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THE ALLEGHENY PORTAGE RAILROAD.

By W. William Wilt

Preface

Perhaps one of the most interesting facets of the transportation history of the United States is the Allegheny Portage Railroad, which ran between Hollidaysburg, Pennsylvania and Johnstown, Pennsylvania from 1834 to 1854. Stories concerning the greatness of this Railroad have aroused the curiosity of the author in the past, and thus when the opportunity arose to participate in the Honors Course it was seen as the perfect chance to satisfy at least part of this curiosity.

This paper has not been written to convey the day-by-day, fact-by-fact history, rather it has been written to relate the more interesting aspects that were a part of the Allegheny Portage Railroad. This has been done in an effort to convey some of the glamour that once belonged to this important link in the Pennsylvania Main Line of Public Works. A great deal of assistance has been received in this endeavor, and without the help of Jesse L. Hartman, Floyd G. Hoenstine, Dr. Loring Priest (advisor), and Connie Wilt (typist) this paper would not have been possible.

W. William Wilt

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Introduction

One of the most colorful, yet little-known aspects of American History was the Allegheny Portage Railroad. In the early 1800's the great mass movement of people to the West caused New York and Pennsylvania to build a series of canals connecting major cities of the East with the frontier towns of the West. Overnight, these canals became main arteries of transportation between Albany and Buffalo and Philadelphia and Pittsburgh, "Gateway to the West." Competition was naturally keen between the two states, and each tried to outdo the other in providing the best, cheapest, and fastest mode of transportation. Pennsylvania was handicapped in her endeavors by the Allegheny Mountains, which ran through the West-Central part of the State. They were the main obstacle in an otherwise favorable situation for the establishment of a canal. The "Main Line" of canals could easily be extended to either side of the Alleghenies from Philadelphia or Pittsburgh. However, connecting the two terminal points was a formidable problem.

The connection of these terminal points was accomplished by the Allegheny Portage Railroad, considered at that time to be an engineering masterpiece. The study of its conception, planning, construction, and especially its romance is a fascinating subject. The Allegheny Portage Railroad is a little known part of our American Heritage, yet in so many ways it reflects the ingenuity and glamour that is still so much a part of our way of life.

The Old Portage Railroad

In the early 1800's the call of adventure seized much of the populace of the United States and beckoned them to leave their safety and security in order to conquer the newly acquired lands in the West. This mania, one that was to remain with Americans for the rest of the century, caused thousands of Easterners to migrate to the rich, fabled "new" land. However, as these people flocked to their new homes, they found that travel was difficult and that practically any manner of transportation was non-existent except for the reliable "Shank's Mare." The increased travel and the rapid development of communities in the West, made it necessary to devise new and efficient means of transportation and communication between the ~~West~~ East and the rapidly growing frontier.

First to realize that this problem existed was the State of New York, which built the Erie Canal in 1825. This important link in communication connected the Hudson River with Lake Erie. Overnight it became a success, as travelers took advantage of the swiftness with which it carried them to the frontier. However, as soon as other states saw the advantage that New York now had, their citizens began to clamor for a "cut of the action." Particularly interested were the businessmen and merchants of Philadelphia and Pittsburgh. These two cities were important links in the Western migration before the Erie Canal. Now the merchants saw that Pennsylvania would have to match that enterprise with a similar one if they were to maintain the trading relations between their cities. Hence, with the knowledge that important interest groups wanted action, the State of Pennsylvania appointed a Board of Canal Commissioners on March 31, 1824, to view and explore the several routes for a canal from Harrisburg to Pittsburgh, by waters of the Juniata and Conemaugh Rivers, and also the route by the West Branch of the

Susquehanna and Sinnemahoning rivers with the waters of the Allegheny river, and also the country between the Schuylkil and the Susquehanna through the great valley of Chester and Lancaster Counties, ~~XXX~~ The Commissioners were Colonel Jacob Holgate, James Clark, and Charles Treziyulney. They began the survey without engineers, but with axemen, chainmen, and levelmen on May 24, and closed it for the year on December 6, 1824.¹

The canal contemplated was a continuous waterway from Philadelphia to Pittsburgh. However, the Allegheny Mountains in the West-Central portion of the state presented the engineers with a formidable problem. Their solution was to tunnel through the mountains, thus connecting the Juniata (Eastern side of the mountain) with the Conemaugh (Western side of the mountain). It is easy to see why a tunnel was recommended when the engineers' figures are considered.

The ascertainment was that:

The rise from tide to Harrisburg was 297 feet.

The rise from Harrisburg to the head of the Juniata was 589 feet.

The rise from the head of the Juniata to the tunnel was 945 feet.

The rise from tunnel level to the summit of the mountain was 754 feet.

The total rise from tide to mountain summit was 2585 feet.²

Col. Holgate and Mr. Clark said in their report to the Governor in February, 1825:

The project of tunneling some three or four miles through a mountain is, to the uninformed, a fertile source of amusement from which they can extract the value of their taxes in good-humored laughter; and to the envious, and secret or avowed enemy of public improvements, it cannot fail to be a subject of malignant and bitter sarcasm. Even good men who love to see the improvement of their country, have been startled at the idea of burrowing in the ground for a few miles to let large boats pass through the bowels of the Allegheny. To such, it will be a con-

- (1) William Bender Wilson, "Evolution, Decadence, and Abandonment of The Allegheny Portage Railroad," 1897, Reprinted by Mallon J. Baumgardner and Floyd G. Hoenstine, The Allegheny Portage Railroad (Hollidaysburg, Pa., 1952), P. 36.
- (2) Ibid., P. 37.

solution to know that tunnels are now becoming very common. An engineer of the first standing has said that "tunnels are now so common that the necessity of them is no greater obstacle than the increase of expense."³

However, though Holgate and Clark might not have had any reservations about the construction of a tunnel, most people in Pennsylvania and many of the Representatives in the State Legislature did not even know what a tunnel was. Therefore, when they confronted the General Assembly with their proposal, they had to explain to them that a tunnel was "a hole like a well, dug horizontally through a hill or mountain."⁴

Some skepticism appeared in the minds of some of the citizens, as related by Jones:

To men of limited information, the project seemed vague and ill-defined; while knowing old fogies shook their heads and declared that a canal and turnpike both could not be sustained, and that, if the former could accomplish the wonders claimed for it, the teams that carried goods between Philadelphia and Pittsburgh in the short space of from fifteen to twenty days would be compelled to suspend operations. But the opposition to the canal was too insignificant to claim notice and when the building of it was once commenced an improvement mania raged.⁵

~~Many~~ of the people of Pennsylvania regarded the efforts of the Canal Commission as only half-hearted, however, and through the agitation of the businessmen and ~~others~~, ~~MINNAPOLIS~~ a convention was held in Harrisburg on August 4, 1825. Since the matter was of such an acute nature to the people of the state, almost every county sent delegates for the purpose of discussing internal improvements. After considering all positions on the subject, the members of the Conference pressed for direct action by the state, and petitions were circulated asking the Legislature for the construction of canals.

In the next few years more surveys were taken over the proposed terrain. During this period, the idea of a tunnel almost completely

(3) Ibid., P. 37.

(4) Wilson, Op. Cit., P. 38.

(5) U.A. Jones, History of the Early Settlement of the Juniata Valley (Harrisburg, Pa.: Telegraph Press, 1940), P. 333.

vanished, and in its place came the idea of portaging goods and passengers across the Alleghenies by means of either a railroad or a turnpike road. Before construction could begin, it became necessary to resolve the differences between the factions, each of whom favored one method over the other, and to determine once and for all which method would be most economical and efficient.

In order to resolve the question, the Canal Commissioners appointed Nathan S. Roberts as Engineer, with the specific job of making extensive examinations of the Alleghenies. After making his investigation, Mr. Roberts was directed to give his expert opinion as to which method should be used to make the portage between the Juniata and Conemaugh canals. After considerable work and the accumulation of a considerable amount of information, Mr. Roberts made his report. However, the results were not conclusive enough to enable the Canal Board to make a decision.

Nathan Roberts did not remain in the service of the State of Pennsylvania long enough to make more exhaustive and conclusive surveys. He resigned his position to accept an appointment elsewhere, and Moncure Robinson was brought all the way from England and appointed to take his place on December 8, 1828. Upon examining all the material the Canal Board had obtained up to that time, Robinson went to the Alleghenies in the Spring of 1829, with the firm belief that a railroad was far superior to a turnpike and that stationary steam engines and locomotive power would make this railroad most effective and economical. "Like a very colossus of roads, he strode about the mountain, and his nod and beck, like that of imperial Caesar upon his throne, was the law from which there was no appeal." ⁶

(6) Ibid., P. 333.

Robinson's belief in the feasibility of a railroad across the Alleghenies was in itself quite revolutionary when it is remembered that modern railroads were in their infancy when this work was begun. However, after a considerable amount of labor, Robinson concluded that his previous beliefs were correct and on November 21, 1829, he made his report to the Canal Board. His suggested plan was to cross the mountain by means of a system of ten inclined planes, with stationary power at the head of each plane, and to reduce the height of the mountain by a tunnel at the summit.

The principle of the inclined plane was understood well enough, but the problem of locating a series of these planes, with the intervening stretches of track, was not a simple one in such terrain. Simply stated, an inclined plane is a length of straight track laid on a grade of seven to ten feet per hundred. Its length did not usually exceed half a mile, and it was operated by a stationary engine pulling an endless rope over a drum. The cars were attached to this rope by clamps.⁷

The recommendations of Mr. Robinson, however, were so advanced and bold that neither the Governor, the Board of Canal Commissioners, nor the Legislature would act favorably upon them without the confirmation of the plans by other qualified engineers. The Legislature then passed an act for the purpose of obtaining further information. Under this Act, Moncure Robinson, S. H. Long, and Major John Wilson were appointed to make further surveys and to make reports at the conclusion of their study.

After their field work was over in the Fall of 1830, they made a report concurring in their preference of a railroad over a turnpike road, and for a route leading upwards along the valley of Blair's Run, crossing the mountain at Blair's Gap Summit, and then descending to Johnstown in the Conemaugh Valley. However, this was as far as the engineers could agree. Robinson still held to his plan of ten planes and a summit tunnel.

(7) George H. Burgess and Miles C. Kennedy, (Philadelphia: The Pennsylvania Railroad Company, 1949), PP. 19-20.

But, Long and Wilson wanted to avoid the tunnel at the summit and thus they ran a new line which necessitated inclined planes, six East and five West of the summit. They proposed to cross the summit of the mountain by making a deep cut. The proposed cut was 1,500 feet long and 18 feet deep at the maximum point. The Long-Wilson plan included a tunnel, however. It was to be located at one bend of the Conemaugh River on the West side of the mountain. The proposed Conemaugh Tunnel was a thousand feet long, and would reduce the length of the railroad to Johnstown by one mile.⁸

On March 21, 1831, the Legislature passed an Act giving the Board of Canal Commissioners the authority to commence the building of the Portage Railroad, from the basin at Hollidaysburg, across the Alleghenies to Johnstown. The length of the Railroad was approximately 38 miles, and it was to be built along the plans as defined by Robinson, Long and Wilson (stated in their report of the 21st day of December, 1830, with the exclusion of the plan of a summit tunnel as recommended by Moncure Robinson). On May 29, 1831, contracts were let for the Railroad between Hollidaysburg and the summit, and other contracts soon followed.

