger and freight traffic was entered into, the Pennsylvania Railroad Company endorsing the agreement made on their behalf by the Northern Central Railway Company.

It having been reported that the Camden & Amboy Railroad Company were unable to carry the increased trade offering for the West on account of the war, a Special Committee was appointed by the Board on February 11, "to obtain the necessary information for a report of the facts to the Board, with a view to such action as might be deemed necessary." Satisfactory arrangements were made and on the 17th a contract with the Philadelphia & Trenton and Camden & Amboy Railroad Companies "insuring a closer exchange of passenger and freight traffic" was agreed to.

A special report by the Committee on Canals was made at the meeting of February 11, which concluded with the following statement: "The obligation to maintain the eastern division of canals, renders it imperative to increase their capacity and efficiency, otherwise a great and serious loss would be the result." T. T. Wieman, Chief Engineer and Superintendent of the Canals, was requested.
to furnish an estimate of the probable cost of increasing the capacity of the canal from Duncan's Island to Huntingdon, so as to pass boats of an equal capacity with those of the Susquehanna Division.

It was decided to issue notice that on and after May 1, 1863, the Pennsylvania Railroad Company would "abandon so much of the Western Division of the Canal, lately forming a part of the main line of the public works, as lies between Blairsville and Johnstown, commonly known as the Upper Western Division."

The Board at the meeting held February 25, resolved unanimously "that the thanks of the Board of Directors are eminently due, and are hereby tendered to Josiah Bacon, Esq., for the able and satisfactory manner in which he discharged the duties of the President pro tem during the absence of Mr. Thomson in Europe."

At a meeting of the stockholders on March 2, the ten Directors received 18,706 votes each, their being no opposition. Mr. J. Edgar Thomson was unanimously elected President. The Directors elected by the city of Philadelphia for this year were Messrs David Salomon, Hugh Craig and S. Y. Megargee.

A supplement to an act entitled "An Act to Incorporate the Pennsylvania Railroad Company" was approved by the Governor on the 16th of March. It provided for some changes in the organic law of the Company, which did not meet with the approbation of a number of the stockholders.

The question of a transatlantic line from Philadelphia to Liverpool was discussed at the meeting of the Board held April 1, and President Thomson was authorized to communicate with the President of the City Councils in regard to the matter.

On the 15th of April a communication was received from T. T. Wieman, Engineer and President of the Canals, in which he stated that it would cost $439,000 to enlarge the locks and chambers to the size of seventeen by one hundred and eighty feet, and deepen the water to five feet on the Juniata Canal from Huntingdon dam down. To enlarge the locks to seventeen by ninety feet and complete the other work necessary, except deepening the canal, would cost $180,000. The Chief Engineer was instructed to have the work done under the latter recommendation.

At the Board meeting held April 29, the Finance Committee recommended "that the sum of $400,000 be advanced to relieve the Central Ohio Railroad Company from all obligations interfering with the execution of a perpetual contract for the joint use by the Steubenville & Indiana Railroad Company of that portion of the Central Ohio Railroad between Newark and Columbus upon terms of entire equality."

The Board, at a meeting held May 27, re-elected Thomas A. Scott, First Vice-President for the ensuing year. H. J. Lombaert, Auditor of the Company, was elected Second Vice-President and Samuel G. Lewis succeeded Mr. Lombaert as Auditor.

1863.

At a meeting of the Board on September 30 W. J. Howard was elected Assistant Secretary of the Company.

Early in the year the Point Breeze Branch of the Delaware extension was completed and put into use, by which means coal from the Westmoreland County mines could be conveyed to the city gas works without transshipment.

During the spring work on the Union Passenger Station at Pittsburgh was begun.

On the 23d of November the track on the Junction Railroad, connecting the Philadelphia and Reading and the Pennsylvania Railroads was completed and put in operation. The surveys were made and a line located for the Connecting Railroad, from a point one mile west of the Market Street bridge to the Trenton Railroad near Frankford, a distance of about seven miles.

At a meeting of the Board held December 9, the President was authorized to negotiate a contract with responsible parties for the
establishment of fast freight lines between the East and West, by way of the Pennsylvania Railroad, on such terms as in his opinion were just and reasonable. It was further directed that the rates per car load by such independent fast freight lines should not be less than those submitted by William Thaw, President of the Union Transportation and Insurance Company, under date of November 16, 1863.

On December 9, the basis of the proposition for the establishment of the line of steamships between Liverpool and Philadelphia in connection with the Pennsylvania Railroad Company, to run fortnightly, was considered and favorably reported on; it being the understanding that the steamers were to be about 3,000 tons register, 400 English horse power, capital not to exceed £400,000, the vessels to be ready for service on or before March 1, 1865. Smaller steamers of 1,500 tons register were to be placed on the line on or before March 1, 1864. It was resolved that the Pennsylvania Railroad Company would agree to enter into a contract with the steamship company organization in a manner satisfactory to the Board, on this basis.

The President reported to the Board on December 23, that he had purchased the piers, abutments, and appurtenances belonging to the road during the year amounted to $1,707,000, averaging 64.6 miles for each passenger, while the total tonnage moved was 2,455,000, of which 903,000 tons was coal. The increase in the freight business over the previous year was nearly ten per cent.

Referring to the increase in the business of the road since 1859, President Thomson sounded a note of warning to the stockholders of the Company in his annual report for 1863 in the following comprehensive statement:

In presenting these gratifying results of the operations of your road, it must not be forgotten that
the causes that have been largely instrumental in producing them cannot, it is hoped, long continue. The railways of the North, generally, since the first year of the Rebellion, have greatly increased their earnings. Those of this Company have advanced from $5,362,355.21 in 1839, the year before the war commenced, to $11,891,412.05 in 1863. This increase is chiefly in freight, the passenger business having increased from $1,420,012.43 to $3,275,367.88, omitting the earnings for the transportation of troops. The increase in the money receipts from freight, for obvious reasons, is greater than the tonnage.

The limit to the receipts of the Company from eastward bound traffic during the continuance of favorable navigation on the Ohio river has only been controlled by the amount of rolling stock at its command. At all other periods the equipment has been ample to meet the demands upon it.

The increase in the receipts of the Company from freight being largely due to the more remunerative rates of freight, the decrease in its revenues, that may be confidently looked for after the close of the war, will not affect the tonnage of the road in the same ratio. The stimulus given to the internal trade of the State by the great demand that has existed for the past two years for her products, added to the additional traffic that may be expected from the new territory opened by the branch lines and extensions already made, and those that will be brought into use by the close of the year, will go far towards maintaining the tonnage of the main stem, which time must gradually continue to augment.

The following paragraphs contained in the annual report of the President over thirty years ago will be read with interest by all persons interested in the solution of the great problem of maintenance of way, which had already confronted the managers of the Pennsylvania Railroad at that early day:

The rapid destruction of iron rails under the high speeds and heavy locomotives now used upon railways has become a subject of serious consideration, not only to the managers of these improvements in this country, but also in Europe. When the Pennsylvania Railroad was planned, a locomotive weighing 4,500 to 50,000 pounds was considered as the extreme limit to these machines justified by prudence. But the demands of the public for high speeds has compelled the introduction upon all thoroughfares of more powerful engines. These could only be obtained by adding to their dimensions and weight, which has produced its natural result—great wear and tear of iron rails and the superstructure of the road. This evil has been still further increased by the inferiority of the rails now manufactured compared with those placed upon railways when the edge-rail was first introduced. It was then deemed essential that rails should be made from the best refined iron produced from selected ores. The great increase in the demand for iron under the rapid development of the railway system in England and this country soon caused the substitution of an inferior article, which seemed for a time to answer the purpose, but which experience had proven to be insufficient to resist the causes referred to, as continually operating for its destruction. A return to the quality of iron originally used on railways would be the natural remedy for this difficulty, but this will require time, as none of the rail mills have the required furnaces to refine their metal. In Europe this subject has been longer considered, and the determination appears to be general to gradually substitute a still more expensive material—either a rail made wholly of steel, with a steel head only, or the wearing surface converted into steel after the iron rail is made. The present high cost of rails made entirely of steel will probably prevent their general adoption, although the rapid destruction at the termini and stations, where the iron rail in some positions does not last six months, will fully justify their introduction. For the purpose of testing the relative value of steel and iron rails in such positions we have procured 150 tons of rails made wholly of cast steel. A trial is also being made of a rail with a steel head worn surface passed through the rolls when drawn from the converting furnace, which promises well. It is understood that favorable results have been obtained from rails, the top plate in the pile from which they were made being puddled steel. If the two metals can be firmly welded together this improvement in railway bars will be generally adopted. This is a subject of such great importance to the Company that it will continue to meet the earnest attention of your Directors, and, if necessary, to effect the reformation desired in the quality of rails, it should become necessary to erect works to effect that object, such a policy will be adopted. The frequent renewal of rails is not only expensive, but it adds to the interruption of the traffic of the line.

Near the close of the year one hundred and fifty tons of cast steel rails were procured, which were “slotted to receive the chairs and spikes,” and placed on sidings and in the yards at Altoona and Pittsburgh, where they were subjected to heavy traffic.
A tract of land was purchased at East Liberty during the year, and pens for the transfer of live stock from western lines were completed in the fall. The parties to whom the stock yard was leased erected a large hotel near by for the accommodation of persons engaged in the cattle trade.

The passenger depot at Pittsburgh was commenced in 1863 and the walls of the main building were nearly up to the second floor when cold weather set in.

The Ebensburg and Cresson Railroad was opened as far as Ebensburg during this year. The Tyrone and Clearfield Railroad was completed and opened to Philipsburg, the Bedford road was put in operation as far as the Southern Turnpike, and work was pushed forward on the Bald Eagle Valley and the West Penn roads to such an extent that the completion of the former to Lockhaven and the latter to the Allegheny river opposite Freeport during the year 1864 was assured, and ultimately consummated.

The large increase in the business of the road made the defects in the alignment of the old Philadelphia and Columbia Railroad more apparent, and the improvements in the details of its location were begun. It was also decided to begin the construction of third tracks at several points between Lancaster and Philadelphia.

At the close of the year there only remained twenty-one miles of single track between Philadelphia and Pittsburgh, this being located between Lewistown and Mill Creek, the completion of which was deferred on account of the scarcity of labor incident to the war.

The increased net earnings during the year 1863 led the Board of Directors, on the 15th of February following, to declare an extra dividend of fifteen dollars on each share of stock "payable in the stock of the Company at its par value of fifty dollars per share." The additional stock thus created was entitled to dividends payable in November, 1864, and thereafter.

1864.

In the matters of civil administration the officials of the Pennsylvania Railroad had many important matters brought to their attention during the year.

The Board on January 20, 1864, determined to abolish the system of issuing quarterly coupons, and school tickets on the first of April, and on that day to introduce a new system of monthly coupon tickets, good for 54 rides, if used in the month for which issued, to be sold at rates proportionate to those now charged for quarterly and school tickets.

The Chief Engineer of the canals was authorized on the 20th of January, to enter into a contract for the purpose of introducing steam packets on the upper Juniata Division of the canal from Petersburg to Hollidaysburg.

At the meeting on the 3d of February David Salomon presented to the Board his resignation as a member of the Board on account of removal to the State of New York.

Immediately after the election of the Board of Directors in February, 1864, the temporary office of Second Vice-President was permanently created, and Herman J. Lombaert was again elected to that position.

The annual meeting of stockholders held February 16, was enlivened by the introduction of several resolutions by Col. Page. His resolution for the appointment of a committee of five stockholders "to ascertain what disposition has been made, by whom, and by what authority, of the sum of $850,000 commutation tax left in the hands of the Company by the State, was adversely reported, as was a further resolution offered by Col. Page criticising the officers of the road who were instrumental in procuring the passage of the act of March 16, 1863, changing the organic law of the Company "without consulting the Board of Directors on the subject, and without first submitting the same for the consideration of the stockholders." The stockholders, by a large majority vote, approved the action of the Board in the matter last referred to.
During March, 1864, much difficulty was experienced in arranging with Common Councils of the city of Pittsburgh "respecting the construction and location of the Pittsburgh and Steubenville branch of the Pennsylvania Railroad Company through the city," and the whole matter was referred to a special committee, consisting of Thomas A. Scott and William J. Howard, for conference with the Pittsburgh officials.

On account of the failure of the City Council to elect Directors in February, 1864, Theo. Cuyler, General Counsel for the Company, delivered an opinion that the Directors elected by the city in the previous year should continue in office until their successors were chosen.

The resignation of Louis L. Houpt, General Ticket Agent, was accepted on the 18th of May, to take effect May 31, whereupon the President nominated Henry W. Gwinner, to the vacancy. The severance of Mr. Houpt's connection with the Company was noted May 23, by the Directors who declared that his resignation was accepted "with sincere regret, and recognized the value of his services to this Company, from the opening of the road to business, in 1848, to the present time," and it was resolved that the best wishes of the Board of Directors be extended to Mr. Houpt in his new business relations, and for his prosperity.

At the session of the Board, on the 1st of June, the President was authorized to purchase the Franklin Market House, located on the west side of 10th Street, between Market and Chestnut streets, for the sum of $70,000, subject to a ground rent of $3,000 per annum.

It was agreed on September 21, that the matter of renting this Market House to the United States Government for the use of the Quartermaster's Department should be referred to a Special Committee, with power to act, and that the Committee be instructed to confer with the Councils of Philadelphia "in reference to the permanent lease of the railroad on Market Street, and also to confer with the officers of the Passenger Railway Com-
panies in reference to the connection (or communication) between such depot and West Philadelphia, with a view of improving the facilities for the transportation of travelers."

Thomas A. Scott and Herman J. Lombaert were unanimously re-elected Vice-Presidents, at the meeting of Directors held June 15, 1864.

By the terms of the agreement, dated July 6, 1864, between Dean Richmond and Thomas A. Scott, the former on behalf of the New York Central Railroad Company and the latter on behalf of the Pennsylvania Railroad Company, the parties having jointly purchased a controlling interest of 6,540 shares of the capital stock of the Oil Creek Railroad Company, it was agreed that the stock should be placed in the hands of Samuel J. Tilden, of New York State, as Trustee. It was the understanding that in accordance with the obligation of the Philadelphia & Erie Railroad, all oil or other freight shipped over the New York Central Lines from Erie was to be delivered at Erie by the Pennsylvania Railroad Company as lessee of the Philadelphia & Erie Railroad, until otherwise agreed upon, and that all consignments of oil to Boston or the New England States, should go from Corry by the Philadelphia & Erie Railroad to Erie and thence by such route as the New York Central and the Buffalo & Erie Railroads might direct. One-half of the oil bound for New York was to go from Corry over the Philadelphia & Erie Railroad, and thence East over the New York Central; the other half to come South from Corry and to go East to New York over the Pennsylvania Railroad.

On the 6th of July the members of the Board confirmed the appointment of Frank Thomson as Superintendent of the Eastern Division of the Philadelphia and Erie Railroad Company.

During the session of the Board on September 7, it was decided to purchase the whole or any part of the bonds of the Western Pennsylvania Railroad Company, secured by mort-
gage dated April 1, 1863, as might be deemed advisable.

D. M. Boyd was appointed on September 21, Assistant General Ticket Agent in charge of the Philadelphia & Erie Railroad.

"The station building on Market, west of 30th Street," had been fitted up for the accommodation of passengers during the summer and a frame car shed fifty-seven feet by 337 feet was connected with it.

On the 16th of October, 1864, the passenger station at 11th and Market streets was abandoned, and West Philadelphia became the terminus for the passenger business of the Pennsylvania Railroad Company.

A semi-annual dividend was declared at the meeting of the Board, held November 2, 1864. The Board on this same day passed a resolution, increasing the stock of the Pennsylvania Railroad Company to twenty million dollars, in order to supply "the amount still required to finish and equip the Philadelphia & Erie Railroad, and to complete other connecting lines in which the Company was interested." The total capital stock on that day was $18,029,260. Each shareholder was given "the privilege of subscribing, at par, to the new stock proposed to be issued to the extent of ten per cent of the amount standing to his credit, as shown by the books of the Company on this day."

On the 16th of November, the Board was informed that the city of Philadelphia would not subscribe to this proposed increase of capital stock. The Trustees of the Sinking Fund were authorized to confer with the Mayor and also Commissioners of the Sinking Fund of the city of Philadelphia, to perfect such plan, as may in their judgment be needed to protect the interests of the city.

The nominations of Edward Yardley, Resident Engineer, Western Division, and George C. Wilkins, Resident Engineer, Eastern Division, by the General Superintendent of the Philadelphia and Erie Railroad were confirmed at the Board meeting of the 16th of November.

On December 14, 1864, an organization for conducting the business of the Company at Pittsburgh, was unanimously adopted, as follows:

THE AGENT OF THE PENNSYLVANIA RAILROAD COMPANY AT PITTSBURGH.

The duties of this office will be the general charge of all freight and passenger stations of the Company at or near Pittsburgh, including the caleyard at East Liberty; also those that may be established for the Western Transportation Company. To see that those in direct charge of these several stations allow no unnecessary delay in receiving, forwarding or delivering freight and passengers; to see that they keep their books and accounts always made up with the traffic, and their bills made out and properly collected.

He will give notice to the Superintendent of the Pittsburgh Division daily or oftener, if the traffic seems to require it, of the number of cars required at each station under his charge, and see to their prompt delivery thereat.

He will keep himself in constant communication with the agents of connecting roads, with a view not only to the regular interchange of the daily freight and passenger business, but also to secure information as to the probable demands for transportation in advance of its receipt, and report such information to the General Superintendent as he may obtain, with such suggestions as he may think will promote the interests of the Company.

He will have his office in the new passenger station at Pittsburgh, and attend to such other duties as the President or General Superintendent may from time to time commit to him.

Upon the acceptance of this plan of organization James McClintock Creighton was appointed Agent at Pittsburgh.

At a meeting of the Select and Common Councils of Philadelphia, December 1, 1864, John Rice, John M. Kennedy and John Derbyshire, were elected Directors by the city.

On the 28th of December, 1864, W. McCormick was appointed Superintendent of Telegraph, in place of David McCargo, transferred to other duties at Pittsburgh.