Further planning and construction of the Portage Railroad was placed under Sylvester Welch as Chief Engineer, Moncure Robinson as Consulting Engineer, and Samuel Jones as Superintendent. Their surveys in locating the final route of the Railroad began in April, 1831. As they located the road, 120 feet was marked as the width of the route. The erection of any house, shanty or other building was prohibited within the confines of this 120 feet. To many this might seem like quite a lot of ground to set aside, but it was necessary due to the dense forest of heavy timber that stood in the path of the Railroad. It was imperative to clear off the

(8) Wilson, Op. Cit., P. 41.

timber for at least sixty feet on each side of the center of the road for fear of tree falls. Also, it was not known at the time just how successful the Pennsylvania internal improvements would be. It was quite possible that the trade from the Mississippi basin and the Great Lakes would require additional tracks. Therefore, it was thought advisable to buy the land while it was of little value, instead of waiting until a later time when the land might be quite expensive.

The final plan saw a double-track railroad with ten inclined planes, five on each side of the mountain, numbered eastward from Johnstown. (See Table I)

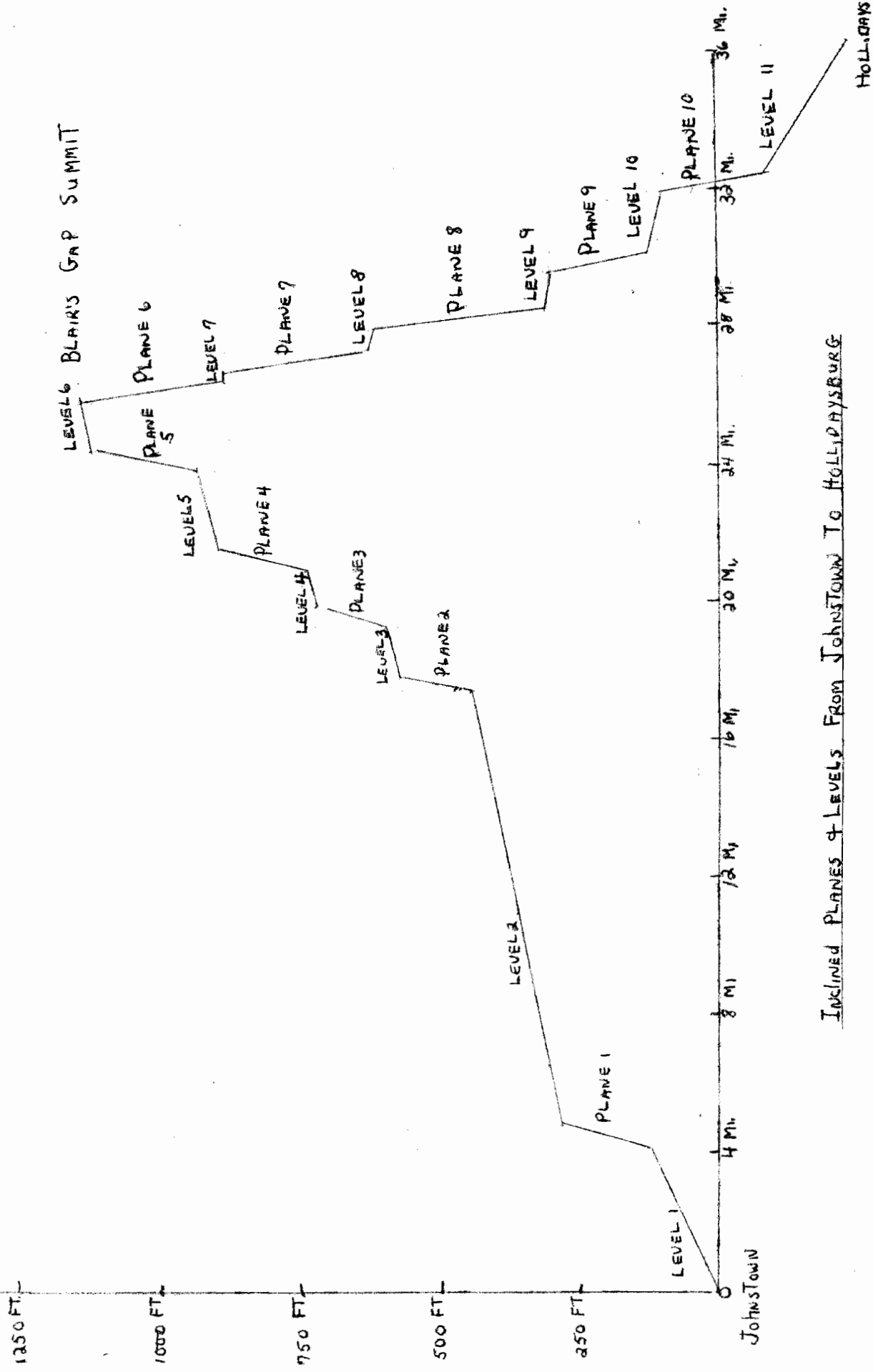
Construction

When actual work began in the Spring of 1831, the contractors soon became aware that it was going to be quite a job to transform the rough, heavily forested country into a railroad bed. The idea of clearing an area 120 feet wide was fine on paper, but a large part of the line ran through heavy spruce and hemlock trees, many over 100 feet high. Strangely enough, the big problem was not cutting these trees. The problem was getting rid of them after they were cut down. Tremendous fires were made, but the green timber wouldn't burn very well. Consequently, the huge trees had to be rolled down the mountain slopes and left to decay. This was a very slow operation and involved the labor of many men who could have been employed elsewhere.

The roughness of the terrain would naturally have been enough of an obstacle in itself. In this case, however, there was another obstacle that was equally as difficult, rattlesnakes. The entire mountain area was alive with these poisonous reptiles, and the men lived in constant fear of being bitten. Solomon W. Roberts wrote this account of their presence:

They are usually sluggish reptiles, and will let men alone if they are not trodden on or attacked. They also give

LEVEL 6 BLAIR'S GAP SUMMIT



Inclined Planes & Levels From Johnstown To Hollidaysburg

(NOTE: Johnstown is higher than Hollidaysburg)

warning with their rattles before they strike. Our axemen made a collection of live rattlesnakes, and kept them in a box. They were easily caught by an expert hand. To the end of a stick about four feet long, a short piece of strong twine was tied so as to form a slip knot. The snake, when defending itself, would lie partly coiled on the ground, or on a rock, with the rattles on its tail at the outside of the coil and its head upraised in the middle. The man approaching with the stick would slip the loop of twine over the snake's head and round its neck and, by giving a little jerk, would draw the slip knot tight and lift the snake from the ground. The snake would then writhe in vain and would be powerless to strike. To carry it to camp, it was put into a tube made of the bark of a sapling or small tree, peeled off for the purpose, which was readily done by an expert woodsman. Catching snakes was our luxury. I remember that George Wolf, then Governor of Pennsylvania, visited our camp while we had the box of snakes. 10

Another obstacle faced the construction crews during the first year. The Winter of 1831-32 was exceptionally hard. It was so hard that many of the contractors abandoned their contracts, which had to be relet for the Spring of 1832. Because of the difficulty of the work and the severity of conditions, it was no simple task to procure an ample supply of laborers for the summer of 1832. Yet, the workers that were found applied themselves diligently and considerable progress was made.

During the year 1833 the work made steady advancement. The grading and masonry was all completed before the close of the year and a single track of rails along the length of the road and a double track on the inclined planes were about finished. Some of the stationary engines had been received and were partially assembled.

The grading of the first track was finished by December 1, 1833, and during the next few months, preparations were made for the completion of the Railroad and its grand opening in the Spring of 1834. Before the Railroad could be opened to the public, however, it was necessary to give it a test run. An account of this first test is found in Poulson's

- (10) Solomon W. Roberts, "Reminiscences of the first Railroad Over the Allegheny Mountain." Pennsylvania Magazine of History and Biography (Philadelphia: 1878), v. 2, No. 4: p. 373. Read before the Historical Society of Pennsylvania, April 8, 1878.

Advertiser of February 20, 1834. An engineer present in Hollidaysburg for the test wrote:

I cannot refrain from dropping you a few lines before the closing of the mail to inform you of the complete success with which this afternoon proved to be when I attended the first trial of one of the inclined planes on the Portage Railroad. The rope, sheaves, machinery, engine, etc., were all complete and put in motion in the presence of about one hundred gentlemen who had assembled to witness the operation of passing a car over an inclined plane. The car, loaded with passengers, was twice taken up at a velocity which was varied at pleasure from four to twelve miles an hour. The work generally along the Railroad is progressing rapidly and great confidence is expressed that the Portage Railroad will be fully prepared before the 15th of March next, for the transportation of all the merchandise and produce which can be sent through the eastern and western canals.¹¹

One track was opened for use on March 18, 1834, although the second track was not completed until the 1835 season. The cost for construction was \$1,828,461.38.*

A great deal of work had been expended to build a railroad that would make Pennsylvania the leader in transportation to the West. As fate would have it, however, the Railroad operated only about 20 years. Solomon Roberts regretfully commented later that "We were striving to build a great public work to endure for generations, and, as it turned out, it was superseded by something better in about twenty years."¹²

Tracks

Since the Portage Railroad was one of the first railroads in America, it is quite interesting to note the difficulty that was caused by the question of tracks. Today we have thousands of miles of railroad tracks and we think nothing of it. In the 1830's, however, it was a real problem to determine what type of tracks were to be used and just how they were to be laid.

(11) Harry Jacobs, The Juniata Canal and Old Portage Railroad (Hollidaysburg, Pa.: Blair Co. Historical Society, 1941), P. 3.

(12) Roberts, Op. Cit., P. 380.

*Jacobs, Op. Cit., P. 4.

When the road was contemplated, the great obstacle to the civil engineers was to place a track around the many sharp curves which would be required in passing over the mountains. The engineers did not believe that a long rail could be used for this purpose, and they actually bought rails four feet long. In later years it was discovered that a long rail could be laid around any curve of other than excessive radius. If this had been known at the time the Portage Railroad had been built, there is a strong possibility that there would have been no inclined planes. Instead, there would have been a road of gradual ascent such as was adopted years later.¹³

In the end, the rails were fastened to cross ties whenever the road passed over high embankments, but on solid ground they were attached to stone blocks measuring about three and one half feet.

To do this two holes were drilled into each block. Into these holes oak plugs were driven. The cast-iron chair was placed directly upon the top of the stone block, and spikes driven through holes in the flanges of the chair into the oak plugs. The rail was a double headed rail, and held in place by a wedge. The difficulty of the spreading of the tracks was at first overcome by substituting for each alternate pair of blocks a stone block some seven feet long, extending across the track, and having a chair at each end. This was found too expensive, and wooden cross ties were placed between each pair of stone blocks.¹⁴

Rails were a constant source of trouble for Railroad officials. Not only were they continually coming loose, but during the winter the frost would dislodge the cross ties, thus necessitating a great deal of repair every spring. A dangerous and aggravating problem were the recurring "snake heads." It is recounted that:

Every train carried a sledge hammer and whenever it passed over loose rails leaving a "snake head" in its path, the conductor had to stop the train and hammer the loose rail of the "snake head" into place. These occurred because the

(13) Henry Wilson Storey, History of Cambria County Pennsylvania, Vol. I (New York: Lewis Publishing Co., 1907) P. 351.

(14) Wilson, Op. Cit., P. 53.

rails were wooden with an iron strip fastened on top and it was difficult to keep the stripping from working loose.¹⁵

Locomotives, Cars and Machinery

The method by which the Portage was to operate was relatively simple. Cars would be drawn along the levels to the base of one of the planes. They would then be attached to a rope and drawn up the incline where they would again be drawn to the next plane, and so on. A major problem confronting the early planners of the Railroad, however, was by what method should the cars be drawn along the levels? Since steam locomotives were not very old and were not thoroughly tested, the Canal Commissioners decided that it was impractical to construct the entire road so that it would be suitable for the use of steam locomotives. Even though there were three levels which were a total of twenty-two miles long, the Commissioners decided that it would be wise to wait until the steam engines were more developed, and therefore, they provided that operations on the Portage Railroad would begin with horse power being used to draw the cars along the levels. Strangely enough, by the end of the first year the Commissioners made contracts for the construction of several locomotives. Over the ensuing years, horses were gradually replaced by steam locomotives, and by 1850 steam locomotives were the sole means of travel between the planes.

The cars used on the Allegheny Portage Railroad were a small-scale version of the railroad cars we have today. Jacobs gives a very good account of what the cars were like:

An old Portage passenger car carried from seven to nine passengers, but in later years a passenger train consisted of a baggage car and two coaches and hauled sixty persons, about the number carried on a packet boat. During the forties and fifties, the immigrant travel was heavy, but those people were

(15) Students and Teachers of the Social Studies Dept. of the Altoona Senior High School, A History of Blair County, Pennsylvania (Altoona, Pa.: Altoona Senior High School, 1938), P. 51.

hauled on trains specially run for that class of passengers. They usually carried their food in the cars, and frequently the train would stop along the road at some suitable location for them to cook and eat their meals.¹⁶

After their arrival at either Hollidaysburg or Johnstown by canal, passengers and cargo took their positions in the railroad cars and were sped along a level toward one of the planes. Here they were connected to an endless rope and drawn to the top of the plane. From this point they continued their journey along the next level to the next plane, where the incredible journey started again. It is with the planes that the uniqueness of the Portage Railroad lies.

At the head of each plane were two engines of about thirty-five horsepower each; and each engine had two horizontal cylinders, the pistons of which were connected with cranks at right angles to each other, which gave motion to the large grooved wheels, around which the endless ropes passed and by which the rope was put in motion. The engines were built in Pittsburgh, and could be started and stopped very quickly. One engine only was used at a time, but two were provided for the greater security. Hemp ropes were at first used, and gave much trouble, as they varied greatly in length with changes in the weather, although sliding carriages were used to keep them stretched without too much strain; but wire ropes were afterwards substituted and were a great improvement.¹⁷ (See next page for pictures of an inclined plane).

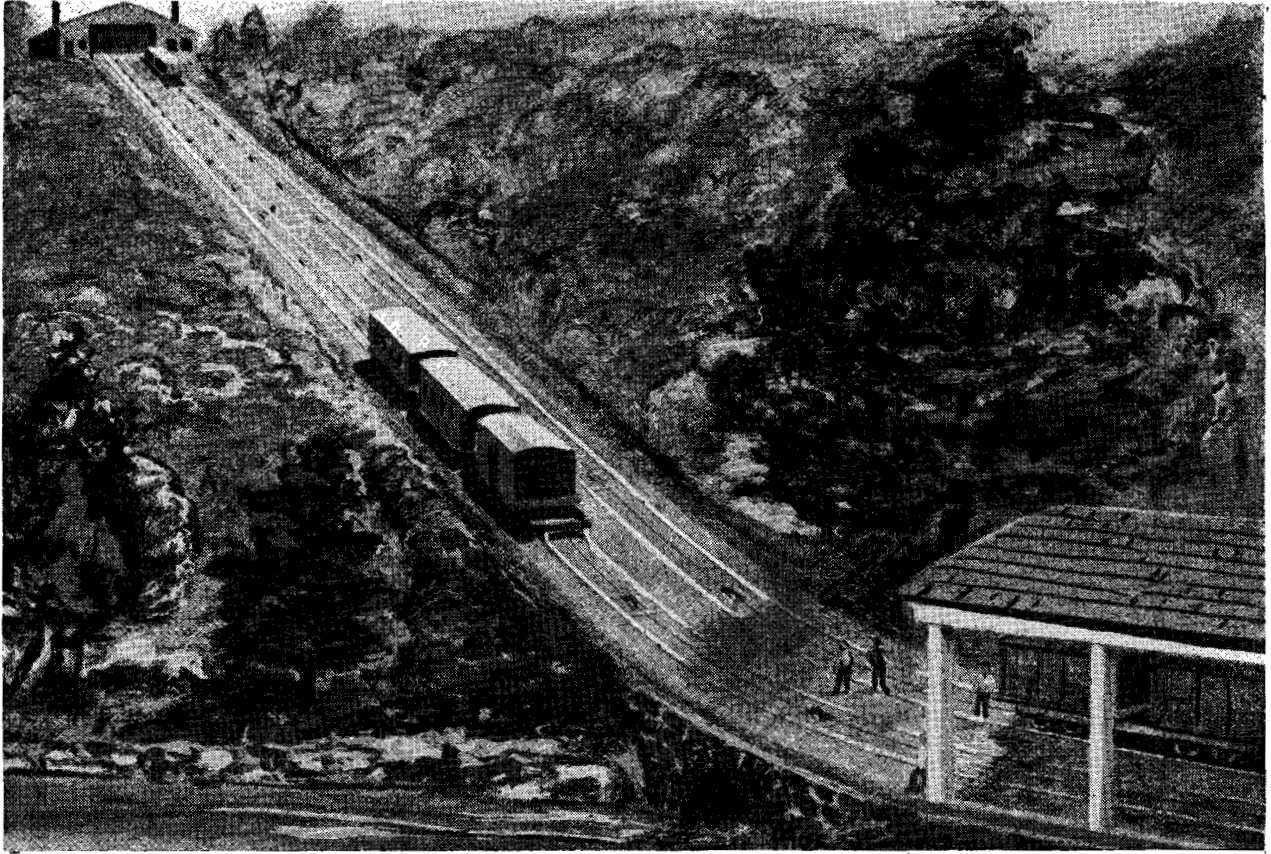
As difficult as this method of travel may seem, at the time it was regarded as a rather efficient operation and a speedy and economical means of transportation.

Conemaugh Viaduct and Staple Bend Tunnel

Though the Portage Railroad was considered to be an engineering miracle, primarily because of the extensive and efficient use of inclined planes, there were several other aspects of the Railroad which were in themselves spectacular. One of these was the Conemaugh Viaduct which was located about eight miles east of Johnstown on the western slope of the mountain. This viaduct spanned the Conemaugh River with a total length of about eighty

(16) Jacobs, Op. Cit., P. 4.

(17) Roberts, Op. Cit., P. 378.



Picture of Inclined Plane in Operation.

feet. It was 78 1/2 feet tall as measured from the foundation, and it had a width at the top of 28 feet. The foundations rested, one end on timber, the other on solid rock. The Conemaugh Viaduct was a semi-circular arch, and at the time it was built it was considered to be the most perfectly constructed arch in the United States. Not only was this arch spectacular, it also saved two miles of distance. In later years when the Portage Railroad was replaced by the Main Line of the Pennsylvania Railroad, trains were often stopped to permit passengers to view the arch.¹⁸ The arch is no longer in existence, as it was destroyed by the disastrous Johnstown Flood.

Another innovation of the Portage Railroad was the Staple Bend Tunnel. This tunnel was 901 feet long, 20 feet wide, and 19 feet high, at the top of the arch. It is claimed that the Staple Bend Tunnel was the first tunnel in America, although some accounts disagree with this claim. Whatever the case, it was at least among the earliest and certainly was the longest of the tunnels in America at that time.

Cable

Although the Portage Railroad is gone and almost forgotten, it was the source of one of the most useful devices that man has yet devised, wire cable.

From the outset of the plane operations, the hempen ropes were a source of trouble, anxiety and expense, and were never satisfactory. Their average price was \$3000 per rope and even under the best possible conditions their average life span was not more than sixteen months. Several suggestions were made as to improvements, but none of them was ever too successful. One of the suggestions was that a roof be constructed along the whole length of the plane to protect the ropes from the weather.

(18) Jacobs, Op. Cit., P. 7.

However, the Legislature was in no mood to make such a large appropriation. In 1841 the outside strands were tarred, which was the reason that they would last a maximum of sixteen months. In 1842, an immigrant by the name of John Roebling suggested the substitution of wire for hempen ropes.

One day Roebling was watching the operation of one of the inclines. A heavily loaded railway truck was being pulled up the steep ascent. Suddenly the hemp cable snapped, letting truck and load come crashing down to the foot of the slope. Two men were crushed under the wreckage.

This dramatic incident was the igniting spark of Roebling's genius. All that had gone before was preparation for this crystallizing moment of invention. Up from the subconscious, from years of directed study and from months of intensive contemplation of this specific problem, there suddenly came a realization of the solution. Wire rope! And in that moment an invention was born--an invention that was to be the foundation of a great new industry, to revolutionize the art of bridge building, and to serve the needs of advancing civilization in a thousand indispensable applications.¹⁹

Roebling's suggestion was not immediately accepted by the Canal Commissioners. In those days, as well as now, there were corrupt interests and they did not want to see wire ropes installed. In order to even get a chance to try his invention, Roebling had to overcome the entrenched opposition of both politicians and ropemakers. Only after a long and persuasive argument was Roebling given the chance to try his cable--at his own expense and risk!

When the big day came for the test, Roebling was confident that his invention would prove highly successful. However, a member of the opposition sabotaged the cable, and it broke in the middle of the test. Roebling thought he was ruined, but an appeal to James Butler, President of the Pennsylvania Canal Commission, won him another test. This time he was successful, and in the course of a few years, as rapidly as the driving machinery could be altered, all of the planes were converted to the use of wire cable.²⁰ John Roebling's success did not end with the

(19) D. B. Steinman, The Builders of the Bridge (New York: Harcourt, Brace & Co., 1945), P. 64.

(20) Ibid., PP. 66-67.

Portage Railroad. Before his death he was to become one of the greatest bridge builders in America. It was he who designed and built the famed Brooklyn Bridge.