The Board was informed at this meeting by Edward F. Gray, President of the Philadelphia and Erie Railroad Company, that his Company had decided to make application to the Legislature, early in the coming session, for permission to issue third mortgage, seven
per cent convertible bonds, to the amount of three millions of dollars, provided this Company would receive the same at par, in payment of their indebtedness.

In the 18th annual report the President states:

The investments made by this Company in the stock and bonds of the Pittsburgh, Fort Wayne and Chicago Railway Company to insure its completion have all been sold except 1,200 shares of its stock, and $200,000 of its Third Mortgage Bonds, at a considerable advance upon their cost. The interest of the Company in the Bedford Railroad and in the New Castle (Lawrence county) Railroad, received for aid extended towards the completion of these works, has also been disposed of upon satisfactory terms.

In July rolled steel rails were for the first time laid in the tracks of the Pennsylvania Railroad. In that month seventy-eight tons of crucible steel rails of the Philadelphia and Erie pattern, four inches high and weighing fifty-six pounds to the yard, were laid at Altoona, and in October of this year seventy-seven tons of the same pattern were laid at Pittsburgh. These rails were placed in sidings upon which a large amount of work was done at slow speed. This experiment was closely watched by the officers of the Pennsylvania Railroad Company with the hope of bettering the track by the use of more durable rails.

1865.

During the years 1864–65, the excitement in connection with the discoveries in the oil fields of Western Pennsylvania and West Virginia stimulated the traffic in crude petroleum to such an extent that large quantities of oil were transported over the road, and at Greenwich Point, on the Delaware river, below Philadelphia, extensive improvements were made for the accommodation of this traffic. At this time the General Government was discussing the advisability of locating a navy yard at League Island, near by.

A resolution adopted on February 18, directed the President to sell to the Western Pennsylvania Railroad Company, in accordance with an act passed April 17, 1864, a portion of the Western Division of the Pennsylvania Canal, extending westwardly from Blairsville, upon such terms as may be agreed upon between the Presidents of the Companies.

The dividend of fifteen dollars per share which had been declared by the Board in February, 1864, did not meet the approval of all the stockholders, and at the annual meeting, held February 21, 1865, Col. Page, who was again present, offered a resolution criticizing the Board for its action, and providing for the appointment of a committee of five by the chairman of the meeting (Hon. Alexander
Henry, Mayor of the city), "to examine and ascertain whether there are any errors or omissions in regard to the receipts and expenditures, and if such receipts and expenditures have been charged and credited under the proper head, the said committee to have ample power to inspect all books and papers and examine the proper officers touching the same, and to report all the facts and circumstances to the stockholders at a special meeting, which they are authorized to call for that purpose." The resolution was agreed to by a vote of 33 to 31, and a motion to lay the resolution on the table was lost by a vote of 26 to 43. Col. Page declined, however, to serve on the committee, either as Chairman, or in any other capacity.

The appointment of Robert Pitcairn as Superintendent of the Pittsburgh Division in place of Andrew Carnegie, resigned, on March 22, received the unanimous approval of the Board.

An agreement concerning the interchange of business between the Pennsylvania Railroad Company and the Philadelphia and Erie Railroad and other lines, was approved on the same date to the effect that, "as the line of the lessees between the Philadelphia and Erie to New York is via Philadelphia, they will agree that it shall form the basis for defining the rates per mile between New York and the West, that is to say that the rate per passenger or freight per hundred pounds per mile charged upon the whole line of the Company from Erie to New York, via Philadelphia, shall be the rates per mile allowed upon the shorter lines between the Philadelphia and Erie Railroad Company and New York."

In pursuance of the authority granted in the act authorizing the Junction Railroad Company to issue additional bonds and secure them by a second mortgage, the President of the Company in connection with the Presidents of the Philadelphia and Erie and the Philadelphia, Wilmington and Baltimore Railroad Companies, was on April 5, directed to cause the guarantee of the principal and interest to be placed upon the bonds, in such form as shall be approved by the Solicitor of the Company to an amount not exceeding $300,000.

In a resolution submitted to the Directors by Mr. Scott, on April 5, this Company expressed its decision to place on the bonds of the Western Pennsylvania Railroad Company a qualified endorsement for an amount not exceeding one million dollars, to enable them to extend and construct their line from the terminus on the Allegheny river at Allegheny city. In making this endorsement the Company agreed to receive ten per cent of the bonds in payment of freight to and from the Western Pennsylvania Railroad Company, provided the citizens and corporations along the proposed extension would purchase at par, all the bonds needed to construct the line.

The basis of a new agreement with Telegraph Companies was arranged, by which they were given the privilege of placing one or more lines of wires with cross arms and insulators upon the telegraph poles erected by the Pennsylvania Railroad Company along the lines owned or controlled by them.

This Company was to receive compensation for the use of the poles and maintaining them in proportion to the number and mileage of the wires strung on the poles.

The use of the wires by the Pennsylvania Railroad Company was to be at the disposal of their officers for the transmission of messages necessary to conduct the business of the Company, for which there was no charge.

The transmission of dispatches, free of charge, to points beyond the limits of the Railroad Company's line, was only to be permitted by the officers or agents of the Railroad Company, when sending messages on business of the Company.

A draft of a contract with Telegraph Companies, was submitted by the President and it was directed "that a copy be furnished to the American, Western Union, Atlantic and Ohio and the United States Telegraph Companies for examination with request to make statements within the next fifteen days setting
forth the terms they are willing to offer and
the facilities they can give for the transmis-
sion of messages for this Company beyond
the termini of the lines of the roads owned
or controlled by this Company.”

T. T. Wierman, reported on May 3 in re-
gard to the damages to the Western Division
of the Canals caused by freshets and estimated
that the repairs would cost $28,260.

A number of contracts were approved by
the Board on June 7, among them, a con-
tract with the Coal Transportation Company
for carrying petroleum and other oils in bulk
by cars specially constructed for the purpose.

The proposed lease of the Mifflin and
Centre Counties Railroad Company, including
the assignment of the lease held by that Com-
pany of the bridge over the Juniata river,
met with the approval of the Directors.

A contract intended “to encourage the in-
troduction of a fast through freight line over
the Philadelphia and Erie Railroad Company,
making connections with the Atlantic and
Great Western Railroads; and the cultivating
of the Erie Railroad and other connections on
the west and the Northern Central Railway
Company, and the Catawissa Railroad and
other connections on the east,” was on June 7
approved by the Road Committee.

The re-election of Thomas A. Scott as First
Vice-President and H. J. Lombaert as Second
Vice-President occurred on the 28th of June.

When the Board re-assembled on Septem-
ber 6, after the summer adjournment, the
Special Committee reported concerning the
proposed lease of the Western Pennsylvania
Railroad. The lease of the road was ap-
proved and the President authorized to sign
and seal the contract on behalf of this Com-
pany.

The Board learned of the death of Mr.
Derbyshire, formerly a Director of the Com-
pany, and at the meeting suitable resolutions
were framed and adopted.

The following acts of the Assembly were
then read and severally accepted by this Com-
pany, as follows: An Act relative to the use of Tunnels and Bridges by Railroad Companies, approved June 21, 1865; an Act to Authorize Railroad Companies whose lines reach navigable streams to erect docks and wharves therein and to take private property for such public use on compensation and ratifying the purchase of same, approved March 23, 1865; an Act to Authorize the Common Council of the city of Pittsburgh to vacate certain streets, and sell a portion of these streets, and of lots in that city for the better accommodation of the passenger travel of the railroad through the city, approved March 23, 1865. A further supplement relative to the removal of the tracks of the Pennsylvania Railroad Company on a portion of Liberty Street in the city of Pittsburgh, approved April 5, 1860; an Act to authorize the purchase of branches of connecting roads, approved June 21, 1865.

The resignation of J. D. Potts, General Manager of the Philadelphia and Erie Railroad was on the same day accepted by the Board, whereupon the President submitted the name of Alfred Tyler to fill the vacancy.

The President submitted the form of a proposed contract with the New York Central Railroad Company for the purchase of the interest of that Company in the Oil Creek Railroad Company, and of the vacating of the trust held by Samuel J. Tilden, and also providing for the transportation of the trade of the Oil Creek Railroad Company. The proposed contract was approved, and the President authorized to sign and seal the same on behalf of this Company.

The West Pennsylvania Railroad from Blairsville to the Allegheny river was operated by the Pennsylvania Railroad Company in August of this year.

Authority was granted to the President on the 20th of September to enter into a contract with satisfactory parties for the establishment of a line of steamers between Erie and different lake ports in connection with the Philadelphia and Erie Railroad Company.

The advertisement for bids, called for first-class steamers, screw propellers, of not less than 500 tons register, each to be ready for service and placed regularly in the trade as soon as practicable. The number of steamers was to be increased as the trade required.

The Pennsylvania Railroad Company was to give for ten years, free wharfage in the harbor of Erie for the steamers, and suitable storage room for coal and cargo, free. The coal conveyed for the steamship company over the Philadelphia and Erie Railroad and delivered in cars to storage rooms for consumption by the steamships was to be transported at 20 per cent reduction on the general carrying rate accruing to the Pennsylvania Railroad Company as lessee of the State Road.

The Pennsylvania Railroad agreed to carry all traffic east and west from Erie at the same rate a mile as given by rival lines on the same class of trade, it being understood that the Propeller Steamship Company should furnish the agents, and to receive as compensation five per cent of the revenue accruing to the Railway Company on their traffic transported by rail and lake between the eastern cities and points on the lakes beyond Erie.

The contract was to be entered into to be for ten years and the propeller line could not withdraw without the written consent of the Pennsylvania Railroad Company.

A communication from Vice-President Lombaert was laid before the Directors on September 20 in which he stated that he had examined the plans of cars and arrangement of tanks prepared by the Howard Oil Tanking and Transportation Company for the transportation of oil upon railroads, and recommended that they be allowed to construct not exceeding twenty-five cars and tanks, at their own expense, and place them upon the railroad.

Mr. Lombaert was authorized to arrange with the Howard Car and Tanking Company accordingly.

In the course of the meeting on November 15 the Board adopted resolutions of regret because of the death of William R. Thompson, formerly a Director of the Company.
The President stated that a new organization called the Pennsylvania Iron and Steel Company, using the Bessemer Process, of which S. M. Felton was President, desired to know what inducement the Pennsylvania Railroad Company would offer in the matter of rates on transportation of material for the plant, should it be erected on the line of the Road near Harrisburg. The Board replied on November 15, that for the purpose of aiding in the construction of a steel works for the manufacture of rails, upon the line of this road in the vicinity of Harrisburg, and in view of its importance, to this Company, they would, for a period of five years, transport at cost all materials required for the erection of the works. The communication of Mr. Felton was referred to the Executive Officers of the Company, to prepare the necessary contract.

This arrangement was not altogether satisfactory to the Steel Company.

After hearing the views of President Felton, and examining his statement the Board recommended on November 29 the preparation of a modified contract with the Pennsylvania Steel Company, to be submitted to the Board for action at its next meeting. (For further action see chapter relating to the Construction and Maintenance of Way Departments.)

The Committee on Canals reported to the Board on the same date their recommendation that the Chief Engineer of Canals be authorized to lease the portion of the canal between Blairsville and the Allegheny river upon the opening of the Western Pennsylvania Railroad to Blairsville, "the same to be kept open as a public highway."

The Morrell property at Third and Willings' Alley was purchased for $31,500 in December, 1865.

Lewis Elkin was on December 5 elected a Director in place of Mr. Derbyshire, deceased.

George W. Cass tendered his resignation as Director on December 16, and on December 27 his resignation was accepted, whereupon Washington Butcher was elected to the vacancy.

Enoch Lewis resigned his position as General Superintendent on December 5, 1865, and E. H. Williams was appointed his successor.

In accepting the resignation of Mr. Lewis the Directors, at their next meeting, on the 16th, directed that the following resolution be spread upon the minutes:

Whereas, The Directors desire to convey to Mr. Lewis their appreciation of the services rendered by him to this Company, especially during the war, when the energies of its officers were taxed to the utmost, therefore,

Resolved, That by the resignation of Mr. Lewis, the Board of Directors regret the loss of a most valuable and efficient officer, and convey to him their acknowledgment of the zeal and fidelity that have always characterized his official relations with the Company.

In retiring from the duties of General Superintendent, Mr. Lewis thus closed his annual report:

With the present year terminates my connection with the Pennsylvania Railroad Company as its General Superintendent. My term of office had included a period of great business activity, caused by the successful efforts of the national government to suppress the great rebellion; during that period the most pressing demands have been made upon the road and its officers. I have heretofore acknowledged my great indebtedness to my assistants and subordinates for their earnest co-operation and assistance; but I wish to renew the acknowledgment here, not as a matter of form, but because it is heartfelt and sincere, it is with no slight feelings of regret that my connection with them is severed.

The General Superintendent was on December 27, directed to examine and report on the condition of the sleeping cars on the road, noting especially if they compare favorably with those on competing lines.

By resolution five hundred thousand dollars was subscribed to the capital stock "of a steamship company to establish a direct line between Philadelphia and Liverpool, whenever that amount will complete a subscription of one million dollars," provided the fore-
going resolution shall not continue in force longer than the first of April, 1866.

The establishment of a trans-Atlantic freight steamship line had been discussed in the journals of Philadelphia for several years, and in order to allay the growing feeling of discontent the Board of Directors determined thus to encourage every effort which might lead to making a trans-Atlantic port of Philadelphia. In his annual report President Thomson makes the following statement concerning this matter:

Although this Company was organized only for the purpose of carrying freight and passengers to and from the interior and the West, yet it has repeatedly signified its disposition to aid in the establishment of a steamship line between this port and Europe, that the necessity for sending Western products to New York for shipment abroad might at least be diminished. This aid has been offered by subscription to the shares of a company to be raised for that object, or by paying six per centum upon the amount of capital so invested, together with other valuable and important business facilities, and they still hope that the mercantile community will co-operate as to render this aid efficient. Of the success and profitableness of such an enterprise, commenced and managed upon a proper basis, your directors have no doubt, and with the consent of the shareholders, this Company will, unaided, establish such a line of steamers.

The total earnings of the Company in 1865 amounted to $14,760,000, the sum of $511,774 being for the movement of United States troops. The cost of operating the road reached the enormous sum of $10,694,000, so that the net revenue compared with the year 1864 showed a falling off of $1,050,000. The whole number of passengers carried was 2,366,213, the average distance of each being 62 miles, while the total tonnage transported was 2,765,000, of which 1,087,000 was coal.

Although the total earnings of the Philadelphia and Erie Railroad in 1865 amounted to $2,074,000, there was a loss in operating that road of $270,600, so that the net balance to the credit of the profit and loss account of the Pennsylvania Railroad Company for the year was but $3,800,000, only seventy per cent greater than during the year 1866. Notwithstanding this fact, two semi-annual dividends of five per cent had been paid during that year, together with $460,000, the annual sum due the State on account of the purchase of the Main Line, and for taxes and interest on bonds, leaving a net surplus of $222,000.

Gratified at the experiments of the previous year, one hundred tons of crucible steel rails, fifty-six pounds to the yard, were laid at Philadelphia and Altoona in June, 1865, and with a view of testing the qualities of Bessemer steel, during October and November two hundred and seventy tons of rails made by that new process were laid in sidings at several of the important stations.

During the year 1865 six miles of second track were laid between Lewistown and Anderson’s Station, so that the total road operated as single track was reduced to eleven and one-half miles.

During the spring of 1865 the Bald Eagle Valley Railroad was opened for business throughout its length of fifty-five miles, thus completing an all-rail connection between Tyrone on the main line of the Pennsylvania Railroad Company and Lock Haven on the Philadelphia and Erie road. The West Pennsylvania Railroad from Blairsville to the Allegheny river, thirty-four miles, was also completed during the year and leased by the Pennsylvania Railroad Company. A branch railroad from Lewistown to Reedsville, seven miles long, known as the Mifflin and Centre County Railroad, was also completed.

The second track between Lewistown and Anderson’s was finished during this year. A heavy rain and thaw occurred on March 16 which washed out the tracks in many places and carried away several bridges.

President Thomson in the annual report for 1865 thus comments upon the financial condition of the road during the twenty years since the granting of the charter in 1846:

With a view to prevent an undue enlargement of the capital of the Company, so difficult to restrain in corporate enterprises, all interest paid during the construction of the Company’s railroads, together with all discounts allowed upon bonds
sold, and all doubtful investments have from time
time been charged to and paid out of the annual
net revenues of the road. There is nothing, there-
fore, in the accounts of the Company representing
fictitious values; on the contrary, its property is
worth in specie much more than it is represented
at upon its books. The main line and branches
of your road were constructed under small con-
tracts for cash when labor was low and at rates
fully one-half less than those now prevalent. In
consequence of this conservative policy, the share-
holders have, from the day of payment of each
installment received six per cent interest, free of
taxes, upon their investment, from the net revenues
of the road until May, 1862,1 since which time the
regular and extra dividends have averaged over
eighteen per cent per annum.
If the increase of rolling stock, &c., paid for from
the net revenues of the road, as already stated,
were added to the surplus profits as shown by the
Treasurer’s statement, it would exceed the original
cost of the Company’s road and outfit between
Harrisburg and Pittsburgh when finished with a
single track and sidings.
The present condition of the Company’s property,
therefore, cannot but be viewed with great satis-
faction by its shareholders. Estimated at its specie
value, it may be safely stated as follows:
Main Line of Railway, Branches and
Extensions, including shops and depots,
Harrisburg & Lancaster Railroad and
Canal ............................................. 31,000,000

Equipment of all the Company’s Rail-
ways ............................................. 8,000,000
Real Estate ............................................. 3,000,000
Materials on hand, cash, and cash bal-
ances .............................................. 3,500,000
Investments in other lines.......................... 9,500,000

$55,000,000

LIABILITIES.
Capital Stock ....................................... 20,000,000
Stock, Harrisburg & Lancaster R. R. Co. 1,182,500
Funded Debt ...................................... 16,585,000
Bonds of Harrisburg & Lancaster Rail-
road Company ($700,000) and other ob-
ligations, say in all ................................. 2,232,500

$40,000,000

Surplus ............................................. 15,000,000
Which, added to its capital stock, would make its
real value $35,000,000 instead of $20,000,000.