Section Boats

It is said that necessity is the mother of invention, and in the case of the Portage Railroad, necessity gave birth to quite a large family. It should be quite evident so far, that many significant inventions were made on the Railroad, and yet there were still many more. One of the most interesting of these was the development of the section boat, each section of which could be carried by trucks over the mountain and then placed back together in the canal. From this point the boats could continue their journey with ease. Prior to the development of the section boats, travelers would sail up the canal to Hollidaysburg and then sell their boat. They would then travel over the mountain and purchase a new boat in Johnstown in order to complete their journey to the West.

The section boat was developed by John Dougherty of Hollidaysburg. He first devised a railroad car which made it possible to carry small canal boats over the mountains, and then when he saw that this was entirely feasible, he devised boats which could be broken down into sections for the trip across the mountains. Thus, much larger boats could be transported across the mountain barrier and then be placed back into the water for the trip to the Mississippi and beyond.

The story of the development of the section boat provides a most colorful segment of the history of the Allegheny Portage Railroad. Thus, in October, 1834:

Jesse Chrisman, from the Lackawanna, a tributary of the North branch of the Susquehanna, loaded his boat named "Hit or Miss," with his wife, children, beds and family accommodations, with

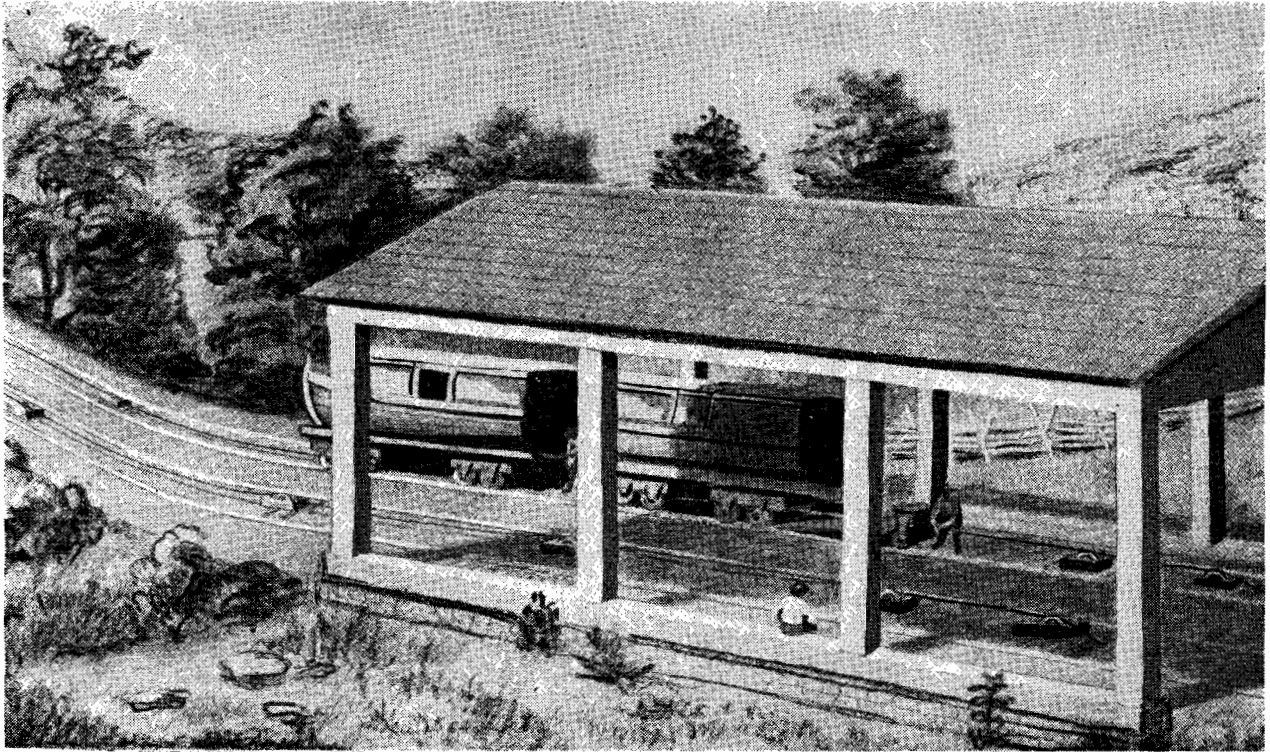
pigeons and other livestock, and started for Illinois. At Hollidaysburg, where he expected to sell his boat, it was suggested by John Dougherty, of the Reliance Transportation Line, that the whole concern could be safely hoisted over the mountain and set afloat again in the canal. Mr. Dougherty prepared a railroad car calculated to bear the novel burden. The boat was taken from its proper element and placed on wheels, and under the superintendence of Major C. Williams, (who, be it remembered, was the first man who ran a boat over the Allegheny Mountains), the boat and cargo at noon on the same day began their progress over the rugged Allegheny. All this was done without disturbing the family arrangements of cooking, sleeping, etc. They rested a night on the top of the mountain, like Noah's Ark on Ararat, and descended next morning into the valley ~~xxxxxxx~~ of the Mississippi, and sailed for St. Louis.²¹

This event caused quite a lot of excitement in the frontier towns of the day. Imagine, a boat sailing over the Allegheny Mountains! It caused so much excitement, in fact, that John Dougherty was given the impetus to design a boat which could carry even bigger loads over the mountain to Johnstown.

In this enterprise, Dougherty became associated with John Elgar of Baltimore, who was also working on the idea of a section boat. Dougherty reasoned that it would be feasible to design a section boat that could be used in conjunction with the new-style truck that he had just designed for the Chrisman family. Designs were offered and rejected, until finally Dougherty secured a patent for a section boat and truck for his Reliance Transportation Line. With this patent, the future looked rosy for the Reliance Line, since they were the only line to have section boats. All the others had boats that had to be abandoned at one of the terminal points, while the section boats could be transported across the mountains intact. (See Page 19 for a picture of a section boat).

Things did not work out well, however, for Dougherty and his Reliance Line. It soon became evident that it was very uneconomical to run their section boats. This was due to the fact that they were all two and three

(21) Sherman Day, Historical Collections of the State of Pennsylvania (Philadelphia; George W. Gorton, 1843), P. 184.



Picture of Hitching Shed and Section Boat.

section boats and because they had a very small capacity. Realizing that the Reliance Line was going bankrupt, Dougherty pulled out of the business and branched out for himself in an effort to develop a four-sectioned boat. He devoted almost all of his time to this endeavor for the next few years, mostly at his own personal expense. His work paid off, as he was successful in developing a boat made of four sections.

This time, Dougherty did not try to go into private business. Instead, he made every effort to get the State to take responsibility. While Dougherty wanted the State to take over his invention of boats and trucks (now commonly called the truck system) for financial reasons, he also wanted the public to receive the benefit of his discovery. By this time a few large shipping companies had won a monopoly of the traffic between Philadelphia and Pittsburgh. A somewhat progressive Dougherty thought that if the State would make available section boats to individuals at reasonable costs, perhaps the monopolistic combinations could be broken up. In a way, Dougherty might be considered the first "trust buster."

The shipping companies naturally fought Dougherty, who carried his message to the public by means of two pamphlets. Controversy rose across the state as truckmen and anti-truckmen became embroiled in heated debates. Some of these became so heated, in fact, that they could be more easily called riots. Standard ~~necessary~~ boat companies were afraid that the section boats would force them out of business, and black eyes were common in basin towns when opposing forces got together. All of this served Dougherty's cause very well, and he became a public figure overnight. Dougherty was not the type to sit idly by when he had the chance, and while in the limelight, he took the opportunity to advocate other reforms which

he felt were necessary for the efficient operation of the Public Works. Since he was always in the thick of things, he quickly acquired the title of "Agitator John."

Apparently, "Agitator John" and his forces held a lot of power in the State in the early 1840's, because in 1842 the Legislature passed an act which gave the Canal Commissioners the power to place trucks on the Columbia and Portage Railroads. The truck system was inaugurated in 1843. However, the Act of 1842 did not authorize the State to become a carrier of freight, as some of the anti-truck men had feared. The State merely provided facilities for the movement of section boats over the railways. Eighteen sets of trucks of four sections each were contracted for, and ten were earmarked for use on the Allegheny Portage Railroad. Boat slips with short inclined planes leading to the railroad tracks were constructed at Hollidaysburg and Johnstown so that sections could be floated over trucks and then pulled out of the water.²²

Section boats flourished on the Main Line for about eight years. They had the effect that Dougherty predicted, in that they lowered the rates on the Main Line to the extent that many more people were able to use the Canal System. The standard transportation lines were forced to reduce their prices to stay in business. However, the truck system was hard on the Railroad, and necessitated many expensive repair jobs. This, coupled with the expansion of the Pennsylvania Railroad to the West, rendered the Portage Railroad and its truck system obsolete. In its heyday, however, the section boat system was a perfect example of the ingenuity that was quickly making the American transportation system the most efficient in the world.

(22) Jesse L. Hartman, "John Dougherty and the Rise of the Section Boat System," The Pennsylvania Magazine of History and Biography, Vol. 69, P. 309. Most information on Dougherty comes from this account.

Safety Cars

Still another important device employed originally on the Allegheny Portage Railroad was a clever contraption that was known as a safety car. When the ropes were still being used on the inclined planes, it was not uncommon for a rope to break and the cars to go plunging headlong down the plane. So many serious accidents were caused in this way that it became necessary to develop some kind of a safety device which would stop the cars whenever a rope gave away. The solution to the problem was discovered by John Tittle of Johnstown, Henry Wilson Storey relates:

To prevent these accidents, John Tittle, of Johnstown, invented a safety car which was adopted by the State. It was a two-wheeled car with a concave top, and a strip of notched iron on the bottom which slid along on top of the rail. The safety car was attached to the rear of an ascending truck and in front of a descending one, and, if the rope broke, the truck ran into the concave surface and thus its own weight pressing the notched iron on the rail, was sufficient to hold it. The safety car was a success.²³

If relating some of the innovations and marvels connected with the Allegheny Portage Railroad conveys the idea that everything mentioned was new or fantastic, this is true. As one of the earliest railroads in America, the Portage Railroad provided future generations for the first time, with many things that are taken for granted today. That is one of the reasons why the Allegheny Portage Railroad is such a significant part of our past.

Operation

A trip over the Allegheny Portage Railroad was an extraordinary experience. It was not as simple as today, when a passenger can get on a train almost any time and then have a relaxing, leisurely trip to his destination. When a passenger took a trip on the Allegheny Portage Railroad, he discovered that he had to conform to strict schedules in order to complete his trip across the mountain. The reason for this was that the Railroad

(23) Storey, Op. Cit., P. 352.

was an all daylight railroad, never running any trains at night. When twilight fell, the freight trains stopped at the first place available and waited until sunup to complete their journey. Since it took such a long time to complete a trip over the mountain, only one passenger train from each terminal town could run on a regular schedule. Several travelers and writers provide excellent descriptions of their journey across the Alleghenies. One is quoted by Asa Earl Martin as writing:

We were called up before four on the second morning, and had barely time to dress, step ashore, and take our places in the car, before the train set off. We understood that the utmost possible advantage is taken of the daylight, as the trains do not travel after dark. It was made a point of that the ropes should be examined before each trip. After having breakfasted by the way, we reached the summit of the Portage Railroad between nine and ten. There were fine views all the way; the mountains opening and receding, and disclosing distant clearings and nestling villages. All around us were plots of wild flowers of many hues.²⁴

Appleton gives another good description of a typical trip over the mountain along the Railroad:

The passenger spent the third night out from Lancaster at Hollidaysburg, and began his journey over the mountain at five o'clock in the morning. Several cars carrying one hundred passengers each, followed each other closely. The horses carried them at a trot along an almost level but slightly ascending plane for three and three-quarter miles, which brought them to the foot of the first incline. The inclined planes were operated by stationary engines, one car descending as another went upward. The horses were unhitched, the cable hooked on, and the car rose nearly three hundred feet in less than a mile. Reaching the top, horses drew the car again for two miles, then another incline was passed; and so on until five inclines and five levels had been negotiated, one of the levels being less than eight hundred feet in length. The final climb landed the passengers on the summit in time for an eight o'clock breakfast at one of the two taverns there.²⁵

As can be easily seen, a trip across the Allegheny Portage was a time consuming, yet probably very interesting experience. It is no wonder that this engineering masterpiece was the pride of Pennsylvania, as she surveyed the whole system of public works.

(24) Asa Earl Martin, Pennsylvania History Told by Contemporaries (New York: Macmillan Co., 1925), P. 526.

(25) Appleton, Op. Cit., P. 103.

Yet, it was in the shipment of freight rather than passenger service that the railroad excelled. In the year 1835, the Railroad carried about fifty thousand tons of freight and only about twenty thousand passengers. With a few years of experience behind them, the time for cars to pass over the Railroad was reduced to about four hours. For this reason, the volume of business gradually increased, and by 1846 over 145,000 tons of freight were moved, while the passenger business had steadily declined.²⁶

Prior to the completion of the Portage Railroad it cost from \$12.00 to \$16.00 to ship a ton of merchandise from Hollidaysburg to Blairsville, a distance of fifty-three miles. With the Portage Railroad in operation, the cost fell below \$4.00 per ton, and much time was saved.²⁷

During the year 1849, 817 section boats were carried over the Portage Railroad westward, and 812 eastward. There were a total of 3,526 boats which passed through Hollidaysburg on their way east, and 34,611 loaded cars and 12,381 empty cars that were cleared and sent westward. All in all, the Portage Railroad hauled over 143,294 ton of goods in 1849.²⁸

Harry Jacobs provides the report of David Watson, Superintendent of Motive Power, for the fiscal year ending November 30, 1845. A brief selection from this report indicates the amount of freight carried that year, and also the conscientiousness with which records were kept.

The aggregate distance traveled upon the Portage Railroad in 1845 is 396,459 $\frac{3}{4}$ miles. Average number of passengers over the whole road, 11,013. Expense per trip for carrying each passenger, 81 $\frac{27}{125}$ cents. Cost per mile, 2 $\frac{32}{125}$ cents.²⁹

For all intents and purposes, at least for a few years, the Portage Railroad was a speedy and economical boon to the merchants of Philadelphia

(26) George H. Burgess and Miles C. Kennedy, Centennial History of the Pennsylvania Railroad Company, (Philadelphia; Pennsylvania Railroad Co., 1949), P. 21.

(27) Wilson, Op. Cit., P. 58.

(28) Jacobs, Op. Cit., P. 10.

(29) Ibid., P. 11.

and Pittsburgh. It was not long, however, before the receipts began to fall off and the amount of freight began to decline, as the Pennsylvania Railroad drew many of these same merchants as her customers.

Famous Travelers

Since the Portage Railroad was part of one of the major transportation routes to the West, it carried many famous travelers. As can be expected, the arrival of famous personages caused quite a stir in the towns of Hollidaysburg and Johnstown. Though things were usually very exciting in these terminus points, the arrival of men that everyone had read so much about in the papers caused people to turn out in large numbers to get a glimpse of the great leaders of the day. Solomon Roberts relates his experience in meeting Henry Clay:

The Portage Railroad was a great thoroughfare in 1835; and towards the close of the year, Joseph Ritner passed over it on his way to Harrisburg as Governor-elect. He was attended by Joseph Lawrence, of Washington County, who was his confidential advisor. In the same train were Henry Clay and Felix Grundy, on their way to Washington for the opening of Congress. There was a large party, and we dined together on the summit of the mountain. Joseph Ritner sat at the head of the table, with Henry Clay at his right hand. I remember saying that I had both masonry and anti-masonry entrusted to my care.³⁰

In 1842 one of the greatest authors the world has ever known, made a trip through the United States, and on this trip he passed along the Pennsylvania Canal and across the Allegheny Portage Railroad. The man was Charles Dickens, and everywhere he went people came out to stare at the man whose works they knew so well. Dickens did not leave his pen at home, as he wrote quite extensively about his travels. His accounts of the Portage Railroad and the Pennsylvania Canal leave little doubt as to what such a trip entailed. Of his fellow travelers, he wrote:

Breakfast was perhaps the least desirable meal of the day, as in addition to the many savory odours arising from the

(30) Roberts, Op. Cit., P. 383.

eatables, there were whiffs of gin, whiskey, brandy, and rum, from the little bar hard by, and a decided seasoning of stale tobacco. Many of the gentlemen passengers were far from particular in respect of their linen, which was in some cases, as yellow as the little rivulets that had trickled from the corners of their mouths in chewing, and dried there.³¹

Dickens also is known for this very graphic account of the Portage Railroad:

It was very pretty, traveling thus at a rapid rate along the heights of the mountain in a keen wind, to look down into the valley full of light and softness; catching glimpses, through the tree tops, of scattered cabins; children running to the doors, dogs bursting out to bark, whom we could see without hearing; terrified pigs scampering homeward; families sitting out in their rustic gardens; cows gazing upward with stupid indifference; men in their shirt sleeves looking on at their unfinished houses, planning out tomorrow's work; and we riding onward, high above them, like a whirlwind. It was amusing, too, when we had dined and rattled down a steep pass, having no other moving power than the weight of the carriages themselves, to see the engine released long after us, come buzzing down along like a great insect, its back of green and gold so shining in the sun that if it had spread a pair of wings and soared away, no one would have had occasion, as I fancied, for the least surprise. But it stopped short of us in a very businesslike manner when we reached the canal, and before we left the wharf, went panting up this hill again with the passengers who had waited our arrival for the means of traversing the road by which we had come.³²

Two Presidents of the United States made the trip across the Alleghenies on the Portage Railroad. Unfortunately, however, neither of them were alive when they made it. The first of the Presidents to make the trip was William Henry Harrison. Harrison died in Washington one month after his inauguration, and his body made the trip across the mountains, along the canal, and onward to Ohio where he was buried. As Harrison's body was being transported over the Railroad, it was discovered that the car which carried his body had a severely cracked wheel. Needless to say, there was considerable anxiety as to what to do. However, with a great deal of care the car made its way safely to Johnstown, where it was placed on a canal boat and shipped to Pittsburgh.³³

(31) Charles Dickens, American Notes (London: Gresham Publishing Co., Limited, 1850), P. 147.

(32) Ibid., P. 149

(33) Jacobs, Op. Cit., P. 15.

The next President to make passage on the Allegheny Portage Railroad was the "Hero of Buena Vista," Zachary Taylor. Strangely enough, the Hollidaysburg Register made more of the speed at which the body was transported there than of the funeral procession itself.

The remains of the lamented Hero of Buena Vista, late President of the United States, Gen. Zachary Taylor, arrived in this place on Friday evening last, in charge of Cols. Taylor and Bliss--remained overnight at the "American House," and on Saturday morning passed on to the reposing place in Kentucky. They left Washington City on Friday morning at 6 O'clock, and arrived here at half-past eight in the evening of the same day--through from Washington to Hollidaysburg in 14 1/2 hours!!³⁴

Taylor's horse, "Old Whitey", also made the journey.

"Old Whitey"--This famous animal arrived in Hollidaysburg on Thursday night last, on board of D. Leech & Co's. boats, and on Friday passed on, via Railroad, to his place of destination in Kentucky. He is in fine keeping, of course, and seems to feel his importance.³⁵

Only two Presidents made the trip on the Allegheny Portage Railroad. It seemed a remarkable coincidence that they were both Generals, both Whigs, and both dead!

In 1851, the great Jenny Lind passed through Hollidaysburg on her United States tour. She stayed for a short time in Hollidaysburg in one of the hotels, and an interesting story arose concerning her visit. It seems that in her spare time, Jenny Lind rented herself a carriage to take her up the road next to the Railroad, where she could view the mountains, the valley, and the Juniata River flowing through it. She was so impressed by the beauty of the scene that she greeted it with an outburst of song, so exquisite that the birds, her only hearers except the coachman, must have felt that a rival of their own kind had joined them. It was generally conceded that the scenery must have reminded the "Swedish

(34) Hollidaysburg Register & Blair County Inquirer Vol. XV, No. 15., October 30, 1850

(35) Ibid.

Nightingale" of some scene in her homeland, because the song she sang was "Home Sweet Home."³⁶

On Saturday, January 17, 1852, the famous Hungarian refugee, Louis Kossuth, made a visit to Hollidaysburg, and remained for two days. He was escorted by Judge McFarlane and the Blair Family, leading citizens of the community. He was greeted by a great throng of people, and was guest of honor at an elaborate banquet. After the dinner, Kossuth was officially welcomed and the sympathy of the townspeople was extended to his oppressed countrymen. Kossuth himself then gave an oration of considerable length, which deeply impressed the audience. "Thaddeus Banks, Esq., on behalf of the committee to receive contributions of 'material aid,' presented to Kossuth a purse containing over two hundred dollars in gold, while Judge McFarlane offered to make him fifty tons of cannon balls, and would deliver them whenever called upon."³⁷

Although one would expect Kossuth's impression of Hollidaysburg and its people to be very high, Anne Hollingsworth Wharton provides this version of Kossuth's feelings:

Kossuth was warmly welcomed to the town, and entertained by Judge McFarlane, the Blairs, and other leading citizens. While staying in the house of one or the other of these Hollidaysburg families, Kossuth wrote to his friends of the comfort in which his hosts lived, belonging, as he expressed it, "to the upper class of peasant." Kossuth, himself of noble birth, seemed to know of no social gradation between noble and peasant; and his remark is the more amusing in view of the social position, education, and refinement of the Blairs and other old families in this aristocratic town.³⁸

Perhaps no person can give a better description of the famous people who traveled on the Portage Railroad than someone who was actually there, especially a boy, who would probably remember more vividly than anyone

(36) Anne Hollingsworth Wharton, In Old Pennsylvania Towns (Philadelphia: J.B. Lippincott Co., 1920), P. 245.

(37) J. Simpson Africa, History of Huntingdon & Blair Counties, Pennsylvania P. 67.

(38) Wharton, Op. Cit., P. 243.

else the famous people he had seen. In his memoirs, Dr. Harry Coffey of Hollidaysburg describes his remembrances as a boy of the distinguished visitors that came through his home town.