1One dividend was passed during the financial
crisis of 1857, to compensate for which three semi-
annual dividends of four per cent had been paid.

President Thomson in closing this state-
ment said that “If this estimate was predi-
cated upon the cost of creating this property
at present values, it would present a much
larger balance.”

1866.

The year 1866 brought with it continued
prosperity to the Pennsylvania Railroad Com-
pany.

During the twenty years that the road had
been in existence, forty-six per cent above
the regular interest upon the original invest-
ment had been divided among the stock-
holders. It was true, as the reports stated,
that the Company “to a larger extent than
any other corporation of the kind had pro-
moted the development of the interior of the
commonwealth by aiding the completion and
extension of other railroads where private
capital would not incur the risk of such in-
vestment.”

During the year the Directors procured an
amendment to the charter of the Company
which prohibited the issue of mortgage bonds
exceeding the amount of capital stock. Owing
to the fact that the city of Philadelphia was
unable to subscribe to the new issue of stock
in proportion to its interest, it was determined
to pay the dividends due the city in stock,
instead of cash until the desired amount of
increase in capital stock should be reached.

In the beginning of its existence the Penn-
sylvania Railroad Company was opposed to
the establishment of “express freight lines.”
Although this policy had apparently been
approved by the rival companies a definite
attempt to have the fast lines withdrawn made
by the Pennsylvania Railroad Company was
unsuccessful. Failing in this effort to have
their competitors live up to the mutual un-
derstanding, the introduction of this service
upon the Pennsylvania Railroad became a
necessity. Speaking of this, President Thom-
son in his annual report for the year 1866
says, “A failure to make use of this weapon
so dexterously and persistently used by our
THE PENNSYLVANIA RAILROAD COMPANY.

competitors in various forms to promote their interests would have shown as little foresight as would have been attributed to the general government if it had failed to make the preparations known to be in progress upon the Merrimac by the building of a more efficient ironclad." In discussing the advisability of encouraging transportation companies of this nature Mr. Thomson stated his views as follows in the annual report for the year 1866:

From the statistics of the Company it appears that ordinary freight business of the road has continued to grow in its usual ratio since the introduction of these freight lines, showing that their sustenance is abstracted from the business of similar organizations that exist upon rival routes whose competition they were introduced to meet, gaining for this Company a business not heretofore enjoyed by it and which could not be secured by any other means.

It also appears from the same sources that the freights brought to the road by these lines pay to the Company better net rates than are derived from any other portion of the Company's through business. The success of these lines, in collecting and distributing freight throughout the West, has been largely due to the inability of many of the Western railways to supply cars sufficient to accommodate the through traffic originating along their own and connecting roads, and, in consequence, the traffic has heretofore sought rival avenues, whose equipment was sufficient to furnish the means for its transportation.

Under existing contracts between this Company and the freight lines, it seems that the only point it is necessary to solve is whether the rates charged for this freight by the railroad companies are as large as the express freight companies can pay and preserve the full efficiency of their organizations. As at present advised, the directors are disposed to believe that they are, and that the interests of the Company would suffer great damage by their withdrawal from its service, while such lines, or other organizations to effect the same objects, are maintained upon competing routes.

The chief element of profit of these freight lines has been in the margins paid to them above the ordinary railroad rates by merchants disposed to patronize a medium of transportation where the responsibility is direct, immediately accessible, and undivided from the point of shipment to the point of delivery of their merchandise rather than a line made up of various railway corporations with whose responsibility they are not familiar. Advantages such as are afforded by these organizations cannot, for obvious reasons, be fully accorded to shippers by any railway company.

That the enterprise has proved successful to its proprietors, in view of the large amount of capital ventured in an untried field, should be a matter of gratification to the shareholders of the Pennsylvania Railroad Company, whose interest it was intended to and has so largely promoted. This success is mainly due to the thorough knowledge of the freight business possessed by those to whom the control of these organizations was first entrusted, and their comprehension of the means required to achieve the objects of their creation, united to a disposition and ability to embark whatever capital was required to secure favorable results to this Company and themselves. In other hands it might have proved a failure.

The Board has deemed it important to say this much in explanation of their action upon a subject that has met with considerable animadversion from the captious, and to assure the shareholders that under its contract it has entire control of these organizations, and as long as their operations conduct to your interest they will be maintained; if otherwise, they will be abolished.

The Directors agreed on January 10, 1866, to erect coal shutes for transferring coal from the cars to boats at the Millerstown dam, when the Union Canal Company secured for its line a sufficient depth of water.

The office of "General Agent at Philadelphia," was created January 19, and G. C. Franciscus appointed. His duties were "to have a general charge of the transportation department in Philadelphia, including the business from the Delaware extensions and with connecting lines of road at that point, with such other duties as the President and General Superintendent may commit to him."

The Directors decided on March 7, to lease the road and equipment of the Huntingdon and Broad Top Railroad Company for a period of 99 years on the minimum basis of 79 per cent of the gross earnings, "provided that amount is sufficient to meet the annual expenditure for construction, repairs and the use of additional equipment for running the road." If this basis proved insufficient to meet the expenditures, the deficiencies were to be deducted from the remaining thirty per cent. The balance was to be appropriated
ADVERTISEMENT OF STAR UNION LINE, 1866.

Signed by D. S. Gray, Superintendent Union Line Issued 1866.
first towards the payment of the interest on the bonded debt of the Huntingdon Company and the residue to be paid over to that company.

At the meeting of the Board on March 7 the General Car Inspector was directed to examine frequently the condition and app-

\begin{center}
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\end{center}

\textit{Car Trucks, Altoona Shops. 1866.}

\begin{itemize}
  \item pointments of the sleeping cars of the Central Transportation Company, in service on the Pennsylvania Railroad, and to make a monthly report, and the Central Transportation Company were instructed to keep their cars, with their ventilators and equipments, in first-class condition and to provide such improvements as may be desired for the com-
  \item neer of the Middle Division, on nomination of the General Superintendent of the Philadelphia and Erie Railroad.
  \item John M. Kennedy and G. D. Rosengarten were elected Directors of the Company on March 5.
  \item Early in the spring of 1866 the new engine house at West Philadelphia was placed in
\end{itemize}
service, and the freight depot at Thirteenth and Market streets was reconstructed.

The President was authorized on March 21, to inform the members of Congress from Pennsylvania that the Company had opened the extension of the railroad to the Delaware river front at Greenwich Point in Philadelphia passing parallel for a distance of about one-half a mile, to the proposed location for the Navy Yard at League Island, and that "a bridge will place the island in direct communication with all the railroads centering in Philadelphia—by which all stores and supplies can be delivered to and from the proposed Naval Station in cars without transshipment from St. Louis, Cairo, Chicago, Rock Island, Detroit, Cincinnati, Cleveland, Erie, Buffalo, Pittsburgh, Washington, Baltimore, Wheeling and other cities, and from the coal and iron regions of Pennsylvania and Maryland."

A contract was on April 4, authorized with the Empire Transportation Company, "by which certain lines of pipe in the oil regions of Pennsylvania can be controlled by the Empire Transportation Company and authorizing the construction of tanking cars therefor, not to exceed $18,000. The Empire Transportation Company to make all the outlay necessary and in consideration thereof, to have the exclusive right to tanking cars on the Philadelphia and Erie Railroad Company, for five years."

In April Samuel A. Black was appointed Superintendent and John Pitcairn, Jr., Assistant Superintendent, of the Middle Division.

Enoch Lewis was also appointed Purchasing Agent to date from May 1.

In May, 1866, John P. Laird resigned his position as Superintendent of Motive Power and Machinery, and R. E. Ricker, who for many years had been connected with western railways, was appointed his successor.

The Legislature of Pennsylvania at its session in 1866 passed an act incorporating the Pennsylvania Canal Company with power to purchase from the Pennsylvania Railroad Company the canal from Columbia to Hollidaysburg and all the appurtenances belonging to the Canal Company, with power to immediately operate the same.

Since it seemed desirable to separate the operations of the canals from the railway and other departments of the Company, it was decided on May 2 to sell to the Pennsylvania Canal Company by special deed the canal from Columbia to Hollidaysburg and the property pertaining thereto, and in payment to receive fifty-five thousand shares of fifty dollars each, of the full paid capital stock of the Pennsylvania Canal Company. The deed to provide specially that the canals be maintained as public highways.

For the purpose of raising funds for the annual dividends and for new tracks, additional equipment, the enlargement of depots, and extension of sidings to meet the legitimate demands of the traffic of the Company from the territory drained by the Pennsylvania Railroad Company and its branches for increased railroad accommodations, a revised financial programme was considered at the Board meetings in November and December.

This re-arrangement of the finances of the Company was however not ratified by the Board until February 16, 1867.

By the 31st of December, 1866, the Pennsylvania Railroad Company had lent the Philadelphia and Erie Railroad Company five millions of dollars, secured by first mortgage on that property. In addition to this amount one million dollars had been furnished to the connecting railway and $800,000 to the West Pennsylvania Railroad.

During the year 1866 the connecting railway was leased to the Philadelphia and Trenton and Camden and Amboy Railroad Companies at legal interest upon its entire cost.

Of the $16,500,000 earned during the year 1866, $10,500,000 were required to defray the ordinary expenses, and $2,200,000 for extraordinary expenses, constructing of second tracks and sidings, leaving a net balance of about $3,800,000. In this first year after the war there was a decrease compared with the previous year of over $1,600,000 in passenger
earnings, $718,000 of which was on account of the fact that no government troops were transported over the road, for the first time in five years. Notwithstanding this fact, the freight earnings showed a gratifying increase of $516,000.

It is interesting to note that in 1866 the total through tonnage carried from Pittsburgh to Philadelphia was 633,000,000 pounds, while the west bound through tonnage from Philadelphia to Pittsburgh was a little over half that amount, being about 328,500,000 pounds. The way freight received at Philadelphia during the same period amounted to 1,329,000,000 pounds, and that shipped from Philadelphia to way stations only, amounted to about one-fifth that amount, being 246,000,000 pounds. The freight shipped from way stations to Pittsburgh amounted to 928,000,000 pounds; from Pittsburgh to way stations, 276,000,000 pounds.

The experiments in the use of steel rails which had been commenced in 1864 and continued in 1865, were in progress during 1866. During October and November of the previous year, 270 tons of Bessemer steel rails had been laid down upon sidings over which a large tonnage was moved. These rails were of what was known as the Philadelphia and Erie pattern, four inches high and weighing 50 pounds to the yard. President Thomson thus refers to these experiments in his annual report for 1866:

Some few of these rails have broken down at the ends, probably on account of having been cut off too close at the works, but they are generally wearing very well. At some of the points where the above rails have been in use two or three sets of iron rails would have been worn out, while the steel rails are yet in good condition. During the past year, 1,541 tons of Bessemer rails have been laid down in the main tracks, about 600 tons of which are of the Philadelphia and Erie pattern, and the balance are of the pattern adopted on this road, having a height of four and a half inches and weighing sixty-seven pounds per yard. Experiments are now in progress to determine the relative endurance of iron and steel rails by placing them where they are subject to exactly the same usage.

During the year surveys were made to straighten the line on the Philadelphia Division between Haverford College and Valley Creek, a distance of over twenty miles. This distance, the engineers reported, embraced the worst located parts of the old line, and required alterations which amounted to nearly a new road for this distance. An iron bridge of five spans was also built over the Juniata river at Granville, and "a double-track bridge of wrought iron, including upper and side posts," was constructed at the Altoona shops for the Connecting Railway. This bridge was successfully erected in the spring of 1867, and an illustration from a contemporary photograph has been prepared for this book.

On the 31st of December, 1866, the financial condition of the Company was as follows: Capital stock, $20,000,000; first mortgage six per cent bonds, $4,980,000; second mortgage bonds, $4,904,840. In addition to this the Company owed the State on account of the purchase of the public works $6,600,000, bearing interest at five per cent. There were also short bonds, or debentures, outstanding amounting to a million and a half dollars, and bills payable, including dividends due stock-
holders and unpaid, amounting to a trifle over three millions of dollars. In addition to this the Company had guaranteed the Harrisburg and Lancaster Company's stock to the extent of $1,182,550 and the bonds of that company to the extent of $700,000; and these, including the balance of $870,000, aggregated a trifle over forty-six millions of dollars. Of this amount $31,600,000 had been expended in the construction of the railroad from Har- and Erie Railroad; the balance in the bank being a trifle over a million dollars and the value of fuel and material on hand about one million four hundred thousand dollars.

The value both of materials and labor during the year became gradually adjusted to a peace basis and the high rates on freight and passenger traffic which had prevailed in previous years were also reduced to a normal condition. As with other large corporations

The Connecting Railway Bridge. 1866.

risburg to Pittsburgh, the purchase of the Harrisburg and Lancaster Railroad, the main line of the State works, and the extension of the Pennsylvania Railroad to the south bank of the Monongahela river at Pittsburgh and to the Delaware river at Philadelphia and in wharves and grain elevators at that point. The remainder of the amount, less about four millions of dollars of bills receivable, had been expended for the bonds held by the Company of the western railroads and the Philadelphia whose business had been temporarily expanded during the war period the Pennsylvania Railroad Company was compelled to face new problems.

1867.

The year 1867 differed from any of the years that preceded it in two important facts as follows:

1. The local business of the road showed
a gratifying increase in volume over the previous year, both in passengers and freight.

2. The freight rates were greatly reduced during the year while the prices for labor and material remained about the same as in the previous year.

The free pass system having given rise to serious annoyance and confusion from the improper use of courtesies extended, the Directors decided to decline to issue free passes, except when in the opinion of the Board or President such action was necessary in the interest of the Company. It was also decided January 9 that no one except the President should issue free passes (except to employees when travelling on business of the Company), unless specially authorized by him to do so.

At the meeting of the Directors on February 6, $50,000 of the bonds of the Steubenville and Indiana Railroad Company were donated to the Pennsylvania Hospital.

At the annual meeting held in February, 1867, the question of the advisability of establishing a trans-Atlantic steamship line from Philadelphia to some point in England was thoroughly discussed, and the matter was referred to the incoming Board with instructions to give the subject all the consideration which its importance required, and it was decided to ask proposals until the 1st of May, 1867, for the establishment of such a line under a concession and a subsidy to be paid by the Pennsylvania Railroad Company.

The following resolutions passed by the Board of Directors February 16, were ratified at this meeting:

Resolved, That for the purpose of consolidating the bonded and other indebtedness of the Pennsylvania Railroad Company and to raise funds to meet the annual demands upon the treasury of the Company for new tracks, additional equipment, enlargement of depots, extension of sidings, and to meet the legitimate demands of the traffic of the country drained by the road of said Company and its branches, for increased railroad accommodations, and also to preserve the proper relation between the share capital and the debts of the Company, the following financial programme be and the same is hereby adopted:

First.—That the bonds of the Pennsylvania Railroad Company secured by the first and second mortgages, and those due the commonwealth, issued for the purchases of the main line of public works and other indebtedness, be paid out of the proceeds of, or be retired by bonds to be secured by a consolidated mortgage upon the whole or such portion of the line from Philadelphia to Pittsburgh, with its equipment, and for such amount, as the President and Board of Directors may determine, and the issue of the bonds secured thereby shall at no time exceed the capital stock as the same may from time to time be increased.

Second.—Dividends to be made semi-annually of not exceeding four per cent from the net profits of the Company, payable in cash, free of United States and State taxes, and that a stock dividend of five per cent, based upon the profits already earned, be declared at the regular dividend term in May next and thereafter, in addition to the semi-annual cash dividend, a stock dividend of five per cent per annum be declared annually, if the net earnings of the Company will warrant the same.

On March 10 William F. Lockard was appointed Superintendent of the Philadelphia Division in place of S. P. Darlington, resigned, and George C. Wilkins was appointed Superintendent of the Tyrone and Clearfield and the Bald Eagle Valley branches, on April 1st. His duties also embraced those of Resident Engineer, taking the place of James Lewis and William Whitehead who had resigned.

The President laid before the Board on April 6 a duly certified copy of an act approved March 21, 1866, authorizing the Pennsylvania Railroad Company to increase its capital stock and to borrow money, also a copy of an act approved March 22, 1867, authorizing the Company to increase the capital stock, to issue bonds and to secure the same by mortgages. These acts were accepted by the Board.

At a meeting of the Board of Directors of the Pittsburgh, Fort Wayne and Chicago Railroad Company held on the 27th of April, 1867, the action of the Pennsylvania Railroad Company in obtaining a controlling interest in the line from Pittsburgh to Columbus, Ohio, and their efforts to arrange for the further extension of their lines in that
section were the subject of a resolution con-
mning this action, which the Board re-
garded with disfavor. Through the influence 
of President Thomson, however, the resolu-
tion was finally rejected.

The President was requested on May 15 to 
appoint a Special Committee of three to con-
fer with the officers of the Philadelphia and 
Trenton and the Camden and Amboy Rail-
road Companies with a view to perfecting 
such arrangements as might be needful to 
secure the opening of the new route to New 
York by way of the Connecting Railway.

The Adams Express Company was notified 
June 26 that the Pennsylvania Road would 
expect them to recognize its policy and to 
establish rates to and from Philadelphia, be-
low those to and from New York, and it was 
directed that all future contracts with the Ex-
press Company should contain an agreement 
to this effect.

On the same day H. H. Houston, having 
tendered his resignation as General Freight 
Agent, to take effect the first day of July, 
S. B. Kingston, Jr., was nominated for the 
position and his nomination was duly con-

firmed by the Board. Resolutions were 
adopted by the Directors expressing their ap-
preciation of the worth of Mr. Houston, and 
accepting his resignation with great reluct-
ance. He had filled the place of General 
Freight Agent since the organization of the 
transportation department to the entire satis-
faction of the officers of the Company.

In June the Connecting Railway around 
Philadelphia was completed. By its construc-
tion a junction with the Pennsylvania Rail-
road was made at Mantua, one and one-half 
miles west of West Philadelphia, connecting 

with the tracks of the Philadelphia and Tren-
ton Railroad, by which a through rail route 
for freight and passengers was opened.