I recall among exciting arrivals in our town in those early days, Blackhawk and his company of Indians after their capture in Wisconsin territory, who were on their way to Washington; also General Santa Anna, ex-president of Mexico, who had been defeated in battle and lost his leg, now a prisoner of war on his way to the Capital; General Harrison's body on its way to North Bend, Ohio, for burial, and more distinctly than all, the Sunday morning that Charles Dickens stepped off the packet boat and took the cars to Johnstown. My older brother, Titian J. Coffey, was such an enthusiastic admirer of Dickens, that he went over to Johnstown in the same car with him. His disappearance on that quiet Sabbath from our household excited some uneasiness until we hear of his departure, which was very sudden.³⁹

The Allegheny Portage Railroad provided many jobs and a great deal of excitement for the people of Pennsylvania. The fact that it also attracted so many famous people of the period reflects its importance, and illustrates clearly the significance of the Portage Railroad as a major link in the transportation system of the United States.

Obstacles to Efficient Operation

Almost any new concern has a difficult time in operating at maximum efficiency during the first few years, and such was the case with the Allegheny Portage Railroad. However, the troubles did not all cease during the first few years; in many cases they continued for the duration of the Railroad, and they were sufficient to cause the State as well as private individuals to seek a safer, faster, and more economical means of crossing the Alleghenies.

When railroads were first introduced into this country, there was a great question as to how they should be controlled. Generally, the majority of the people believed that the control of the railroads should

(39) Dr. Harry T. Coffey, Hollidaysburg, 1834-1850: A Memoir of the Canal Period (Altoona, Pa.: Blair County Historical Society, 1896), P. 20.

not be centered in the hands of a single agency, whether this agency consisted of individuals, corporations, or even of government. There was a great tendency to fear anything that could lead to monopoly, and to uphold anything that increased the power of the individual citizen. Thus, the prevailing idea was that the railroads, including the Portage Railroad, should be operated just like the turnpikes of the day, where an individual could get on or off at any place, and travel at his own pace. Simply, the individual citizen was to have the authority to roam at will over the railroad in any manner that would suit his own personal convenience. The State, believing that it was serving popular will, therefore opened the Portage Railroad with the same rules prevailing that applied to the turnpikes.

It takes little imagination to visualize the kinds of problems that existed during the early operations of the Railroad under this system. There was a great deal of extravagance, and the inefficiency produced was so great that trade and travel were slowed down to a standstill. Since persons could use the road at their convenience, no semblance of a schedule could be achieved. No two people were willing to start at the same time, or place, or at the same rate of speed. One man would stop for a rest whenever he felt like it, while another man might go on a mile or two further.

When the road had but a single track between the turnouts, a large post called a centre post, was set up half way between two turnouts, and the rule was made that when two drivers met on the single track with their cars, the one that had gone beyond the centre post had the right to go on, and the other that had not reached it must go back to the turnout which he had left. The road was in many places very crooked, and a man could not see far ahead. The way the rule worked was this: When a man left a turnout, he would drive very slowly, learning that he might have to turn back; and, as he approached the centre post, he would drive faster and faster, to try to get beyond it, and thus to

drive back any cars that he might meet, and this way cars have been driven together, and a man killed by being crushed between them. We had no electric telegraph in those days.⁴⁰

Even then, people were not quite sure just what the solution should be, and many still believed that the railroads should still be operated like the turnpikes. Locomotives had not been introduced on the Portage Railroad at this time, however, and it was still possible for a man to use his own mule to pull a car along the line. It was not till the State proposed to place steam locomotives on the Railroad and to control all the motive power that the forces of individual liberty rose in arms. Solomon Roberts, who was in favor of State control, relates an interesting experience with members of the opposition.

The car stopped, and a man spoke to my traveling companions, saying that he hoped they would oppose the bill to authorize the Canal Commissioners to put locomotives on the road, and control the motive power. The Senator said that it should never be done with his consent. Thereupon, as the car drove on, I proceeded to argue the matter, but with poor success; the reply being that the farmers along the line should have the right to drive their own horses and cars on the railroad, as they did their wagons on the Lancaster turnpike, to go to market in Philadelphia; and that if they were not permitted to do it, the railroad would be a nuisance to the people of Lancaster and Chester Counties.⁴¹

Nevertheless, it was obvious to most people that there had to be some type of organization and some type of central authority to operate the Railroad at its greatest efficiency. In this instance, experience had been an excellent teacher. With the weight of popular opinion now shifted to the other side, the Legislature passed an Act on April 15, 1834, which gave the Board of Canal Commissioners the power to use locomotives, and to make any regulations that were necessary to conduct the business. Individuals were allowed the right to place cars on the road, and attach them to the locomotives of the Commonwealth under such regulations as the Board might adopt.⁴²

(40) Roberts, Op. Cit., P. 380.

(41) Ibid., P. 382.

(42) Wilson, Op. Cit., P. 55.

Under this authority, the Board, on June 4, 1834, adopted rules and regulations covering those roads. Some of these rules were that: motive power would be furnished by the State as soon as locomotives could be secured; that locomotives and their trains would start from their respective stations periodically and move with uniform speed; and that individuals or companies were permitted to use horses to be driven tandem as a motive power, until the head engineer indicated that the State would furnish all the power.⁴³

With these rules thus instituted, the State took over full control of the Allegheny Portage Railroad. This produced a considerable boost to the operations of the road, since it made possible a systematic, orderly operation. The knowledge that the Railroad was run efficiently on a schedule induced many transporters to ship their goods on the Main Line, and thus accounted largely for the growth of business done by the Portage Railroad in the years following the assumption of authority by the State.

State control was not the answer to all the problems that confronted the Railroad. They were so numerous that it is difficult to mention all of them. One major problem was that the officials who were in charge of the operations were somewhat inefficient, and in many cases their carelessness cost the State a great deal of money. Storey tells of the indifference that the officials had concerning the regulations regarding locomotives:

After dusk, the officials were not particular what the employees did with the engines, and frequently they would raise steam and start off to attend a country frolic, and leave the locomotive standing on the main track, without guard or a light, as no lamps or torches were provided for night work. On Sunday, the engine would be taken out at the pleasure of the crew who would go where they desired. Even on week days, while hauling a train, the engine would stop anywhere to take up a weary traveler--man or woman, boy or girl, or a lot of either--and many a funeral cortege was

(43) Ibid.

put on the engine and tank and conveyed to its destination. No charge, and everyone was made happy.⁴⁴

Another notable example of the inefficiency of the officials was in the purchasing of wood for the engines. Wood cutters would arrange their piles of wood in such a manner that they would have as little wood as possible in them. Still, the Railroad officials bought anything and everything, thus spending money for nothing. Also, when the officials would travel up and down the road examining the piles of wood for sale, they usually inspected the piles on the right side going up, and the piles on the left side coming back. This afforded the wood cutters the perfect opportunity to carry their wood across the track as soon as the inspector went by. Then, when he came back down, he examined the same pile of wood on the other side of the track. Needless to say, the wood cutters made quite a profit for their efforts.

The efficiency of the State in operating the Portage Railroad was much greater than the method used prior to their intervention. Yet, the Board of Canal Commissioners were certainly not the best qualified men to operate such an enterprise. As has been shown, the men who represented the State were generally unconcerned with the Railroad. They were more interested in having a political job which paid them, in most cases, quite well for the times. Coupled with their inefficiency, the Board passed a number of foolish regulations, which seriously hindered the operations of the road. One of these rules is referred to in a letter by a State employee in Hollidaysburg to the Board of Canal Commissioners:

Believing it to be my duty, as an agent of the State, where I know of a resolution of the Board operating injuriously to the interests of the Commonwealth, to make it known, I would respectfully call your attention to the resolution published in the Toll List, prohibiting boats or cars engaged in carrying

(44) Storey, Op. Cit., P. 359.

emigrant passengers over the Philadelphia and Columbia or Allegheny Portage Railroads, from carrying other than those who shall pass the whole distance over the Pennsylvania Improvements, between Philadelphia and Pittsburgh.

By reference to the "Clearances" of last year, it will be seen that a very large number of the emigrants taken westward on the Main Line, were shipped along the interior, from varied points; and if this resolution is carried out to the letter, as our Collector at this Port is doing, this travel must necessarily be cut off. The State has no means of carrying passengers on the Canal, and none but the express cars on the Railroad.

Two or three families, from Williamsburg in this county, emigrating to the West, called upon Mr. Suchis, Agent at this place, day before yesterday, and engaged their passage to Pittsburgh, but clearance could not be had, and the consequence was that they had to go in wagons in having too much baggage and not being otherwise in a condition to travel in express.⁴⁵

All the difficulties belonging to the Railroad, however, did not lie with the State. Though they made foolish regulations and had poor officials, there were many obstacles that would have faced even the most efficient administration. One of the greatest of these difficulties was accidents. The accident rate on the Portage Railroad was very high. Many of these accidents were probably due to the untested nature of railroads and in particular to the daring design of the Portage itself. It took a great deal of time to discover devices which would hold the number of accidents to a minimum, but in the meantime the newspapers of the day were full of accounts of deadly and maiming accidents that were common occurrences on the Allegheny Portage Railroad.

The Hollidaysburg Register of September 25, 1850, tells of a particularly bad week on the Railroad.

3 Accidents in One Week

On yesterday morning, Edward Daily, one of the hitchers employed at Plane No. 2 APRR, came to his death in the following manner:--He took his seat behind a car that was to descend the plane. The car, having moved on the fastenings broke, and

(45) H. A. Boggs, Letter to Hon. Joshua Hartshorn et al., Canal Commissioners, Mar. 25, 1847 (In Reports and Miscellaneous Documents, 1844-57, Vol. 2).

it ran headlong down the plane. Daily remained in his place until the car came to the bottom and struck another car. The concussion being exceedingly violent, threw him off, killing him instantly. Several persons called to him to jump off, which he might safety have done.

Another:--Yesterday morning, Mr. John Lynch, a respectable young man, just from county Galway, Ireland, and going West, was badly injured in Gaysport. It appears he was standing either on or at the side of the track, when a coal car struck him and knocked him down, running over one of his feet and crushing it so badly, that amputation may have to be resorted to.

Still Another:--We have to record another fatal accident on the A.P. Railroad, yesterday. A man named Jemmison, of Freeport, was on a section boat on Plane No. 6, the rope broke, and when the boat had gained great velocity, he jumped off, was caught by the rope, dragged along the plane and instantly killed.⁴⁶

Accidents such as this were very detrimental to the Allegheny Portage Railroad, as they gave it a reputation of being very dangerous. Accidents in many cases, were also very costly. After an accident occurred, injured parties sued the State for damages. With the number of accidents that occurred, the State had its hands full in processing the claims filed by injured parties. A great deal of money was spent in dealing with these matters, a perfect example of which is found in the award granted to Leech & Company, as recorded in the Canal Commissioners Reports:

In the Summer of 1847, six cars of Leech & Co. arrived at Plane No. 4 of the Allegheny Portage Railroad. Three of these cars were attached to the rope, and had proceeded some distance down the plane, when the driver of a team in the employ of the Commonwealth hauled the other three onto the shed with such a speed as to force them over the head of the plane. In their descent, they came in collision with the three attached to the rope, doing considerable damage to the cars and loading. The accident was evidently the result of the want of proper care on the part of the driver.