Through freight trains between New York 
and Pittsburgh without change of cars were 
put in service in July, but through passenger 
traffic without changing cars did not begin 
until October.

The proposition of J. D. Potts, G. W. Cass, 
G. Montgomery and Clinton Lloyd, relative 
to the construction of the Baltimore and Po-
tomac Railroad was on July 5 referred to the 
President, and a Special Committee of four 
was appointed with authority in their discre-
tion to make arrangements with the Philadelphia, Wilmington and Baltimore Railroad Company, the Camden and Amboy Railroad Company, and other joint companies of New Jersey, and the Northern Central Railway Company, with a view to securing early action.

The President was authorized on the same day to enter into arrangements for the construction of a railroad between Greensburg and Connellsville, to be opened by the first of January, 1869, and to take in payment for work done and materials furnished the first mortgage bonds of the said Railroad Company, at par, not to exceed the sum of $150,000.

The Special Committee to whom was referred the proposition concerning the assignment of a contract for the construction of the Baltimore and Potomac Railroad reported on September 4, that they had adopted a resolution accepting the proposition of Messrs. Cass, Potts and others, for the assignment of a contract dated August 7, 1866, for the construction of the Baltimore and Potomac Railroad to J. Edgar Thomson and J. Donald Cam-
In response to a request from J. Donald Cameron, of the Board of Directors of the Columbia and Port Deposit Railroad Company, a Special Committee of three was appointed on September 18, to confer with a similar Committee of the Columbia and Port Deposit Railroad Company in reference to the early construction of the latter's line.

A proposed supplemental contract with the Philadelphia and Trenton joint railroads in New Jersey, providing for the division of receipts, according to the present length of their lines, "without reduction for any shortening of distances by revision of such lines," was referred to the President by the Board on October 2, and he was authorized to confer with the President of the joint Companies in reference thereto.

The nomination by the General Superintendent of W. H. Brown as engineer of the Philadelphia and Erie Railroad in place of John H. Wilson, was confirmed.

The following letter was also presented at this meeting:

Philadelphia, September 27, 1867.

To the Special Committee of the Directors:

As a result of our conference with your committee at our joint meeting to-day, we desire to place in writing the basis which seemed most satisfactory to you by which the immediate construction of the Columbia and Port Deposit Railroad Company could be secured, so that the same may be laid before your Board of Directors with such further action thereon as you may deem necessary.

First.—That the Pennsylvania Railroad Company will agree to lease the railroad of the Columbia and Port Deposit Railroad Company upon its completion, for the term of 99 years and guarantee the annual payment of $200,000, to be paid in semi-annual investments of $100,000.

Second.—That the rental herein named shall be applied as a credit to be issued by the Columbia and Port Deposit Railroad Company to secure the immediate construction of the road.

Third.—That the details of the lease herein named shall be made satisfactory to the Pennsylvania Railroad Company.

We should be pleased to be informed of your action thereon, that it may be communicated to the Directors of the Columbia and Port Deposit Railroad Company. Very respectfully,

J. D. CAMERON,
ED. SMITH,
JACOB TOME.

In connection with this proposition the following resolution was offered:

Resolved, That the Directors of the Pennsylvania Railroad Company do hereby approve the proposed basis of a guarantee rental for the construction of the Columbia and Port Deposit Railroad, as submitted this day by the Special Committee, and authorize the President to enter into a contract and to arrange the details of the proposed lease as therein provided for, subject to the approval of the Board, it being understood that the Philadelphia, Wilmington and Baltimore will pro rate all trade and travel between the two companies (except that no charge for carrying services is to be made the Philadelphia, Wilmington and Baltimore on either coal or lumber), and will construct a branch road to some eligible point on the Delaware and also on the Chesapeake bay, and furnish, at its own expense, such shipping facilities for the accommodation of the trade as may from time to time be required at such points.

A new organization of the Engineering Department of the Pennsylvania Railroad Company was also unanimously adopted on October 2, as follows:

There shall be an officer designated as Chief Engineer of Construction and Consulting Engineer of the Pennsylvania Railroad Company, whose office shall be located at Philadelphia, and whose duties shall be as follows, viz.:

To have charge of all new work on the Pennsylvania Railroad and the branches working in connection therewith.

To have plans, specifications and estimates for the same prepared under his direction, and when approved by the President to superintend the construction of the work, employing for this purpose such assistance, subject to the approval of the President, as may be deemed necessary. He shall make to the President, annually, a general report upon the operations under his charge, and from time to time such special reports as may be required. He shall also act as Consulting Engineer in all matters of engineering pertaining to the maintenance of way, communicating with the President in regard to the same when necessary, and carry out his advice and instructions.

In the office of the Engineer of Construction shall be kept the original maps and profiles of the road, plans of real estate owned by the Company, and plans of all structures.

A record shall also be kept of all expenditures for construction purposes, and of all purchases and sale of real estate.
The Chief Engineer of Maintenance of Way\(^1\) shall be aided by five engineers who shall respectively have charge of the Philadelphia Division, Middle Division, Pittsburgh\(^7\) Division, Tyrone Division and the Western Division, in addition to whom he shall be allowed to employ one assistant engineer and rodmen for general work upon the road, and such assistance as a proper economy in the proper administration of his department may require.

Towards the close of the year, after the reorganization of the maintenance of way department, W. Hasell Wilson severed his connection with that branch of the company’s service as chief engineer. Of this change Edward H. Williams, the General Superintendent, thus speaks in his annual report: “I feel that it is both a duty and a pleasure to express my obligations for the valued assistance which I have derived from his extended experience and friendly counsels.”

A Special Committee of five was appointed at the above meeting with directions to give public notice that they would receive proposals until the first day of January, 1868, for leasing the depot-hotels at Harrisburg and Pittsburgh, and the Logan House at Altoona, for a period of years, beginning on or before the first day of March, 1868.

The President was authorized on October 2 to purchase for the sum of $72,340.42 the property and franchise of the Chartier’s Valley Company, sold by judicial sale on the thirtieth of October, 1866, as recommended by George B. Roberts.

R. E. Ricker, Superintendent of Motive Power and Machinery, resigned that position on the 15th of October, to become General Superintendent of the New Jersey Central Railroad Company. His position was filled by the appointment of Mr. A. J. Cassatt.

Under date of November 13, the President was authorized to enter into a lease of the Columbia and Port Deposit Railroad.

The branches to Indiana and to Hollidaysburg, aggregating twenty-seven miles in length, had also been built. The construction account upon this whole line at the close of the year 1867 represented $20,000,000—“a sum so small compared with the cost of building such a work at this time that no rival line, if there was a favorable route for one, could be constructed with any prospect of deriving a profit from the investment.” By this policy reasonable rates of transportation had been maintained, while at the same time dividends were continued to the stockholders. In order to increase the share capital to some equitable amount, and at the same time to procure the necessary funds for the extension and improvement of the road, the Board desired to increase the capital stock by selling these shares at par to shareholders in proportion to the interest of each but the “alleged legal inability of Philadelphia to meet her share of this increase” led to the decision to pay the dividends of the railroad in stock instead of in cash, and this plan was found to be “sufficient to meet the objects of the Company and the requirements of its charter.”

During the year the roadbed on the Tyrone and Clearfield Railroad was graded as far as Clearfield. The track was laid during the spring and summer of 1868. The expenditures for the completion of this line, and other lines within the State, was one of the conditions of the legislation “by which the Company was relieved from the onerous burden of a special tonnage tax, which dwarfed its usefulness and prevented its railway from developing the resources of the interior.” These expenditures resulted in the construction of the Pittsburgh and Steubenville Railroad, the West Pennsylvania Railroad, the Ebensburg and Cresson Railroad, the Tyrone and Clearfield Railroad, the Bald Eagle Valley Railroad, the Mifflin and Centre County Railroad to Milroy, and the extension of the Broad Top Railroad to Dallas.

During the year an act was passed by the Legislature, supplementary to the act of incorporation, authorizing the Company to construct additional tracks, sidings, depots, work-

\(^1\) Appointed under the previous organization.
shops, and other appurtenances along and adjoining its own lines.

The year 1867 was a prosperous one for the Pennsylvania Railroad Company. The gross earnings amounted to over $16,000,000, while the expenses were only a trifle over $12,000,000.

The Philadelphia and Erie was operated at a net loss of $354,000 during the year 1867, which was about $75,000 in excess of the loss in 1866. The year 1867 was the tenth year after the acquirement of the State works by the expense account. During the ten years that had elapsed since its purchase from the State, the superstructure of the Philadelphia and Columbia Railroad had been entirely renewed, and all of the wooden bridges removed and iron structures substituted. A new double track road had been constructed between Dilworthville and Middletown, the old river road, twenty-five miles long, by way of Mount Joy, being also maintained. On December 31, 1867, there remained only one and one-half miles of single track to be laid between Mapleton

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**Pennsylvania Railroad Engine No. 407.**

10-Wheel Freight Locomotive Built by the Lancaster Locomotive Works in 1867.

- Cylinders 17 inches Diameter by 24 inches Stroke.
- Drivers 54 inches Diameter, Vicker Steel Tires.
- Grate Area, 14.3 Square Feet.

- Total Heating Surface, 1235.4 Square Feet.
- No Record of Weights.

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the Pennsylvania Railroad Company, and the twentieth year since the work of construction was begun between Harrisburg and Pittsburgh. At the completion of the latter road in 1854 the total cost of the road was found to be about thirteen and one-half millions of dollars. During these twenty years there had been added to this portion of the railway a second track, except for three miles, with shops, sidings, depots, etc., "sufficient to accommodate more than five times the traffic then moved." The cost of these improvements was estimated at about seven millions of dollars, all of which had been carried in and Bridgeport to complete the double track between Philadelphia and Pittsburgh.

In speaking of the development of the business of the Pennsylvania Railroad Company, President Thomson, in his report for the year 1867, stated that "the revenues of the Company, from the whole line, from Philadelphia to Pittsburgh, during 1854, the first year of its operation as a continuous line, were $3,512,205. In 1867, between the same points—with the addition of the local business of the State railroad—they were $16,583,000, an increase of nearly five-fold in money and a much larger increase in tonnage.
"It is true the Pennsylvania Railroad traversed a country that had been partially developed by the State improvements, and a large local traffic became immediately available, but at that time the through business was of inconsiderable extent. It has since vastly increased by the rapid growth of the West, both in population and wealth, and is capable of still greater development by the introduction of rates of freight that will successfully compete with those charged upon the lakes and the New York canals."

J. Edgar Thomson was unanimously re-elected President on March 4.

The Board on March 18 decided to enter into a contract with the St. Louis and Vandalia, the Ohio and Indiana, the Columbia and Indiana, Sunbury and Erie and the Steubenville and Indiana, and the Panhandle Railroad Companies, for the completion of a portion of the St. Louis, Vandalia and Terre Haute Railroad.

The negotiations of the Pennsylvania Canal Company for the purchase of the total interest of the West Branch and Susquehanna Canal Company, together with legal authority for the same being completed and the custody
of the canal having been delivered to the Pennsylvania Canal Company, on April 15 the Pennsylvania Railroad Company guaranteed the bonds of the Pennsylvania Canal Company in the sum of $2,000,000 issued in payment thereof.

Decided dissatisfaction at the result of the relations with the Pennsylvania Railroad and the connections at Pittsburgh had been manifested by influential members of the Board of Directors of the Pittsburgh, Fort Wayne and Chicago Railroad late in the previous year, when the construction of a rival line from Pittsburgh eastward was seriously considered. The change in sentiment which had since occurred is manifested in the accompanying resolutions passed by the Fort Wayne Board April 1, and communicated to the Directors of the Pennsylvania Railroad Company at their next meeting.

At a meeting of the Board of Directors of the Pittsburgh, Fort Wayne and Chicago Railway Company the following preamble and resolutions were adopted:

Whereas, The President of this Company, in his draft of the annual report submitted to the Board, had in it a paragraph referring to the offers for whole eastern connections and calling attention of the stockholders of this Company to the probable necessity for the early and serious consideration of the same, as follows:

Overtures have been made to your officers during the year to co-operate in the building of a new railroad from Pittsburgh east to the Susquehanna river and there connect with lines terminating at Philadelphia and New York.

Four several routes have been proposed by each, of which the necessary legislative authority exists for building and working a first-class railroad. Surveys have been made for all these routes, some in former years, and others quite recently, and there seems no reasonable doubt but that upon one or more of the surveyed lines a railroad can be made superior to the Pennsylvania Railroad, and that the distance from Pittsburgh to New York will not vary from that of the Pennsylvania Railroad Company. These overtures may soon become worthy of grave consideration, and, if so, will be brought to your attention more fully so as to enable you to take intelligent action thereon.

And Whereas, Mr. J. Edgar Thomson, President of the Pennsylvania Railroad Company, being present as a member of this Board, desired the withdrawal of such paragraph from the annual report and the informal communication of the same to the Boards of the respective companies. Now, therefore,

Resolved, That, with a view of enabling more intimate and lasting relations between this Company and the Pennsylvania Railroad Company, the said paragraph contained in the annual report and objected to Mr. Thomson, be withdrawn and that a copy of the preamble and resolution be sent to the Pennsylvania Railroad Company.

Resolved, That the President be further authorized to appoint a Committee of Three with full power to negotiate and prepare an agreement for more intimate and lasting relations between this Company and the Pennsylvania Railroad Company and report the same as early as possible, whereupon the President appointed Messrs. Myer, Tilden and Dawson, who reported that they did not recommend the adoption of the resolution.

The indebtedness of the Company April 1, 1868, including all classes of bonds, the floating debt and dividends unpaid amounted to $21,420,000 of which $4,972,000 was secured by first mortgage.

At the meeting of the Board on June 24, a letter was read from General Superintendent Tyler of the Philadelphia and Erie, relating to "the great importance of taking apprentices into the shops at Renova, to be educated in the theoretical and practical application of machines and engines, so far as to afford a training school for the future employees of the Company."

The suggestion met with favor, and Mr. Tyler was requested to look into the matter further and report in detail.

Five spans of the Susquehanna bridge, aggregating eight hundred and thirty feet in length, were destroyed by fire on July 17, and for twelve days it was impossible for trains to pass over it.

A special meeting of the Board was called for October 27 to take into consideration a proposition for a steamship line between Liverpool and Philadelphia, in connection with the Pennsylvania Railroad Company. The proposition as presented contained the following provisions:
First.—The steamship company to run a line of
first-class steamers between Philadelphia and Liver-
pool in connection with the Pennsylvania Railroad
Company and continue the said line of steamers for
a period of not less than five years. The steam-
ships to be not less than 2,000 tons register, and
the said first-class vessels to be ready for service
and placed regularly in the trade on or before the
first day of March, 1869.
Second.—The Pennsylvania Railroad Company,
at their own terminus, to give free wharfage for the
steamships and suitable storage and shed room for
storing cargoes so as to meet the needed require-
ments of the steamship company, it being understood
that no wharfage commission or freight charges
shall be made on traffic to and from the Pennsyl-
mania Railroad.
The steamship company not to withdraw their
line of steamships without the consent of the Penn-
sylvania Railroad Company in writing. They shall
give approved security that if done without such
consent they will pay in liquidation of damages all
sums which the Pennsylvania Railroad Company
may have advanced to the said line of steamships.

This proposition was approved by the
Board and referred to the President to close
a contract in accordance therewith.
The sleeping car service on the through
lines to and from the West for some time had
needed improvement. On October 27, the
Board decided “to subscribe to the capital
stock of the Central Transportation Company
to the extent of one hundred thousand dollars,
at par, to provide funds to secure first-class
improvements in the sleeping cars in use on
the Pennsylvania Railroad.”

In October the New York and Erie and
the New York Central Railroad Companies
combined to break down traffic arrangements
of the Pennsylvania Railroad by a heavy cut
in their freight rates. The Pennsylvania
Company retaliated by “still greater reduc-
tions from time to time, which resulted in a
large increase of its tonnage.” The low
freight rates had the effect of increasing the
prestige of the Pennsylvania Railroad by
bringing its shorter lines and better facilities
more prominently into public notice. The
managers of the Erie Company then at-
ttempted to secure control of several of the
western connecting lines “and by this means
divert business from its natural channels by
a circuitous route to the seaboard.” This
made it necessary for the Pennsylvania Rail-

road Company to secure "connections with the chief trade centers of the West, more perfect and less liable in the future to molestation and interruption." In order to accomplish this, the Company guaranteed the lease of the lines of the Columbus, Chicago and Indiana Central Railway Company to the Pittsburgh, Cincinnati and St. Louis Railroad Company, and by this means obtained direct connection with Indianapolis, St. Louis, Louisville and Chicago.

In order to obtain additional capital to be applied "especially to an increase of rolling stock" a resolution was passed by the Board to issue 136,000 shares of the capital stock of the Pennsylvania Railroad Company, giving the stockholders the privilege of subscribing at par to the said issue of stock to the extent of twenty-five per cent of their respective interests as they stood registered on the books of the Company April 30, 1869. By this proposed measure the capital stock was increased to $33,500,000.

The total earnings of the main line of the Pennsylvania Railroad for the year 1868 amounted to $17,233,500, and the expenses, to $11,861,000, leaving a handsome surplus of $5,372,500. The gross revenue exceeded that of the previous year by over $803,000.

The increase in regular freights was more than $50,000. The loss, too, in operating the Philadelphia and Erie Railroad was only $83,000, being $271,000 less than the loss in 1867. This year was the most prosperous in the history of the Company up to that time. Dividends amounting in all to thirteen per cent as has been noted were declared in May and November. In addition thereto the usual annual payment of $460,000 on account of interest and principal due upon the purchase of the State works was made.

At the beginning of the year the Pennsylvania Railroad Company held about 12,300 shares of common and preferred stock in the Cumberland Valley Railroad, which then extended from Harrisburg to Hagerstown, Maryland, a distance of seventy-four miles. During the year 1868 branch roads were in course of construction to the mines of iron ore "of inexhaustible extent." The extension of this road toward the Potomac at or near Williamsport, Maryland, was also contemplated.