(46) Hollidaysburg Register and Blair County Inquirer, Vol. XV., No. 10., September 25, 1850.
See Appendix A for additional accidents.

Leech & Co. have presented a claim of \$803.52 for damages to the cars and loading. The Board have examined the claim and report the amount of damage at \$450.00.⁴⁷

The Portage Railroad had many problems other than those caused by poor administration and accidents. As the years passed, the novelty of the road lessened, and as other forms of transportation were developed, the Portage was regarded as an unusually slow and complicated section of the Main Line. Today, a locomotive can cross the same mountain that the Portage crossed without making a single stop. But when the Old Portage was at the height of its glory with the full use of the inclined planes, it was necessary to change power 33 times in 36 miles. To move a section boat over the mountain it took twelve stationary engines, twelve different teams of horses, and nine locomotives. The absolute minimum number of men needed for this operation was twelve engineers and twelve firemen for the locomotives, and twelve drivers for the teams. This made a grand total of fifty-four men that were needed to make a trip over the mountain. One can easily see the inadequacy of such a system.⁴⁸

In addition to the slowness of the travel, it was found to be very difficult to keep the Railroad in repair. Winters were exceptionally hard in the mountain region, and the heavy frosts dug deep into the ground to loosen the cross ties that held the rails intact. Stationary engines were constantly needing repairs and the boilers became a hazard to both workers and passengers. Locomotives were consistently breaking down, though this was not surprising, since they were some of the first in America. Ropes constantly broke until the introduction of the wire cable by Roebling, and even these were not beyond breakage. The trucks that were introduced to carry section boats across the mountain were not heavy enough, and in a few years after their inception, they gave considerable trouble by frequently

(47) Canal Commissioner's Office, Letter (unsigned) to Hon. J. S. Rhey, Speaker, House of Representatives, April 12, 1852, (in *Damage Claims, 1831-68, Vol. 2*).

(48) Wilson, *Op. Cit.*, P. 68.

breaking down under the increasing weight of the boats and cargo. The State had to construct heavier and stronger ones, but even as these new trucks were being built, the popularity of the truck system was declining and consequently the State spent a great deal of money on a useless item.

As breakage after breakage slowed down the activity on the Railroad, the Canal Commissioners found it increasingly difficult to secure funds for repair. Such a large amount of money was annually going for the repair of the Allegheny Portage Railroad that the Legislature became hesitant to appropriate any more. As money became harder to get, conditions on the Railroad got increasingly worse. This alarmed many merchants, and in 1849 the Board of Trade of Pittsburgh called the attention of the Canal Commissioners to the increasingly deplorable condition of the road, and requested that measures be taken to repair the road so it could better compete with the transportation systems of the other states. (See Appendix B)

One other major problem plagued the Portage Railroad, and that was the fact that it could be operated for only about eight months out of the year, at the most. When winter came, the Canal froze solid and the Portage Railroad was almost completely impassable. This short season turned a lot of business from the Pennsylvania system of canals to other forms of transportation that could continue through the winter. When these businesses found a new means of transportation, they were often times reluctant to return to the Pennsylvania Canal and the Portage Railroad. Toward the end of the Portage's life span, modern railroads were coming into being, and their swiftness and carrying capacity drove all the canals out of business. With the end of the canals came the end of the Allegheny Portage Railroad.

End of the Old Portage Railroad

Though the Portage Railroad eventually became obsolete, in its heyday it attracted the envy of all. Engineers from all over the world marveled at the boldness of its design and the daring of its accomplishments. In the days when railroads were practically unheard of, the Portage Railroad crossed a mountain barrier that is still a formidable barrier in transportation across Pennsylvania today. The Portage Railroad was a place where experiments were performed and ideas perfected, thus providing later generations with invaluable information on the methods to be used in railroad construction. From the lessons learned, came new engineering methods and products that are taken for granted today. The Allegheny Portage Railroad was indeed a masterpiece and even people of the day were alert enough to recognize the genius it represented.

A contemporary writer in the Philadelphia Inquirer has this to say about the magnificence of the Portage.

The most daring one, of course, of the whole big family of Pennsylvania canals was that which coursed along the Blue Juniata and climbed up the eastern slopes of the Allegheny itself. Hollidaysburg was like a seaport town, and its wide canal basins perched hundreds of feet above sea level, were a wonder of the day. A greater wonder was the Portage Railroad, which carried the boats across the mountain wall and sent them on their way to the Ohio.⁴⁹

David Stevenson, famous English civil engineer, made a tour through America, after which he wrote about the civil engineering in this country. This is what he had to say about the Portage Railroad.

America now numbers among its many wonderful artificial lines of communication, a mountain railway, which, in boldness of design and difficulty of execution, I can compare to no modern work I have ever seen, excepting perhaps the passes of the Simplon and Mont Cenis, in Sardinia; but even these remarkable passes, viewed as engineering works, did not strike me as being more wonderful than the Allegheny Railway in the United States.⁵⁰

(49) Jacobs, Op. Cit., P. 7.

(50) David Stevenson, A Sketch of the Civil Engineering of North America (London: John Weale, 1838), P. 185.

Another traveler of the day was so impressed when he was exposed to the wonders of the Portage, that he wrote:

When I first crossed the Alleghenies, in November, 1834, I caught a glimpse of the stupendous Portage Railroad, running between the two canals which reach the opposite bases of the mountains. The stage in which I traveled was on one side of a deep ravine, bustling with pines; while on the other side was the lofty embankment, such a wall as I had never imagined could be built, on the summit of which ran the Railroad, its line traceable for some miles, with frequent stations and trains of baggage cars. One track of this road had not long been opened, and the work was a splendid novelty.⁵¹

What is now known as the Old Portage Railroad was a first-class achievement. It bridged the gap between east and west, and the numerous accounts by contemporaries, famous as well as obscure, indicates just how remarkable the Old Portage really was. However, though it was unique in its day, the passage of time brought new techniques and methods which gradually rendered the Old Portage obsolete. Just as surely as the old year must give way for the new, so old-fashioned methods gave way to new ones.

Progress was rapid in the field of transportation following the construction of the Old Portage. By the late 1840's, steam locomotives were being developed that could haul much greater loads up grades never though possible when the Portage was built. Not only were such locomotives being made, they were being put into use, and the Pennsylvania Railroad was putting these new "iron horses" into service as quickly as possible to compete with the Pennsylvania Main Line. Year by year, the Pennsylvania Railroad pushed its line further and further westward in an effort to connect Pittsburgh and Philadelphia. The Canal Commissioners recognized the progress that the Pennsylvania was making, but they thought that its completion would simply mean increased business for them. For this reason,

(51) Asa Earl Martin, Pennsylvania History Told by Contemporaries (New York: The Macmillan Co., 1925), P. 523.

they suddenly avowed to repair the Old Portage and put it into condition to meet the expected new traffic. With the initiation of this plan, what is now known as the Old Portage Railroad ceased to be, and in its place the New Portage Railroad emerged.

New Portage

On August 28, 1850, the Pennsylvania Railroad opened its Main Line to Hollidaysburg.⁵² No great concern was expressed over the news, but after the Editor of the Hollidaysburg Register took a trip on The Pennsylvania, his tune changed somewhat as he philosophied:

The trip throughout was indeed a pleasant one, and we recommend all our friends to take an excursion at their earliest convenience. The completion of this grand improvement brings Hollidaysburg within 12 hours of Philadelphia--a proximity one would have thought altogether without the range of possibility twenty years ago. But so we drive. It is the day of steam. The spirit of improvement stalks the land with more than giant strides. The Yankee is abroad. And who can tell what twenty years more will bring?⁵³

The Editor seems to have envisioned a great future for his town with the advent of the Pennsylvania Railroad. Yet, ironically, the Pennsylvania Railroad was the ruin of the Pennsylvania Canal and the Portage Railroad, which had made Hollidaysburg so important. Construction of the Pennsylvania Railroad, though important in the history of Pennsylvania and the nation, brought to an end an Era that had showed the entire world what ingenuity was America's.

Almost from the start, complaints arose concerning the efficiency of the inclined planes. Not only were there complaints about their safety, but the delays and the operating expenses aroused much criticism. Many of the charges concerning the inadequacy of the inclined plane system reached the State Legislature, and as early as 1836, a resolution was

(52) Hollidaysburg Register and Blair Co. Inquirer, Vol. XV., No. 6., August 28, 1850.

(53) Hollidaysburg Register and Blair County Inquirer, Vol. XV., No. 14., October 23, 1850.

passed directing the Canal Commissioners to have a survey made of the Alleghenies, with the purpose of eliminating the inclined planes on the Portage Railroad.

A Mr. Charles DeHass directed the survey, with the idea of preserving as much of the Old Portage as possible. His suggested plan included a tunnel at the summit, a mile long, which would eliminate six miles of track. For its time, this was a bold plan because the length of the railroad would be increased from 39 to 58 1/2 miles. Most significant, however, was the fact that it proposed to cross the Alleghenies without the use of any inclined planes.⁵⁴

The DeHass plant encountered strong opposition, especially from those who earned a living from working on the planes. The planes gave employment to a great many men, and such a numerous group of voters was quite important to the party that was in power. Therefore, the State Legislature postponed any plans for the improvement of the Portage Railroad without mentioning when they might act.

The postponement of improvements enabled the Old Portage Railroad to continue its service for a period of nearly twenty years. Frequently, however, the old road was in need of repair. Land slides, rotting timber, "snake heads," and the annual damage due to deep winter frosts involved an immense amount of time, money, and labor for repairs. Though it would have been much better for the Canal Commissioners to rebuild the Railroad almost entirely, they merely made repairs as needed, day-by-day. With such a haphazard method, the Railroad was never in one piece; some part or another was continually in a state of repair.

In 1847, the Pennsylvania Railroad commenced construction of a road that would span the length of the State, from Philadelphia to Pittsburgh.

(54) Wilson, Op. Cit., P. 74.

Those connected with the Portage saw this moment as a perfect opportunity to demand comprehensive repairs, for the Pennsylvania Railroad intended to use Portage temporarily until it could complete its own line over the mountain. The demands went unheeded, however, as the State Legislature was not willing to appropriate the large amount of money necessary to complete such repairs. It was their naive belief that if the inclined planes could be avoided and the railroad built without the use of planes, then the Pennsylvania Railroad would use this new railroad in connection with its own. With this idea in mind, the Legislature decided not to spend any more money on the Old Portage Railroad, and on May 10, 1850, passed an Act calling for the construction of a new railroad across the Alleghenies without the use of inclined planes. The Board of Canal Commissioners appointed Robert Faries to make surveys with this end in mind. Faries went directly to work, and his reports were so conclusive that construction was started in the Spring of 1851 for the elimination of the inclined planes on the western side of the mountain. Work progressed favorably, and the first three planes were effectively eliminated by January 1, 1853.⁵⁵

The assertion that the Pennsylvania Railroad would find it necessary to use the Old Portage Railroad was a correct one. The Pennsylvania Railroad completed its line to Hollidaysburg in the Fall of 1850, and from this time until its own line was completed, it used the Old Portage route.⁵⁶ The Portage received a great boost in revenue with this added business, but still the planes were too slow. Therefore, it was thought imperative that the "New Portage" be completed as soon as possible to enable the State to haul more and more goods for the Pennsylvania

(55) Wilson, Op. Cit., P. 77.