When the summer schedule of 1868 went into effect the number of through trains to Pittsburgh was increased to five, with an additional local train to Lancaster and another to Harrisburg. Eight local trains were also placed on the schedule to accommodate the suburban traffic to points east of Lancaster.

During the year a pumping plant was put in at West Philadelphia, by which the water was obtained directly from the river Schuykill for the uses of the road, making it independent of the city supply.

The iron bridge over the Conemaugh at Johnstown was the first iron bridge constructed on the Pennsylvania Railroad. It was much lighter in its proportions than those subsequently built, and was originally a single track bridge. It was, however, reconstructed in 1868 for a double track, and in April, 1869, was finally completed and opened for traffic. This was the last piece of single track between Altoona and Pittsburgh.

Definite plans for straightening the road at various points were also decided upon. "A section of new road between Athensville and Rosensont, about two and one-half miles in length, to avoid sharp curvatures" was placed under contract during the summer, and a similar section west of Rosensont was also contracted for. The grading for a second track on the Middle Division was completed during the year and one and one-half miles of second track laid thereon, which completed the second track, with the exception of about 4,800 feet, which could not be laid until the iron bridges were completed at Manayunk, Mount Union and Vandivander's.

Plans and specifications were prepared, and contracts were entered into for the erection of several iron bridges during the year, it then being the intention to do away with wooden structures on the road as rapidly as possible.
1869.

The year 1869 stands out conspicuously in the history of the American railroad as the one in which the shores of the Atlantic and Pacific oceans were for the first time connected by a railroad across the Continent. Such rapid progress had been made during the preceding year on the Union and Central Pacific Railroads, that the last rail was laid and the last spike—a golden one—was driven with imposing ceremonies on the tenth day of May, 1869, at Promontory Point, Utah.

At this time the Pennsylvania Railroad and its immediate western connections presented "the shortest line to and from the great cities of the Atlantic seaboard, either by way of Chicago, St. Louis, or by an intermediate route," and President Thomson expressed his belief to the stockholders that this advantage would "secure a fair share of the large traffic that will be carried between the Atlantic and Pacific States."

For the first time in the history of the Pennsylvania Railroad Company, the reports covering the year 1869 included the operations of three companies, the Pennsylvania Railroad Company proper, the Philadelphia and Erie Railroad Company and the Pittsburgh, Fort Wayne and Chicago Railway Company, the latter of which was leased by the Pennsylvania Railroad Company on the 1st day of July, 1869. The leases of the Fort Wayne road by the Pennsylvania Railroad Company, and of the Columbus, Chicago and Indiana and the Little Miami Companies the Pittsburgh, Cincinnati and St. Louis Railway Company were the first steps in the consolidation which led to the establishment of the Northwest and Southwest Systems of the Pennsylvania Lines west of Pittsburgh. At that date it was the published policy of the Pennsylvania Railroad Company not to extend its lines further west than Chicago on the northwestern, nor than the Mississippi river at St. Louis on the southwestern, and Cincinnati in the southern Ohio valley.

During the year, in anticipation of transcontinental business, the gauge of track on the lines west of Pittsburgh, over which the Pennsylvania Railroad exercised control, was reduced from four feet ten inches to four feet nine and one-half inches, and it was stated that the gauge, "when their machinery is adopted to it, will be further reduced to four feet nine inches—the present gauge of the Pennsylvania Railroad."

64-pound Iron Rail laid on Pennsylvania Railroad. 1869.

Early in the year the difference in the rate per ton mile charged on local and through freight began to excite the opposition among shippers which finally led to the establishment of the Interstate Commerce Commission. President Thomson brought the matter to the attention of the stockholders in the following terms:

There has been much complaint by the public in consequence of the higher charges per mile by many railway companies for short than long distances. In this policy, to a limited degree, these companies, for obvious reasons, are fully justified, but in many cases the practice has been carried to an unwarrantable extent. The rule that has governed this Company is not to charge to any intermediate point a greater rate than is required to one at a longer distance. Under this rule, which we think entirely defensible, the average charges for the through and local business per ton per mile passing over our line are nearly equal.

Already the management was looking toward the extension of the Pennsylvania lines eastward from Philadelphia to New York harbor, in order to compete with the through
trunk lines centering in New York for the business of the great West. In calling attention to this matter in the annual report President Thomson states that "unwilling as we have been to enter upon this policy, a careful review of the subject since its adoption leaves no doubt as to its wisdom—under the circumstances that have been developed within the past eighteen months," and he further said "this Company has not attempted, neither does it propose, to absorb the natural connections of either of the other trunk lines."

There is business sufficient to give to each of these companies ample revenues to meet the interest upon any reasonable cost of their works if equitable rates between the shipper and railway company are at all times preserved, and without a resort by one line to take from another, by reduced charges, business which it otherwise would have had a chance to secure at fair prices. Such attempts, though so often repeated, have at all times failed to secure the professed object in view. They have not infrequently been commenced to influence the market price of the shares of the Company in disregard of its permanent interests with a view to benefit the stock speculations of its managers and their friends.

The following words were addressed particularly to the Philadelphia stockholders:

The Pennsylvania Railroad Company was organized mainly with a view to promote the commercial and manufacturing interests of the city of Philadelphia and the interior of the State, and its management has kept these objects steadily in view, giving at all times to the city the difference in transportation to and from the West due to its geographical position. This policy has had a marked influence in developing the manufacturing industry of the city, but it seems only to have preserved its commercial interest from retrograding. With a view to sustain and promote this interest, every effort has been made by this Company to reduce the local expenses on produce at Philadelphia, that necessarily occur in its transfer at seaports, to a minimum; but the pecuniary and shipping facilities required to second these movements and retain the business of the West at this city until forwarded to its destination appear to be deficient, and, in consequence, the larger share of it, notwithstanding these advantages, passes on to New York. The Directors recognizing the importance of the interests of this Company of building up the business of Philadelphia, will cheerfully unite in any reasonable plan by which this object can be secured.

At the meeting of the Board held January 27, the Secretary was instructed to vote the stock of the Company held in the Pennsylvania Canal Company on the 30th, on the question of adopting or rejecting the agreement of the Directors of that Company relative to merging with the Wyoming Valley Canal Company, and also to vote said stock at the annual election of the Pennsylvania Canal Company to be held on the ninth proximo.

It was believed that the best plan for securing additional accommodations for the general offices of the Company in Philadelphia was to improve the property at the northwest corner of Third Street and Willing's Alley, and to connect the two buildings by means of a bridge. Accordingly on January 27 the Secretary was instructed to notify the tenants to vacate on or before May 15.

The President and Treasurer were authorized on February 24 to purchase $200,000 of the bonds of the Pennsylvania Canal Company at a price not exceeding the par value.

J. Edgar Thomson was on March 3 unanimously re-elected President.

An act of Assembly to increase the number of Directors of the Railroad Company, and to give the stockholders the power to locate the general office of the Company was on March 16, 1869, approved by the Governor.

A contract was made on April 14 with the Allegheny Valley Railroad for the endorsement, in connection with the Philadelphia and Erie Railroad Company and the Northern Central Railway Company, of the bonds of the Allegheny Company, and for future interchange of traffic.

On the first day of May a daily line of palace cars between Louisville and New York was established. This line ran in connection with a train of similar cars between Louisville and New Orleans, and formed a through line with but one change of cars between New Orleans and New York. New lines of through cars to and from Chicago and Cincinnati were added during the year, and at its close there were six daily lines over the
Pennsylvania Railroad; one between New York and Louisville, two between New York and Cincinnati, and three between New York and Chicago. This was the beginning of the through traffic which has since been a conspicuous feature of the Pennsylvania Railroad Company.

At the meeting held on May 3 Edmund Smith was elected "an additional member of the Board of Directors" and given power to act as third Vice-President; George B. Roberts was also elected an additional member of the Board with power to act as fourth Vice-President. Joseph Leslie was unanimously elected Secretary in place of Edmund Smith, promoted, and William J. Howard was elected Solicitor.

It was decided on May 21 that, if the consent of the Board of Managers of the Philadelphia and Erie Railroad Company and the sanction of its stockholders could be obtained, the terms of lease were to be so modified "as to pay the Pennsylvania Railroad Company as lessee out of the gross receipts, the actual cost of operating and maintaining the road and property of the Company, and all equipment used thereon at the reasonable rate of interest of seven per cent upon the investment."

The following nominations were confirmed by the Board on May 21: Theodore Cuyler, Counsel, First District; William Darlington, Solicitor, Second District; W. A. Baldwin, Assistant Superintendent, Philadelphia and Erie Railroad; Frank Thomson Superintendent, Eastern Division, Philadelphia and Erie Railroad; John Pitcairn, Superintendent, Middle Division, Philadelphia and Erie Railroad; John W. Reynolds, Superintendent, Western Division of the Philadelphia and Erie Railroad.

The matter of the proposed basis of the agreement for the lease of the Pittsburgh, Fort Wayne and Chicago Railroad Company was considered on May 27, and the following resolution was adopted:

Resolved, That the basis of a contract submitted to the Board for the lease of the Pittsburgh, Fort Wayne and Chicago Railroad and other property controlled by the Company be approved by the Board, and that the President and Secretary be authorized to execute the contracts and lease necessary, and perform the same when the details thereof shall be put in such shape as shall be satisfactory to the President.

The property at the northwest corner of Third Street and Willing's Alley was sold during the early part of June to the Westmoreland Coal Company.

On July 7 Theodore N. Ely was nominated for Superintendent of the Middle Division of the Philadelphia and Erie Railroad and confirmed by the Board.

On the 29th of August an arrangement of through trains was made, with a view of shortening the time between New York, Phil-
adelphia and Chicago, for the accommodation of the through travel. "By dispensing with all unnecessary stops the time was reduced to twenty-nine and one-half hours from Chicago to New York, and twenty-seven and one-half hours from Chicago to Philadelphia. Trains were run with satisfactory regularity on this time-table until the usual winter change was made, November 14."

Under date of September 29 a plan was submitted for the proposed extension of the Akron branch of the Pittsburgh, Fort Wayne and Chicago Railroad Company.

During the month of November a ware-

house for the storage of grain was erected immediately north of Market Street, between Thirtieth Street and the river Schuylkill.

Robert Neilson was, on November 22, appointed Superintendent and Resident Engineer of the Western Division of the Philadelphia and Erie Railroad. William H. Brown was also appointed a resident engineer, to be located at a point to be decided on by the General Superintendent, subject to the approval of the President.

The establishing of suburban homes along the line of the Pennsylvania Railroad may be said to have its origin in the year 1869, when a farm of sixty-two acres, adjacent to the Pennsylvania Railroad in Montgomery county, about nine miles from the West Philadelphia station, was purchased and laid out into a town. The circumstances through which the name "Bryn Mawr" was given to the town are thus stated by Mr. W. Hasell Wilson:

When it became necessary to give a name to the town, I felt desirous to avoid the commonplace

hackneyed style of nomenclature, and my attention having been drawn to the designations of the various early Welsh settlements in eastern Pennsylvania, I selected Bryn Mawr, which, meeting the approval of the President of the Pennsylvania Railroad Company was adopted. Dr. J. J. Le-
The year was a prosperous one for the Company, notwithstanding the fact that the net earnings fell off about $320,000, and in his annual report to the shareholders, the President states that "Your directors take pleasure in submitting to you the satisfactory results of the operation of your railways for the year 1869."

Old claims against the government for military transportation during the year 1868 were settled to the amount of $113,500, while coal transported (2,330,358 tons) the net revenue from it is of considerable importance.

Upon the Philadelphia and Erie portion of the Company’s lines this traffic is chiefly made up from the transportation of anthracite coal to supply the demands of the oil and lake regions, and amounted, in 1869, to 138,138 tons, exclusive of 167,383 tons that were sent to Western New York via Elmira. Its bituminous coal-fields are too far from the lakes to compete upon equal terms with those of Ohio and Western Pennsylvania in the markets of the West. A portion of the bituminous coal-fields upon this railway, east of the tributaries of the Ohio, are favorably situated for the Atlantic markets, but they have not yet been developed to any material extent. The demand for bituminous coal of the Allegheny region in the eastern markets has been confined, until recently, to blacksmiths, but the high price that has prevailed for some years for anthracite coal has caused the bituminous variety to be introduced to a considerable extent for producing steam and for the manufacture of iron. From the limited extent of the anthracite fields, and the greater cost of mining this variety, it is reasonable to infer that the consumption of the bituminous coals will continue to increase on the seaboard.

Upon the main line of your railway and its...
branches the movement of anthracite coal is yet
inconsiderable, whilst the transportation of the
bituminous has been large for the manufacture of
gas for eastern cities and the other purposes already
mentioned. This material exists in inexhaustible
quantities along the whole line of your railway from
the summit of the Allegheny to its western ter-
minus, and in the Broad Top mountain (already
extensively developed) south of Huntingdon. A
branch from the main line at Tyrone to the town of
Clearfield cuts the Allegheny coal-field, and upon
this mining is now carried on to a large extent,
whilst another branch also extends from the same
point to Lockhaven on the Susquehanna river.
From Altoona a branch extends to Hollidaysburg
and Newry, a distance of nine miles. The last two
mentioned, in connection with a portion of the main
line, traverse the valley at the base of the Alle-
gheny mountains for seventy miles, commencing
on the west branch of the Susquehanna river, and
afford ample opportunities to develop this whole
region by short branch lines into the coal-fields at
their summit wherever desired. In this valley and
in the mountains and valleys that lie on its eastern
border there is an abundance of ore easily mined
and of a quality that will make the best quality of
iron, already celebrated for its strength, and found
to be superior to any other in the manufacture of
cannon. The proximity of these ores to coal and
limestone gives to this region advantages for the
manufacture of iron in all its varieties and uses,
a claim equal if not superior to that of any other,
which advantages will doubtless be improved by
capitalists, and thus largely increase the population
upon your line and its local traffic, the most reliable
business of your road. Your railway is not now
dependent upon its through traffic for its dividends,
although this item is important and necessary to the
interests which brought it into existence.

During the year 1869 the freight business
showed a gain at all points, amounting in the
aggregate to nearly fifteen per cent, over
the previous year. On account of brisk com-
petition during the summer and fall, through
freight rates were reduced, and the business
of the road was largely augmented. Not-
withstanding the fact that an extended strike
prevailed among the miners of the Pittsburgh
coal regions from the 1st of October to the
1st of November, during which period the
operations at those mines were entirely sus-
pended, the coal tonnage for the year showed
a gain of twelve per cent as compared with
that of 1868.

In the Connecting Railway, which extended
from West Philadelphia to Frankford, a dis-
tance of seven miles, the Pennsylvania Rail-
road Company held 25,547 shares of the capital
stock, amounting to $1,277,350, on the
1st of January, 1869. This railway was then
operated under a lease to the United Rail-
roads of New Jersey "at an annual rental
equal to six per cent, clear of all taxes upon
its whole cost." The reasons for its construc-
tion are thus stated by President Thomson:

This road was constructed with means furnished
by your Company for the purpose of decreasing the
heavy cost of passing its New York and Eastern
trade through this city, and in the expectation of
returning to the Philadelphia Division of its road
much of the trade and travel which the delay and
obstructions referred to have driven to other chan-
nels. The result, as shown in the 18 months since
the road was opened for traffic, has been such as
we anticipated, while, in addition thereto, we will
receive, during the term of the lease, legal interest
upon the expenditure incurred.

The disadvantage of the steep grades in
the movement of freight over the Allegheny
mountain was fully recognized at that time,
and various attempts were made to establish
a line between Philadelphia and the West by
which the mountain could be avoided. Dur-
ing the years 1868 and 1869 the Allegheny
Valley Railroad Company began the construc-
tion of a line between the Philadelphia and
Erie Railroad and the mouth of the Mahon-
ing, and continued to make surveys for the
location of what was called the "low grade"
line between the east and west, on which it
was shown by the surveys that the gradients
against the heavy traffic might be confined
within eleven feet per mile.

About a half-million of dollars had been
expended for graduation before the end of the
season, and the total cost was estimated at
about five and one-half millions of dollars.

In the latter part of February the second
track over the Johnstown bridge was com-
pleted, and at the close of the year the single
track on the main line was limited to about
one mile at the Susquehanna bridge at Rock-
ville, 1,222 feet at Mount Union, and about 1,200 feet at Manayunk.

With the year 1869 the Pennsylvania Railroad Company entered upon the period of extension and consolidation which, during the years which immediately followed, gave it a leading position among American railways.

1870.

The work of improving the alignment of the old Philadelphia and Columbia Railway was carried on during the year. It was decided to rebuild that portion of the road lying between Philadelphia and Steamboat Station in Chester county, the curves on this section of the road being numerous and particularly abrupt. The grading upon this and other portions of the main line was begun early in the year for the purpose of laying a third track. The delays arising from the use of a single track by trains moving in the same direction at different rates of speed were found to be very annoying.

A separate division was formed of the West Pennsylvania and Indiana Branch on January 1, and Robert Neilson, formerly Resident Engineer of the Middle Division, was appointed Superintendent.

In a report of the Finance Committee submitted on January 26, relative to the insurance of the buildings of the Company and other property, the cost of the buildings was estimated at $5,448,400, and the amount of probable loss by fire at $3,000,000.

A contract was entered into with the Pullman Palace Car Company on January 27 for the running of its sleeping cars over the Pennsylvania Road. The Pullman Company, having leased the entire equipment of the Central Transportation Company, began immediately to build a large number of handsome cars. Only a few, however, were put into service in time for the summer travel.

The Committee on Road reported on February 23 that in the matter of the Westinghouse air brake, referred to them with power to act, they, with the assistance of the Second Vice-President and the General Solicitor, had perfected a form of agreement with the Air Brake Company to furnish the Company with the patent air brakes.

At the same meeting the Auditor was authorized to pay to the Young Men's Christian Association of Altoona the sum of one hundred dollars, as a donation, to assist in procuring furniture for their rooms.

The following paragraph is quoted from the Twenty-fourth Annual Report to the stockholders regarding the relations between the road and the city of Philadelphia:

The main object in the organization of the Pennsylvania Railroad Company was to promote the traffic between this city and the West. This object has been kept steadily in view, and is not inconsistent with the best interests of the stockholders. It was confidently expected that on the completion of the road, the enterprise and capital of the citizens of Philadelphia would have been at once enlisted in marketing the products brought to their doors, and the means furnished to distribute them to points of consumption. But it soon became evident that this could not be depended upon, and that our cars must pass to New York to meet purchasers of their contents, or the business of the Company would become dwarfed to that of a second-class railroad, a fate which the interests of the stockholders would not permit.

To remedy the difficulty above referred to the Company, at an early date, offered to join the citizens or authorities of the city of Philadelphia in establishing a steamship line between that port and Liverpool. This proposition did not, however, meet with much favor until 1870, when the required subscription to the stock of the proposed line was made. At that time the success of the undertaking depended upon the purchase of one and a half millions of the bonds of the Steamship Company guaranteed by the Pennsylvania Railroad Company. The Board agreed to take a majority of the stock, not exceeding $400,000, and to make the guarantee. This action was confirmed by the stockholders at their annual meeting held on February 21.

On June 30 the Board agreed to the following outline of a plan of organization:
First.—A Company shall be chartered under charter from the Commonwealth of Pennsylvania with a minimum capital of two million dollars, in which the Pennsylvania Railroad Company will subscribe for sixty per cent of the capital stock.

Second.—An opportunity shall be afforded the citizens of Philadelphia to secure the balance, say forty per cent of the said capital stock.

Third.—Liberal arrangements will be made by the Pennsylvania Railroad Company for the accommodation of the line of steamships at the port of Philadelphia, and for such other aid as may be found necessary to perfect the organization.

At the meeting of October 24 the Board resolved to agree to build four iron steamships at or near Philadelphia, and, as already stated, to subscribe for sixty per cent of the capital stock of the proposed company, provided the remainder of the stock was taken by responsible persons on or before May 1, 1871. The right was reserved to increase the number of steamships to seven.

It was said that by reason of the delay which had occurred in the organization of the Company it would be possible to take advantage of the great improvements which had been made during recent years in the construction of steamers and their machinery “which rendered almost obsolete” steamships built prior to 1860.

Notwithstanding the establishment of this line of steamships, it was said that the tonnage capacity of the Pennsylvania Railroad was far in excess of the ability of the city of Philadelphia to market it, hence the surplus would still be sent on to New York and other points. In fixing freight charges from and to the West, the differences due to the shorter distance to Philadelphia had, up to this time, always been considered by the Pennsylvania Railroad Company.

On November 23 it was decided to apply to the Legislature at the next session for a charter for the new corporation, which was to be known as the “American Steamship Company.”

J. Edgar Thomson was unanimously re-elected President for the year on March 23, and the resignation of E. H. Williams, General Superintendent, was accepted, A. J. Cassatt being appointed to the place.

The following appointments were made when the revised organization for conducting the business of the Company went into effect April 1: Mr. Isaac Dripps to be Superintendent of Motive Power and Machinery; Mr. John Reilly, formerly Assistant Superintendent, to be Superintendent of Transportation; Mr. Theodore I. Heizmann, formerly Resident Engineer of the Philadelphia Division, to be Engineer of Maintenance of Way. On the same date John A. Wilson, Chief Engineer of the Allegheny Valley Railroad, resigned.

The Pennsylvania Company created by special charter of the commonwealth approved April 8, 1870, was organized “to secure the greatest possible efficiency in the management and control of the lines of railroad connected with the Pennsylvania Railroad Company west of Pittsburgh.”

The General Superintendent of the Philadelphia and Erie Road resigned on April 15, and W. A. Baldwin was appointed as his successor. The position of Assistant General Superintendent was abolished. Theodore N. Ely, formerly Superintendent of the Middle Division, was appointed Assistant Superintendent, and Edmund L. Tyler was chosen to fill the vacancy caused by the transfer. It was specified that Mr. Ely should have charge of construction and maintenance of way work, and that his office should be in Erie.

The President submitted to the Board on April 21 a form of agreement by which the Erie and Pittsburgh Railroad Company agreed to lease its line to the Pennsylvania Company for 999 years from March 1, 1870. The lease was ratified by the Board.

The coal shutes at Greenwich were completed early in the year and put into operation in April.

A semi-annual dividend of five per cent on the capital stock of the Company was declared, payable May 30.

The General Manager was on May 25 authorized to negotiate and contract with the Chicago, Pekin and Southwestern Railroad
Company for the use of a portion of the Pittsburgh, Fort Wayne and Chicago Company's tracks from the Rock Island Junction to the southwestern bridge over the Chicago river, subject to the approval of the Board of Directors.

The St. Louis, Vandalia and Terre Haute Railroad was opened for traffic in June, and a line of palace sleeping cars was put on the route between St. Louis and New York. The Company now had daily through lines of palace cars to and from Chicago, Cincinnati, St. Louis and Louisville.

On the summer schedule, which went into effect on June 12, the run from Chicago to Philadelphia "was made with great regularity in twenty-four hours," and from Chicago to New York in twenty-seven hours. The actual running speed was not materially increased in order to accomplish this, the time being saved largely by avoiding unnecessary stops. Only five stops were made between Philadelphia and Pittsburgh, and only three on the east-bound trip, during a portion of the time. The entire trip required about one and a half hours less than on any previous schedule. Later, water troughs were placed between the rails at Sang Hollow and Derry on the Pittsburgh Division so that no stops whatever were necessary on this section of the road.

The Wrightsville, York and Gettysburg Railroad, extending from York to Wrightsville, opposite Columbia, came into possession of the Pennsylvania Railroad Company on July 1.

G. C. Francis, General Agent at West Philadelphia, one of the oldest and most efficient officers of the Company, died on July 23. The vacancy was shortly afterward filled by the appointment of Charles E. Pugh.

An iron bridge of seventy-five feet clear span was erected during the summer at the point in Philadelphia where Belmont Avenue crosses the railroad.

An arrangement was made with the Allegheny Valley Railroad Company whereby they were permitted to enter the Union Pas-
a system the essential feature of which was the automatic regulation, not the control, of subsidiary time-pieces by the standard instrument.

A special wire connected the Allegheny Observatory with the offices of the railroad company, where a small electric bell was struck lightly every second by the action of the Observatory clock, in which a special electrical device had been introduced for the purpose. The clock paused in its regular beats to designate the minute and the hour, but otherwise continued to sound unintermittingly, affording the train dispatchers, telegraph operators and conductors a ready means of correcting their time-pieces.

At nine o’clock A. M. and four o’clock P. M., Altoona time, the Pittsburgh operator in charge connected the main eastern wire to Philadelphia (354 miles distant) with the Observatory, and for the ensuing five minutes the beats of the Allegheny Observatory mean time standard clock were automatically repeated on similar bells, or on the customary sounders in Philadelphia and in other telegraph offices through which the road wire passed, all station clocks and conductors’ watches being compared with it as the official standard.

A similar set of signals, lasting for five minutes, was sent at nine o’clock A. M. and four o’clock P. M., Columbus time, to all stations, as far west as Chicago inclusive, on the main western line (408 miles in length). At Philadelphia the time was repeated to New York, and at Harrisburg to Erie and to other places, and it is stated that eventually some 24,000 miles of railway were run by this single Allegheny observatory standard clock.

The next step was to secure uniform standards for use over large sections of the country, and for the great convenience in the daily affairs of life which such uniformity brought about the public is indebted to the railroads.

A plan previously adopted for encouraging engineers and firemen to economize in the use of fuel was also beneficial in the case of repairs to engines. In this way the sum of $63,576.44 was saved during 1870, one-half of this amount being divided among the men.

W. Hasell Wilson, the Chief Engineer, in his report for the year 1870 says:

The grading and the masonry of the new line between Athensville and Rosemont was completed during the month of March, and the double track laid during the summer; but in consequence of the settling of a heavy embankment and unavoidable delays in the completion of station-houses, it has been deemed expedient to defer the change of travel to the new line until the close of the winter months.

The space between Rosemont and Morgan’s Corner was divided into three sections, two of which, having an aggregate length of a mile and three-fourths, were put under contract in the month of March; the grading of one is finished, and that of the other will be within two months. The grading of the third section has been recently commenced.

The completion of the work just described will accomplish all that is contemplated relative to straightening the road between Philadelphia and Morgan’s Corner, and will relieve the track from a considerable amount of very objectionable curvature.

It was determined to replace the wooden bridge over Little Conestoga Creek by an iron structure. The masonry for this bridge, which was to consist of two spans of sixty-six feet

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1 For a full account of this subject see the articles by Professor Langley in the American Exchange and Review for January, 1874, in Harper’s Magazine for April, 1878, and in the Journal of the American Electrical Society, 1879, Vol. 2, No. 4.
each, was nearly completed at the close of the year, and the iron work for the spans was on the ground ready to be placed in position. This was the last wooden bridge on the main line between Philadelphia and Columbia. Eight of the iron bridge trusses removed from Johnstown were refitted and used in the construction of a bridge over the Juniata river on the Tyrone Branch. An iron bridge composed of two spans of eighty-three feet each was also built over the Little Juniata to replace a wooden structure.

The General Superintendent in his report for this year stated that there were then 250 miles of steel rail in use. The greater portion of the rails laid during 1870 were of American manufacture, and they proved to be equal to those of foreign make.

56-pound Iron Rail laid on Pennsylvania Railroad. 1870.

Many difficulties were encountered in the effort to open communication with the National Capital. The Northern Central Railway Company had for many years been under the control of the Presidents of the Baltimore and Ohio and the Philadelphia and Reading Railroad Companies, but during the monetary crisis in Baltimore which followed the election of President Lincoln, many shares of the Northern Central were thrown upon the market, and were promptly taken up by the Pennsylvania Company. In addition, a sufficient number of shares to make a majority of the stock was purchased in London. This ar-

rangement enabled the Company to make satisfactory connections as far as Baltimore, but the Baltimore and Ohio tracks had still to be used between the latter city and Washington. The officials of that road would yield nothing, and it was found impossible to run through trains, sell through tickets, or check through passenger baggage. The freight charges were also exorbitant. Soon the Baltimore and Ohio decided to extend a branch of its line to Pittsburgh, and it was then determined to build an independent line from Baltimore to Washington under the auspices of the Northern Central Railroad Company. At the close of the year this road was nearly ready for the rails. It was proposed to construct a tunnel under the city of Baltimore, and to make connections with the depot of the Northern Central Company with the expectation that the transport of coal and lumber from the mines and forests of Pennsylvania to the city of Washington and its vicinity would furnish a large and increasing traffic to the Northern Central Railway.

In order that the greatest possible advantages might be enjoyed, arrangements were made to extend the road across the Potomac, through Alexandria, to a junction with the Richmond, Fredericksburg and Potomac Railroad, northeast of Fredericksburg, thereby forming a continuous line between all important points in the southern Atlantic States and those of the north and east. The Richmond, Fredericksburg and Potomac Railway, however, was not disposed to co-operate in this project, and it was impossible, therefore, to carry it out in full.

Little progress was made during the year by the Allegheny Valley Railroad toward the construction of the "Low Grade Railway" to the Philadelphia and Erie Road at Driftwood. Surveys made by the Chief Engineer, John A. Wilson, demonstrated the practicability of continuing a maximum gradient of eighteen feet to the mile from Columbia, Lancaster county, to near the summit of the Allegheny mountains, thence reaching the tunnel under the mountain by a gradient of only
PROPOSITION TO LEASE THE UNITED RAILROADS OF NEW JERSEY. 447

thirty-six feet to the mile in favor of the heavy grade. On the descent to the Allegheny river there was a maximum gradient of sixteen feet to the mile. It was thus found possible to cross the Allegheny mountains at an extreme elevation of only 1,440 feet above tide water, and with exceptionally low gradients. It was believed that freight could be moved over this line at a reasonable profit at one cent a ton a mile.

The total earnings of the Pennsylvania Railroad during 1870, including the main line and all of its branches, were $17,531,706. The expenses amounted to $11,260,085, the net receipts therefore were $6,271,621. The income from freight, however, showed a decrease, although there was an actual increase in tonnage of 401,660. The decrease in receipts from this source was accounted for by the reductions made by the New York lines during the summer and autumn, the charges being placed much below the actual cost of transportation.

The gross revenues amounted to $48,971.25 a mile for the main line of railroad.

The whole number of passengers carried during this year was 4,352,769, an increase of 123,406 over the previous year, the average distance traveled by each passenger being about thirty-four miles. Nearly 6,000,000 tons of freight were moved, of which about one-half was coal.

The Philadelphia and Erie proportion of the earnings under the provisions of the new lease which took effect January 1, 1870, was $566,316.29, or about $11,000 a mile of road. The total earnings were $3,144,044, and the expenses $2,577,728. The total tonnage moved one mile was 188,073,278, equivalent to 655,115 tons over the entire length of the road. The number of passengers carried one mile was over 19,000,000, equal to 66,399 over the whole road, the average distance traveled by each passenger being about twenty-nine miles.

Nearly 8,000 tons of new and re-rolled iron and more than 500 tons of steel and steel-headed rails were laid in the main track of the Philadelphia and Erie during this year. The number of cross-ties renewed was over 200,000.

The President in his twenty-fourth annual report stated that it was confidently expected that after 1871 the net revenues of the Pennsylvania Railroad Company from investments in other lines would yield a sufficient amount to pay the interest upon its entire mortgage indebtedness, and it was believed that this revenue would increase year by year. It was the intention at this time that the mortgage indebtedness should not be increased beyond the thirty-five millions of dollars then authorized, with the expectation that the other assets of the Company would be sufficient to meet any expenditures which might become necessary in order to comply with the public demand for transportation facilities.

For the purpose of meeting the demands on the treasury, completing certain works then in progress, and to pay the debenture bonds falling due in July, 1871, the Board proposed to give each shareholder the privilege of subscribing for one share of stock for every six shares standing in his name on the books of the Company April 30. Under the terms of the general mortgage there could be issued only $1,192,000 of these bonds before the debentures due in July were cancelled and further payments made upon the State debt and prior mortgages upon its line. The net revenues of the Company in 1870 were in excess of the amount required to meet dividends of ten per cent upon the proposed increase of capital. The act of the General Assembly authorizing an increase of fifty per cent in the capital stock of all railroad companies was accepted by the Board of Directors.

The following paragraph relating to the proposed lease of the United Railroads of New Jersey is quoted from the twenty-fourth annual report of the operations of the road for the year 1870:

Your directors have had under consideration for some months the propriety of leasing the railways and canals of the joint companies between Philadelphia and New York, but have not as yet come
to a satisfactory conclusion in relation to this very important question. The principal object desired by this Company is to secure ample facilities for the accommodation of the large traffic that we can send to Jersey City, and its prompt delivery at that point. These joint companies have been unable or unwilling to give us the facilities desired, and our business is consequently restricted in its development, and the terminal expenses necessarily increased. The effect of such a lease will not be detrimental to the interest of this city, as it is intended to maintain the discrimination in rates of traffic that has always existed in her favor, while its influence upon the prosperity of your Company must be material, if the lease is obtained upon satisfactory terms. The rate at present demanded is greater than the joint companies have derived from the net profits of their lines for some years.

The circumstances connected with the lease of these roads will be recorded below.

1871.

During the year 1871 the Pennsylvania Railroad Company completed the first quarter century of its existence as a corporate body.

This year is a memorable one not only in the annals of the Pennsylvania Railroad Company, but in the history of several other important lines on the Atlantic seaboard as well.

In November the lease of the United Railroad and Canal Companies of New Jersey which had been pending for several months was duly signed, and a few weeks later the works and other appliances belonging to the consolidated lines composing that famous organization, and valued at nearly seventeen millions of dollars, passed under the control of the Pennsylvania Railroad Company.

During the year large sums of money were expended in straightening the old tracks of the Columbia Railroad and improvements were made in terminal arrangements in Pittsburgh.

The American Steamship Company with a capital of three-quarters of a million of dollars, and in which the Pennsylvania Railroad Company held a controlling interest, was also organized during the year.

Important southern connections were also completed through the construction of the Baltimore and Potomac Railroad and the Alexandria and Fredericksburg Railway, and a traffic arrangement over the Richmond, Fredericksburg and Potomac Railroad to Richmond, Virginia, was entered into.

The organization of the Pennsylvania Company was also completed, and all the interests of the Pennsylvania Railroad Company west of Pittsburgh were placed under the charge of that organization.

The Cleveland and Pittsburgh Railroad Company also became a part of the Pennsylvania lines by lease executed in November.

The Finance Committee on January 25 submitted to the Board a resolution relative to the transfer of securities to the Pennsylvania Company.

A communication from Ashbel Welch, General President of the United Companies of New Jersey, was on the same day referred to a special Committee to confer with a similar Committee on the part of the New Jersey Companies, it being understood that this joint Committee should consider and report upon all matters of negotiation concerning the lease pending between the two Companies.

This Special Committee on February 1 asked for an expression of opinion from the Board as to the policy of entering into a contract with the United Railroads of New Jersey under a form of a lease or by running arrangements between West Philadelphia and New York. The subject was discussed at some length, and was finally referred to the Committee having the matter in charge, to present a report to the Board for its action thereon, after another conference with the officers of the United Roads.

It was decided on February 18 to request the President to communicate to the General Railroads and Canal Companies between Philadelphia and New York the desire of this Board that the instructions to their Committee should be modified in reference to the value of certain of their works.

Ten directors were elected on March 8. The President and Vice-President for the preceding year were re-elected.
A New Jersey Railroad Company's Train Passing through Rahway, 1843.

Passenger Station, New Jersey Railroad Company, Jersey City, 1869.
IN WITNESS WHEREOF, the said parties have hereto respectively affixed their corporate seals, the day and year first above written.

[Signatures and seals]

Last page of the Lease of the United Railways and Canal Company of New Jersey
The general features of an agreement with the Palace Stock Car Company were approved by the Board on March 18, and the President was authorized to execute the agreement after it had been put in legal form by the General Solicitor, subject to the ratification of the Board.

The following communication was then read relative to the lease of the New Jersey lines:

Trenton, March 13, 1871.

J. Edgar Thomson, Esquire, President Pennsylvania Railroad Company.

Dear Sir,—I have just read your letter of the 27th ultimo to the members of the Executive Committee. They are unanimously of the opinion that no one member of our Board will entertain a proposition to lease at less than 10 per centum clear of all deductions.

Yours truly,
ASHBEL WELCH.

After considerable discussion, it was on motion,

Resolved, That the letter just read from Mr. Welch to the President be referred back to the latter to make such reply as will be deemed by him best to the interests of the Pennsylvania Railroad Company.

A letter regarding the subscription to the stock of the American Steamship Company was also read, as follows:

Philadelphia, March 16, 1871.

Mr. E. C. Knight.

Dear Sir,—I have the pleasure to officially notify you, and through you the officers and directors of the Pennsylvania Railroad Company, that the subscriptions to the stock of the American Steamboat Company have now reached three hundred thousand dollars in stock, and one million five hundred thousand in bonds, being the amount required to secure the guarantee of the Pennsylvania Railroad Company.

I remain, very respectfully yours,

JOHN O. JAMES, Chairman,
ALEXANDER R. COLESBERRY, Sec'y.

The following resolution was then adopted:

Whereas, At a meeting of this Board held November 23, 1870, it was agreed that the Pennsylvania Railroad Company would agree to subscribe for four hundred thousand dollars of the capital stock of the American Steamboat Company of Philadelphia on condition that three hundred thousand dollars of this stock should first be subscribed for by other responsible parties, and

Whereas, The Committee appointed by the citizens of Philadelphia to receive subscriptions to the said stock have notified this Company, through their chairman, that the subscription for three hundred thousand dollars of the stock had been completed.

Therefore Resolved, That J. Edgar Thomson, Esquire, President, on behalf of this Company, be and he is hereby authorized and directed to subscribe on the books of the American Steamship Company for four hundred thousand dollars to the capital stock of the American Steamboat Company of Philadelphia, after three hundred thousand dollars of the stock shall have been subscribed for by other responsible parties.

And on April 4 it was—

Resolved, That the President be and he is hereby authorized for and on behalf of this Company and as an act of this Company, as a subscriber to four thousand shares of the capital stock of the American Steamboat Company of Philadelphia, to vote for nine directors (one of whom shall be designated as President) at a meeting of the said subscribers to be held on Tuesday, the fourth day of April, 1871, for the purpose of such election.

A letter from Ashbel Welch of the Joint Companies of New Jersey was read at the meeting of the Board on April 26, and, after general discussion of the subject, Col. Thomas A. Scott offered the following resolution:

Resolved, That the President be and he is hereby authorized to negotiate with the joint railroads and canal companies between Philadelphia and New York for the lease of all their lines of railways and canals and property for a term of 990 years, on the basis of ten per cent dividend to the shareholders on the capital stock, and pay the interest thereon and protect the existing debts of the Company as reported by the statement furnished by their auditor, amounting in the aggregate to $16,942,410.50, and submit the same for the approval of its Board, the lease to include all the stocks, bonds, cash, real estate, equipment, rents, assets or other property of every kind whatsoever, belonging to said companies, and to be duly delivered to the lessee, and the President is further authorized to use his discretion as to the modifications or other terms in preparing said lease.

On May 15 it was—

Resolved, That the form of a lease with the United Canal and Railroad Companies of New Jersey and
the Philadelphia and Trenton Railroad of the first part, and the Pennsylvania Railroad Company of the second part, and also the agreement between the said parties, be and the same are ratified, approved and agreed to and that the proper officers of this Company be and they are hereby authorized to affix the corporate seal of this Company and to execute the same.

President Thomson and Secretary Leslie attached their signatures to the lease of the United Railroads of New Jersey June 30, but the signatures of the Presidents of the four New Jersey Roads were not affixed to the document until the 29th of November, 1871.

The General Superintendent was authorized on June 28 to purchase from the Altoona Gas and Water Works their interest in the water power of Potts-Grove Mill, and in the 12-inch main from the dam to the city, and in the reservoir adjacent to the one belonging to the Pennsylvania Railroad Company at Potts-Grove Mill, and the reservoir in the city, and to pay therefor the sum of $33,360.

A contract between the Palace Stock Car Company and the Pennsylvania Railroad Company was, on June 28, ratified and approved. The following acts were accepted by the Board: an act authorizing the Columbia Bridge Company to sell their bridge and its appurtenances, property, real and personal, corporate rights and franchise to the Pennsylvania Railroad Company, and authorizing the Pennsylvania Railroad Company to purchase the same, and issue additional shares of its capital stock for that purpose; acts authorizing the Tyrone and Clearfield Railroad Company to sell and convey its railroad, etc., to the Pennsylvania Railroad Company, and authorizing the Western Pennsylvania Railroad Company to sell and convey its railroad, etc., to the Pennsylvania Railroad Company were also accepted on the same day.

On the first of October, T. W. Worsdell, master mechanic of the Altoona shops, resigned to accept an important position on a leading English railway. The vacancy was filled by the appointment of George W. Stratton to the position.

A proposition of the Delaware and Pennsylvanian Railroad Company in reference to leasing and operating their road by this Company was accepted on October 25. The Delaware and Pennsylvania Railroad Company agreed to modify their proposition so that twenty per cent of the rates on freight accruing to the Pennsylvania Railroad Company, on the traffic to and from the Delaware river, should be applied from time to time by the Treasurer of the Pennsylvania Railroad Company to the purchase of the first mortgage bonds of the Delaware and Pennsylvania Company.

The lease on the Cleveland and Pittsburgh Railroad Company was, on November 8, read, approved and confirmed by the Board, and a resolution was adopted transferring to the Pennsylvania Company the lease of the Cleveland and Pittsburgh Railroad Company, upon the condition that the Pennsylvania Company should assume all the duties and obligations which the Pennsylvania Railroad Company had agreed to fulfill.

Vice-President Scott on November 22 brought to the attention of the Board the matter of the difference concerning the dividend paid by the Camden and Amboy Railroad Company in July, 1871, and that agreed to be paid by the Company under the proposed general lease of the New Jersey lines. The matter was referred to the Finance Committee, to consult with counsel, and report to the Board.

The following preamble and resolution relative to the lease of the New Jersey lines were adopted on December 16:

Whereas, The United Companies of New Jersey by reason of legal proceedings and from other causes, have failed to deliver their property at the time contemplated by the lease thereof, and from this cause large expenses have been incurred that the lessee should not have been subject to, and

Whereas, Certain representations were made to the authorities of the United Companies that the lessees would pay seven per cent in June next if the property were delivered according to the terms of the said lease.

Therefore, Resolved, That the report of the committee be received, and that the seven per cent be
paid on the second day of January next, provided the property of the companies and all their appurtenances be delivered previous to that date.

The President stated that possession having been taken of the New Jersey Companies, there would be a necessity for modifying the organization of the road for conducting the business of the Company, and that such modifications would be made at as early a day as possible and submitted to the Board; meanwhile, he stated, that he had placed the above named works under the charge of A. J. Cassatt, whose title he had changed to General Manager. He had also appointed F. Wolcott Jackson General Superintendent of the New Jersey lines. This action was, on motion, approved.

A large granary was therefore erected on the Schuylkill so constructed that each car load could be kept in a separate bin.

The general office of the Company on Third Street in Philadelphia was sold to the Lehigh Valley Railroad Company. It was expected that the new building would be ready about April 1, 1872.

Over $320,000 was spent during the year in straightening the old Philadelphia and Columbia Railroad, and $440,512 in substituting iron for wooden bridges and steel rails for iron ones.

A section of the new line beginning about eight miles west of Philadelphia, and extending westward two and a half miles, was completed on March 26. It was expected that in the fall a second section, from Rosemont to Villa Nova, would be completed.

The following paragraphs are quoted from the annual report of the Chief Engineer for 1870:

The new line between Athensville and Rosemont, 12,700 feet in length, was opened for use on March 27, and that between Rosemont and Villa Nova, 5,200 feet in length, on November 6. The grading on the section immediately west of Villa Nova, 3,300 feet in length, is progressing favorably, and on the following section, terminating west of Morgan's Corner, 3,400 feet in length, the ballasting is nearly completed and a force engaged in laying track.

From the end of this section to the turnpike crossing west of Eagle station, it is not contemplated to make any changes.
Between the last-mentioned point and the Green Tree station, a distance of about five miles, revisions of the location have been made, with a view to having the work commenced during the ensuing summer.

From a point about 1,900 feet west of the Green Tree, the grading and masonry is now under contract for a distance of three and two-tenths miles; the work is very heavy and will occupy most of the present year.

On the next section of one and an eighth miles in length, terminating a short distance west of Steamboat station, the rails had been laid and connections with the old line were soon to be made.

The bridge across the Susquehanna river at Columbia was purchased during the year.

In the spring of this year the Morrison’s Cove extension of the Hollidaysburg branch was completed and opened for traffic as far as McKee’s; in the fall it was opened to Martinsburg, and towards the close of the year to Henrietta, a distance of about 20 miles from Hollidaysburg. The extension of the West Pennsylvania Railroad to Butler was also opened for traffic early in the year.

During the year a brick extension of the Logan House at Altoona was erected. Near the car shops at this place there were built a brick store house for paints, a brick house for the storage of oil and waste, and an extension to the blacksmith shop, the latter building being then 74 by 357 feet. It contained thirty-one double fires, three large heating furnaces and several small furnaces.

At the close of the year the new foundry in the course of construction at Altoona was nearly finished. The building was 440 feet long by 240 feet wide, and it was the intention to fit it up with the most approved labor-saving machinery, including a provision for the casting of car wheels.

The freight traffic centering at Pittsburgh had reached such proportions that increased facilities for handling it became imperative. With a view to improving this condition of affairs a conference was held during the summer with a Committee of the City Councils of Pittsburgh. A plan was proposed involving the erection of bridges over and under the railway at street crossings, and the sinking of the tracks at other points. It was estimated that the cost of this would be nearly one million dollars, but it was believed that this expenditure would be justified.

The President said, in his report for this year, that the difficulty in running freight trains from the south branch of the Monongahela through the tunnel under Grant’s Hill, in Pittsburgh, had become so serious that it seemed advisable to continue at once a line through Birmingham (under the charter of the Pittsburgh, Virginia, and Charleston Railroad Company), to a point above Turtle Creek, whence a branch line would cross the Monongahela to the Pennsylvania Railroad upon a route of better gradients than the one then used. It was the intention to continue the Pittsburgh, Virginia and Charleston line up the valley of the Monongahela, passing through a region containing bituminous coal of the best quality.

Mr. A. J. Cassatt, General Manager, stated that the business of the transportation department during 1871 showed a marked increase.

The mileage of local and through freight is shown in the following table which is taken from the report of the General Manager:

| Mileage of through freight Eastward | 253,581,076 |
| " " Local " Eastward | 112,521,155 |
| " " Local " Westward | 533,268,389 |
| " " " Westward | 112,521,587 |

Total tons moved one mile 1,011,892,207
" " 1870 825,979,052
Increase 185,912,155
Percentage of increase, 22 51/100

The ratio of the west bound to the east bound tonnage mileage during the year was as 159:80, while that for 1870 was as 157:80. No improvement was therefore shown in the balance of traffic.

The cost of repairs a mile run by locomotives during the preceding five years is here shown:
REDUCTION IN COST OF RUNNING LOCOMOTIVES, 1871.

The great reduction in the cost of repairs a mile run was due (1) to the reduction in the number of old locomotives of various patterns, and (2) to the fact that owing to the great demand for power, the engines could not, in many cases, be laid off for necessary repairs. The ratio of increase of locomotive mileage to that of tonnage mileage was as 74 to 100, showing that considerably greater average loads were hauled. This had been the case for several years, and it was a good argument for the policy, which had been pursued, of replacing the lighter engines with standard locomotives of greater power, especially when the fact was taken into consideration that the locomotive expenses per mile run had steadily diminished.

In the maintenance of way department the expenses were $243,601 in excess of those of the preceding year. This was 'largely due to the fact that there were' over 12,000 tons of steel rails laid, an increase of nearly 25 per cent, and that the single track wooden bridges at Mount Union and Manayunk were replaced by iron structures accommodating double tracks.

The earnings of the Philadelphia and Erie Railroad were $3,542,263.73; the operating expenses were $2,782,972.80, showing a balance to the credit of this line of $759,290.93.

On the Philadelphia and Erie Road 1,828,491 tons of freight were transported during the year, showing an increase in tonnage of about 200,000. The competition between the Philadelphia and Erie and neighboring lines reduced the rates charged on freight during 1871 to one cent and two mills a ton a mile. This low charge did not afford an adequate margin of profit upon the large amount of capital invested. The passenger traffic on

PENNSYLVANIA RAILROAD ENGINE No. 784.

6-WHEEL SHIFTING ENGINE WITH TENDER BUILT BY THE P. R. R. COMPANY IN 1872.

Cylinders 15 inches Diameter by 22 inches Stroke.
Drivers 44 inches Diameter, Chilled Tires.
Grate Area, 12.2 Square Feet.

Total Heating Surface, 778.5 Square Feet.
Weight In Working Order, 52,380 Pounds.

this line showed a profit of $38,221, against a loss of about $6,000 in 1870.

Regarding the management of the Philadelphia and Erie Road, the President in his report for the year says:

The General Superintendent of the Philadelphia and Erie Railroad, W. A. Baldwin, deserves the thanks of the stockholders for his close administration of the affairs of that railroad, which, notwithstanding the low charges made for its use, has shown a profit upon its operations.

Rapid progress was made by the Allegheny Valley Railroad Company in the construction of the "Low Grade Railway" across the Allegheny mountains.

On the south side of the river, opposite
THE PENNSYLVANIA RAILROAD COMPANY.

Williamsport, a new line of about seven miles in length was located. This connected with the road near the southeast end of the Williamsport bridge and the southwest end of the Linden bridge.

A line recently constructed, between the Northern Central Railway below Sunbury and the Pennsylvania Railroad at Lewistown, was leased during the year, to be worked at cost. It was stated that this line would furnish the best outlet for the anthracite traffic at and beyond Pittsburgh, and would also supply the furnaces of Lewistown with this fuel, and those of Danville with iron ore.

The lease of the Sunbury and Lewistown Railroad from Lewistown, on the Mifflin and Centre County Branch, to a connection with the Northern Central Railway at Selinsgrove was effected on October 20. The Mifflin and Centre County Railroad and the Sunbury and Lewistown Railroad were formed into a separate division, of which William H. Brown was appointed Superintendent.

Concerning the organization of the American Steamship Company, the following interesting statement is quoted:

Under the authority given by you at your last annual meeting, the American Steamship Company of Philadelphia has been fully organized by the election of H. J. Lombard, Esq., as President, and Edmund Smith, Esq., as Secretary and Treasurer, with a capital of $704,700, of which this Company owns $400,000. The first mortgage six per cent currency bonds of the Company, amounting to $1,500,000, have also been issued under the guarantee of this Company, and all of them taken at par, giving a realized stock and funded debt capital of $2,204,700, all of which has been secured without discount.

The four steamers that will constitute this line between Philadelphia and Liverpool have all been contracted for, to be built in this city of American iron, by the enterprising firm of William Cramp & Sons. The first vessel, it is expected, will be launched in June next, and the remainder as soon as practicable thereafter. The total cost of these vessels under this contract will be $3,080,000. All of the steamers are to be alike in their model and machinery; the length of each to be 355 feet, and the breadth of beam 43 feet. They will be arranged to carry 76 first-class and 854 steerage passengers, and have an estimated tonnage capacity of 3,016 tons old measurement.

The steamship company has appropriately named the four vessels that are now being constructed after the States traversed by the railways of this Company, viz.: Pennsylvania, Ohio, Indiana and Illinois.

The experience and ability of B. H. Bartol, a mechanical engineer of high standing and a member of the Board of Directors, was relied upon to a great extent in selecting the models and machinery for the new steamers.

The International Navigation Company proposed establishing a line of steamships between Philadelphia and Antwerp, stopping at Southampton, and as it was believed that the establishment of this line would tend to promote the foreign trade of the port of Philadelphia, to and from points not reached by the American Steamship Company, a contract was entered into with the former company for an interchange of traffic.

During the year the Pennsylvania Railroad Company purchased the stock of the Wrightsville, York, and Gettysburg Railroad Company at the instance of the citizens of York, Pa. The bridges on this line had been destroyed by the Confederates just before the battle of Gettysburg, and since that time had been only temporarily repaired. The stock of the bridge which had recently been erected across the Susquehanna was also purchased at a cost of about $500,000. The road was thus extended to York, connecting at that point with the Northern Central Railroad and by it and its branches with Gettysburg. There was a large demand for iron ore at Columbia, Marietta and Reading, and this line was instrumental in developing a profitable business in the transportation of ore.

It was proposed to aid in the construction of a branch commencing at Tyrone and extending to the valuable ore deposits of Centre and Blair counties. The belief was entertained that the transportation of the rich deposits of ore at Morrison's Cove would repay the construction of a line to that point, and accordingly the Hollidaysburg branch was extended a distance of sixteen miles. The President stated in his annual report for this year that these improvements, with those already in
operation, to the extensive coal fields of the Allegheny mountains would bring the chief elements used in the manufacture of iron together as cheaply as in any other part of the State. The knowledge of this fact would, it was thought, soon attract additional capital to aid in the mining of the raw materials, and this would materially increase the local tonnage of the road.

The extensive coal fields in the vicinity of Connellsville produced an exceptionally fine quality of coke, which was largely used in Pittsburgh, Chicago and other western cities. It was seen that by the construction of a line from Greensburg, in Westmoreland county, their profits from the increase of traffic it is proposed to provide facilities for, were ample in 1871 to meet the usual dividend (five per cent semi-annually) upon the addition to the capital stock of the Company it is proposed to issue. And in these profits we have not included any income from our stock ($8,000,000) in the Pennsylvania Company, which can hereafter pay regular dividends to its shareholders, or from the $3,500,000 of stock held in the Pennsylvania Canal Company, which, after this year, will be in a condition to divide its net earnings, nor any income from our large interest in coal properties that this Company has found it necessary to purchase to prevent the diversion of this traffic from the canals that we control—built by the State expressly for the development of these interests—to those of rival improvements.

to Connellsville, the cars which would otherwise run empty to the west might be loaded with coke for these points, thus accommodating a growing traffic of some importance. Such a line was accordingly constructed.

From Lewisburg to Mifflinburg, on the Lewisburg, Spruce Creek, and Centre County Railroad, a single track was laid, the distance being about ten miles. At Mifflinburg the erection of a passenger and freight depot was proposed.

The following paragraph is quoted from the twenty-fifth annual report:

The surplus net revenues of your works during the past year, without considering any increase of

Regarding the acquisition of the lines in New Jersey the following paragraphs are quoted from the same report:

The acceptance of the onerous terms of the lease of the property of the United Railroad Companies of New Jersey is only to be justified by the very great importance of securing to this Company a line terminating upon the Hudson river, where accommodations could be erected for the receipt and storage of the traffic of the extended system of railways that you control connecting Philadelphia and New York with all of the important commercial centers of the West, accommodations essential to the development of this traffic, and which it could not otherwise secure without violating existing arrangements with those companies.
The amount to be paid under the lease is $1,948,500 per annum for division among the shareholders of the companies, this company receiving all of their assets and assuming all of their obligations.

For several years past the dividends of the United Companies have been at the rate of ten per cent per annum, while their net revenues have not justified a rate exceeding seven per cent, the deficiency having been made up from a surplus fund that had accrued during the war, which had become exhausted.

The terms of this lease required the delivery of these works on the first day of July last [1871], but in consequence of an injunction obtained by dissatisfied shareholders from the Chancellor of New Jersey, this was not affected until the first of December, 1871, too late to introduce before the close of the year any reforms in their administration with a view to lessen the cost of operating them. This circumstance has materially increased the amount that we have had to advance under the lease on account of the business of 1871. It is believed, however, that by vigorous reforms in their future administration, and the constantly increasing tonnage that we shall throw upon these works, that they will, in a few years, meet the high rental agreed to be paid for them. Their revenues cannot be increased by an increase of the rates of transportation, as these have generally been kept too high to produce the best net results.

Connections had now been made through the Baltimore and Potomac Railroad, the Alexandria and Fredericksburg Railroad, and the Fredericksburg and Richmond line with the city of Richmond, and at that point with the whole system of southern railways.

With regard to the Baltimore and Potomac Railroad the following statement is made:

The Baltimore and Potomac Railroad is nearly ready for use between the south bank of the Potomac and Baltimore, and the tunnel under the latter city will be finished during the ensuing winter. When this is effected there will be an unbroken railroad from our terminus opposite New York, from Philadelphia and from Baltimore, to all points of importance in the South Atlantic and Gulf States, operated continuously by locomotive power, and with the single object in view to promote the internal commerce between the North and South by the adoption of rates of freight that, while they yield a reasonable profit upon their transportation, will, at the same time, be placed at figures which cannot fail to secure the movement by it of a vast amount of tonnage that is now forced into other channels or lies dormant upon Southern soil.

The following statement relative to the organization of the Pennsylvania Company, which organization was placed in charge of all the interests of the Pennsylvania Railroad west of Pittsburgh, was made by President Thomson in the annual report for 1871 and will be read with interest:

In its last annual report the Board referred to the disposition it proposed to make of the large interest this Company had acquired in railways beyond Pittsburgh, for the purpose of connecting your main line with the trade centers of the West; the object being to secure, by a single management of these works, harmonious action throughout the entire system of railways that we control, and at the same time to obtain the best results from the large amount of rolling stock upon them by transferring, as occasion may require, portions of that one line to another where the demand for its use was more urgent and important to the interest of the Company and the public. With this object in view, a charter was obtained for the "Pennsylvania Company," and all the interest held by this Company in these lines (except in the Cleveland, Mount Vernon and Delaware Railroad) essential to their control, transferred to it for a sum which fully covers their cost to us with interest, and preferred six per cent shares amounting to $8,000,000 received in payment thereof. This stock to participate in all of the profits of the Company above 6 per cent.

The capital of the Pennsylvania Company is fixed at $12,000,000, four millions of which is to be common stock that may be disposed of to individuals at not less than par. Of this stock only $200,000 has been subscribed for, all of which has been taken by its managers to perfect the organization of the Company.

The operations of the "Pennsylvania Company," since it entered into possession of these works on the first of April last, have been very satisfactory, demonstrating fully its ability, after 1871, to make regular dividends to its shareholders of not less than six per cent per annum, while the original object that this Company had in making these investments has been secured.

In organizing the Pennsylvania Company, it was understood that the whole of the net revenues accruing to it during 1871 from the lines committed to its charge were to be expended in their maintenance and improvement and in additions to its rolling stock, which has been done, and the property in consequence is very greatly improved.

During the year the Pittsburgh and Cleveland Railroad was leased, upon favorable
terms for 999 years, and transferred to the Pennsylvania Company. A lease was also made, through the Pittsburgh, Cincinnati and St. Louis Railway Company, of the lines of the Jefferson, Madison and Indianapolis Railroad Company, carrying with it the control of the bridge over the Ohio at Louisville. The Pittsburgh, Cincinnati and St. Louis Railway Company leased the Chartiers Railway, to be worked at cost, for the benefit of its bondholders and shareholders. The Pennsylvania Railroad Company held a majority of its stock. This was a branch line, and extended from Mansfield to Washington, Pa., a distance of 22 miles.

The Cincinnati and Muskingum Railroad was connected during the year with the Pittsburgh, Cincinnati and St. Louis Railway by a branch line, sixteen miles in length, from Dresden to Zanesville.

The Mansfield, Cold Water and Lake Michigan Railroad was also commenced under a favorable traffic contract with the Pennsylvania Company and the Pennsylvania Railroad Company. This road was to run from Mansfield, Ohio, to Allegan, Michigan, with a branch from Tiffin to Toledo.

The Pennsylvania Company entered into a contract with the Plymouth, Kankakee and Pacific Road to operate its line as soon as completed, and also made arrangements for the control of the Vincennes and Cairo Railroad. The Cairo and Fulton Railroad from Cairo was to connect with the International Railway then being built southwestwardly into Texas.

Further details of the organization and officers of the Pennsylvania Company were set forth as follows in the annual report of the Pennsylvania Railroad Company for 1871:

All contracts and arrangements made by the Pennsylvania Company are to be submitted to and approved by the Directors of the Pennsylvania Railroad Company, but none of them are to extend beyond the Mississippi river on the west and Chicago on the northwest.

The Pennsylvania Company was organized by the election of Thomas A. Scott, Esq., as President; William Thaw, Esq., Vice-President; George B. Roberts and Hugh J. Jewett, General Solicitors, who, together with J. N. McCullough, H. H. Houston, and Hon. T. L. Jewett, constitute the Board of Managers. All of these gentlemen have had a long experience in the management of transportation and of railways, and are eminently qualified to secure the success of such an enterprise.

The general management of this extended property, now amounting in the aggregate to 3,200 miles of railway, has been entrusted to J. N. McCullough, Esq., who had gained an enviable reputation by his energetic and judicious administration of the business of the Pittsburgh, Fort Wayne and Chicago, and Pittsburgh and Cleveland Railways.

The Vice-President, Mr. Thaw, was entrusted with the adjustment of rates on freight and the management of the finances of the Pennsylvania Company.

Fear having been expressed that the profit of the broad gauge roads would suffer by competition with those of the narrow gauge, the Directors took the opportunity to explain in their twenty-fifth annual report why, in their opinion, this would not be the case. It was stated that the narrow gauge had some advantages on a line through a rough country, but that shorter curves and a longer road were necessary. The question of weight of machinery was not believed to be of material importance, the heavy engines and cars used on the broad gauge being necessary not on account of the width of the track, but owing to the fact that higher speeds could be maintained and heavier loads moved with economy and safety.

Quoting the language used in the report above mentioned:

The adoption of the proper gauge to be used in each case must be determined by the circumstances that surround the proposed improvement, as neither can be judiciously adopted until all these are known and considered. The narrow gauge is certainly not applicable to a line between Philadelphia and Pittsburgh. Experience has shown that the gauge of your railway, which had its origin in the law of England, regulating the gauge that had been found best for common road carriages, is of ample width to give the best results on all first-class lines where speed of transit is necessary and the amount of transportation large.
During 1871 the earnings of the main line, 358 miles in length, and 258 miles of branches were $18,719,836.85, and the expenses $11,823,433.34, leaving a net profit of $6,896,403.51.

The only items of income that showed a decrease were the receipts from emigrant passengers and from miscellaneous sources. The war between France and Germany was probably responsible for the former, while the large collections from other railways, made in 1870, for rents and similar items had served to swell the miscellaneous collections for that year to an unusually large amount.

Nearly 4,700,000 passengers were carried during 1871, being an increase of eight per cent over the preceding year, the average distance traveled by each passenger being thirty-two miles. The total number of miles traveled by first-class passengers was 133,253,018; by emigrant passengers 12,202,240, and by commutation passengers 7,462,784, making a total of 152,918,042.

Over 7,000,000 tons of freight were moved—an increase of twenty-two per cent over 1870, about one-half of which was coal.

On December 31, 1871, the total number of locomotives on the Pennsylvania Railroad and branches was 514. Except eighty-eight which were in the shops for repairs or rebuilding, the entire number was in service. There were also 126 locomotives on the Philadelphia and Erie Road. Thirty-two locomotives were built at the Company's shops at Altoona during the year. These were placed upon the main line. Twenty-five locomotives which had been leased to the Pittsburgh, Cincinnati, and St. Louis Company were sold to the Pennsylvania Company.

The number of locomotives and cars on the main line and leased roads was as follows:

**EQUIPMENT, PENNSYLVANIA RAILROAD AND PHILADELPHIA AND ERIE RAILROAD, DECEMBER 31, 1871.**

<table>
<thead>
<tr>
<th></th>
<th>P. R. R.</th>
<th>P. &amp; E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locomotives</td>
<td>514</td>
<td>126</td>
</tr>
<tr>
<td>Passenger Cars</td>
<td>195</td>
<td>40</td>
</tr>
<tr>
<td>Emigrant Cars</td>
<td>60</td>
<td>7</td>
</tr>
<tr>
<td>Baggage Cars</td>
<td>55</td>
<td>15</td>
</tr>
</tbody>
</table>

**MAIL CARS**

<table>
<thead>
<tr>
<th></th>
<th>P. R. R.</th>
<th>P. &amp; E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mail Cars</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Express Cars</td>
<td>49</td>
<td>6</td>
</tr>
<tr>
<td>Box Cars</td>
<td>2,713</td>
<td>81</td>
</tr>
<tr>
<td>Stock Cars</td>
<td>1,400</td>
<td>10</td>
</tr>
<tr>
<td>Gondola Cars</td>
<td>2,762</td>
<td>1,615</td>
</tr>
<tr>
<td>Caboose Cars</td>
<td>2</td>
<td>43</td>
</tr>
<tr>
<td>Maint. Way Cars</td>
<td>810</td>
<td>307</td>
</tr>
</tbody>
</table>

**EQUIPMENT, UNITED RAILROADS OF NEW JERSEY, DECEMBER 31, 1871.**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Locomotives</td>
<td>160</td>
</tr>
<tr>
<td>Passenger, Compartment, Chair, Post-office and Baggage Cars</td>
<td>221</td>
</tr>
<tr>
<td>Freight Cars</td>
<td>915</td>
</tr>
<tr>
<td>Platform Cars</td>
<td>442</td>
</tr>
<tr>
<td>Dump Cars</td>
<td>410</td>
</tr>
</tbody>
</table>

**FLOATING EQUIPMENT.**

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Canal Barges</td>
</tr>
<tr>
<td>Canal Schooners</td>
</tr>
<tr>
<td>Other floating equipment, including Tugs, Carfloats, Barges, etc.</td>
</tr>
</tbody>
</table>

**ROLLING STOCK, BELVIDERE-DELAWARE RAILROAD COMPANY.**

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>27 Locomotives</td>
</tr>
<tr>
<td>104 Lime Cars</td>
</tr>
<tr>
<td>17 Passenger Cars</td>
</tr>
<tr>
<td>18 Stock Cars</td>
</tr>
<tr>
<td>2 Smoking Cars</td>
</tr>
<tr>
<td>30 8-wheel Dump Cars</td>
</tr>
<tr>
<td>6 Baggage Cars</td>
</tr>
<tr>
<td>6 Caboose Cars</td>
</tr>
<tr>
<td>1 Express Car</td>
</tr>
<tr>
<td>573 8-wheel Coal Cars</td>
</tr>
<tr>
<td>77 Box Cars</td>
</tr>
<tr>
<td>1 4-wheel Coal Car</td>
</tr>
<tr>
<td>100 Platform Cars</td>
</tr>
</tbody>
</table>

**MILEAGE, PENNSYLVANIA RAILROAD, DECEMBER 31, 1871.**

<table>
<thead>
<tr>
<th>Miles.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Line, Philadelphia to Pittsburgh</td>
<td>354.9</td>
</tr>
<tr>
<td>Altoona to Hollidaysburg</td>
<td>7.6</td>
</tr>
<tr>
<td>Hollidaysburg Branch to Morrison's Cove</td>
<td>19.8</td>
</tr>
<tr>
<td>Blairsville Intersection to Indiana</td>
<td>19.0</td>
</tr>
<tr>
<td>Delaware Extension (in Philadelphia)</td>
<td>5.3</td>
</tr>
<tr>
<td>Steubenville Extension (in Pittsburgh)</td>
<td>1.2</td>
</tr>
<tr>
<td>Tyrone Branch</td>
<td>3.1</td>
</tr>
<tr>
<td>Columbia to York</td>
<td>13.0</td>
</tr>
<tr>
<td>East Brandywine and Waynesburg</td>
<td>17.5</td>
</tr>
<tr>
<td>Mifflin and Centre County Railroad</td>
<td>12.9</td>
</tr>
<tr>
<td>Sunbury and Lewistown Railroad</td>
<td>43.5</td>
</tr>
<tr>
<td>Tyrone and Clearfield Railroad and Branches</td>
<td>50.8</td>
</tr>
<tr>
<td>Bald Eagle Valley Railroad and Branches</td>
<td>53.7</td>
</tr>
<tr>
<td>Newry Branch Railroad</td>
<td>1.1</td>
</tr>
<tr>
<td>Ebensburg and Cresson Railroad</td>
<td>11.0</td>
</tr>
<tr>
<td>Western Pennsylvania Railroad</td>
<td>84.6</td>
</tr>
<tr>
<td>Total</td>
<td>699.0</td>
</tr>
<tr>
<td>Philadelphia and Erie Railroad</td>
<td>287.6</td>
</tr>
</tbody>
</table>

1 First Track | 354.9
2 Second Track | 353.8
3 Sidings | 171.1
4 Total | 879.8
SUMMARY OF MILEAGE AND FINANCIAL STATEMENT, DECEMBER 31, 1871.

MILEAGE, UNITED COMPANIES OF NEW JERSEY, DECEMBER 31, 1871.

1. Owned directly by the Companies—
   Philadelphia (Kensington) to Trenton, all double track .................. 26.6
   Trenton to Jersey City, all double track ............................. 57.1
   Camden to South Amboy, 20 miles, all double track .................. 61.2
   Bordentown to Trenton .................................................. 61.1
   Monmouth Junction to Kingston ................................. 40.0
   Jamesbury to Monmouth Junction ......................... 5.5
   Princeton Branch, 3 miles, other branches 1.5 miles .................. 4.5

Total owned directly ........................................... 165.0

2. Railroads in which the Companies have a controlling interest—
   Rocky Hill to Kingston .............................................. 2.5
   Burlington to Mount Holly ............................................ 7.1
   Mount Holly to Camden .............................................. 16.5
   Pemberton to Mount Holly ............................................ 5.9
   Vincentown Branch .................................................. 3.6
   Glassboro to Bridgeton .............................................. 37.0
   Millville to Glassboro .............................................. 32.0
   Cape May to Millville .............................................. 41.0
   Salem Branch ...................................................... 17.0
   Freehold to Jamesburg .............................................. 11.5
   Millstone to New Brunswick ......................................... 6.6
   Perth Amboy to Woodbridge ........................................... 6.4
   Belvidere-Delaware Railroad ........................................ 68.7
   Flemington Branch Railroad ........................................ 11.4
Total in which the Companies have a controlling interest ................... 266.6

3. Other leased railroads—
   Connecting railroad, 6.8 miles; Pemberton and Hightstown Railroad, 24.5 miles .......... 31.3

Total railroad line owned, leased and controlled .......................... 462.9

GRAND SUMMARY, 1871.

Main track (exclusive of second track and sidings), Pennsylvania Railroad and Branches. 669.0
Philadelphia and Erie Railroad ......................... 287.6
United Railroads of New Jersey ............................................. 462.9

Total Mileage .......................................................... 1,449.5

The “Delaware and Raritan Canal” forming an important part of the United Companies: Bordentown (Delaware river) to New Brunswick (Raritan river) ......................... 43.0
Bull’s Island (Delaware river) to Trenton ....................... 22.5

Total ................................................................. 65.5

The Capital Account stood as follows:

FINANCIAL STATEMENT PENNSYLVANIA RAILROAD COMPANY, DECEMBER 31, 1871.

First Mortgage Bonds .................................. $4,972,000.00
Second Mortgage Bonds .................................. 4,866,840.00
General Mortgage Bonds .................................. 18,504,500.00
Lien of State of Pennsylvania upon public works between Philadelphia and Pittsburgh, payable in annual installment of $460,000 each .................. 5,758,905.40
Mortgages and Ground Rents remaining on Real Estate purchased .................. 215,859.32

$34,418,204.72

Capital Stock ........................................ 41,339,475.00

$75,757,679.72

Total amount charged to Construction, Equipment and Real Estate accounts for the Railroad between Philadelphia and Pittsburgh .................. $34,610,160.70
Stocks and bonds (including those in the Sinking Fund) acquired in perfecting the Pennsylvania Railroad System (par value about $55,000,000), estimated cash value ........................................ 43,000,000.00

$77,610,160.70

WITH THIS CHEERING CONDITION OF AFFAIRS THE PENNSYLVANIA RAILROAD COMPANY ENTERED UPON THE SECOND QUARTER CENTURY OF ITS EXISTENCE!