(56) Jacobs, Op. Cit., P. 19. It is interesting to note that while the Old Portage was being used by the Pennsylvania Railroad, two famous Americans worked at what is now known as "Y" switches. Andrew Carnegie was a telegrapher and Thomas Scott, later President of the Penna. Railroad, was station agent.

Railroad. There was also a decisive belief that though the Canal System and the Pennsylvania Railroad would be parallel with each other, the Canal System would not be injured by this rivalry. Instead, most believed that the Railroad would be beneficial. For this reason, it was held that the State should provide the most perfect system possible.

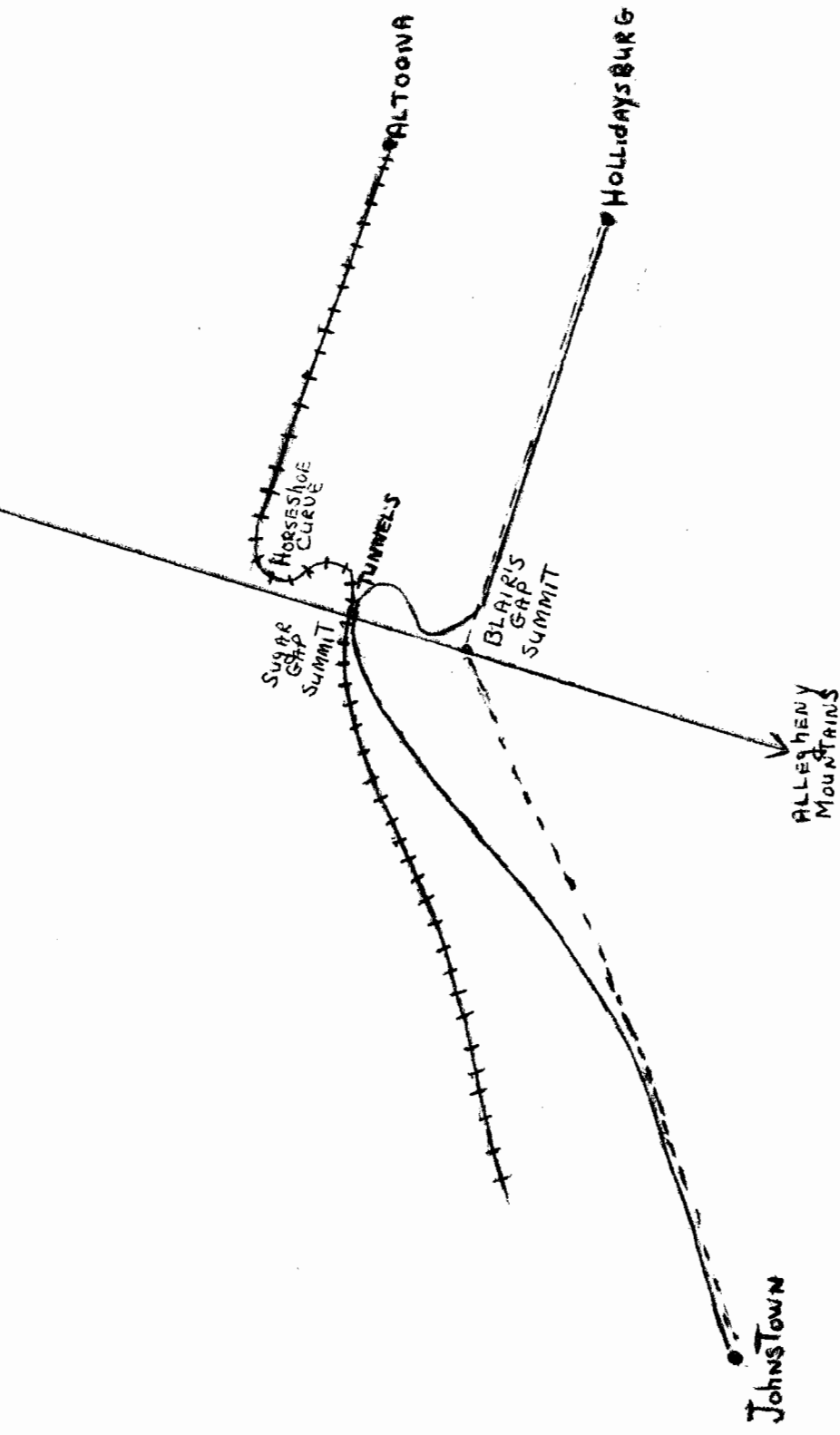
Though work had gone well on the western slope of the mountain in regards to the first three planes, a difference of opinion prevailed over the method to be employed in the completion of the "New Portage" from the foot of Plane No. 4 to Hollidaysburg. W. Milnor Roberts and Edward F. Gay, civil engineers, were appointed to work with Robert Faries in an effort to determine the most effective route.⁵⁷

The plan, as embraced by these men, included a tunnel at the Sugar Gap Summit, which was about 25 feet above the tunnel being built by the Pennsylvania Railroad. The difference between the two lines would be that the Pennsylvania route would descend from the Sugar Gap Summit Tunnel by the left branch of Sugar Run, around the world famous Horseshoe Curve, and along the eastern slopes of the mountain to Altoona. The "New Portage", after passing through its tunnel, descended along the right bank of Sugar Run, cut back to Blair Run, and then followed approximately the same route as the Old Portage from Plane No. 9 to Hollidaysburg.⁵⁸ (See Next Page for Chart)

A disastrous event took place in 1854, when on February 15, the Pennsylvania Railroad put into service its own route across the mountain and withdrew its business from the Old Portage. This was a tremendous

(57) Wilson, Op. Cit., P. 78.

(58) Ibid.



RAILROADS ACROSS THE ALLEGHENIES

- PENNSYLVANIA R.R.
- NEW PORTAGE R.R.
- - - OLD PORTAGE R.R.

shock, since most people in the area anticipated quite a close relationship between the two. This development caused a slow-down in the construction of the New Portage as specified under the plans of Faries, Roberts, and Gay. Since the future looked dim for the new railroad, even before it was completed, the weight of popular opinion was beginning to urge that the Portage system be sold before the State, and consequently the tax payers, lost any more money on the project.

The "New Portage Railroad" was put into use on July 1, 1855, at a total construction cost of \$2,143,335.49.⁵⁹ With the introduction of this system the famed Old Portage Railroad, which had dazzled the imagination of the world for twenty years, passed from existence.

The Pennsylvania Railroad was an overnight success, and the "New Portage," still not completely finished, could not begin to compete with such an organization. The realization that the new railroad and indeed the whole system of public works were outmoded, caused the State Legislature to offer for sale the Main Line of public works, including the Allegheny Portage Railroad, in May, 1855.⁶⁰ The terms of the sale were not very reasonable, and consequently, there were no bidders. No one was foolish enough to buy a "white elephant" for such a price.

The State operated the Railroad the next year at a considerable loss, and then again offered the Main Line for sale on the 16th of May, 1857. This time the Pennsylvania Railroad, as the only bidder, bought it for \$7,500,000. and took possession in August.⁶¹ The Pennsylvania operated the "New Portage" for the months of August, September, and October, 1857, but found that it lost a great deal of money by doing so. Therefore, it closed the Railroad on November 1, 1857. A short branch was built so the "New Portage Tunnel" might be used, and a small section was used for coal sidings. With these exceptions, the Portage roads, both old and new, having

(59) Jacobs, Op. Cit., P. 19.

(60) Wilson, Op. Cit., P. 82.

(61) Jacobs, Op. Cit., P. 19.

outlived their usefulness, were abandoned.⁶²

Boom Town

The completion of the Public Works of Pennsylvania brought about a great deal of prosperity for the whole state, especially the towns and villages which were located on or near the Main Line. One of the most prosperous of all these towns was Hollidaysburg, located near the eastern base of the Alleghenies, approximately four miles from Altoona. Its importance lay mainly in the fact that it was the western terminus for all the Canal traffic in preparation for the trip across the Alleghenies via the Allegheny Portage Railroad. So importantly located on the Pennsylvania System, Hollidaysburg grew almost overnight, from a peaceful frontier hamlet to a bustling, thriving metropolis.

The junction of the Railroad and the Canal was very important to the town fortunate enough to be awarded such a position. The honor was first offered to Frankstown, which was at that time the "metropolis" of the area. However, one of Frankstown's leading citizens, Jacob Wertz, refused to sell part of his land for the creation of a canal basin. This refusal ruined Frankstown's chances, and through the efforts of some very influential citizens of Hollidaysburg, particularly John Blair, Frankstown was unable to recover her previous advantage for this position, and Hollidaysburg was chosen. With her selection, the future of Hollidaysburg was assured, as long as no rival thoroughfare was built across the Alleghenies.⁶³

The grand opening of the Canal in the Fall of 1833, served to awaken the citizens of Hollidaysburg to the fact that they were part of a transportation system that connected them with the major cities of the East.

(62) Wilson, Op. Cit., P. 83.

(63) Jesse C. Sell, Twentieth Century History of Altoona and Blair County (Chicago: Richmond-Arnold Publishing Co., 1911) P. 116.

The splendor of the event is expressed by a contemporary, Dr. Harry Coffey.

And here will not be amiss to mention an event, the first of its kind in Hollidaysburg, and long remembered, but not, perhaps, forgotten. The opening of the canal from Huntingdon to Hollidaysburg occurred in the Fall of the year 1833. It was long looked for and excited the greatest expectations. It was an epoch in the lives of that generation, when the mountaineers of Central Pennsylvania saw the brawling or noisy rivulets of the Juniata River unite in a flow, through the medium of the canal, "unvexed" to the ocean. The first canal packet, as it was called, to pass through the locks from the State Capital had on it a large party from the intermediate towns. Huntingdon people crowded the decks. People came from far and near. Citizens from the far-off but now almost neighboring towns of Johnstown and Ebensburg came by rail.⁶⁴

The first canal boat created much excitement in the town's early citizens, and it was the spark which set off the "boom" that Hollidaysburg was to enjoy for the next twenty years.

The award of the Portage to Hollidaysburg led to a meteoric rise in population and business. A town of less than 80 persons in 1830, Hollidaysburg had a population of approximately 3000 ten years later. The growth of Hollidaysburg in these years was greater than that of any other town between Pittsburgh and Philadelphia.⁶⁵

It was quite obvious to outsiders that Hollidaysburg was growing in importance. It was equally obvious to citizens of the town as well, and they were proud of it. A Hollidaysburg newspaper of October, 1835, conveys the determination and pride of the people.

Perhaps no town in the interior of Pennsylvania enjoys more advantages than Hollidaysburg. Situated at the head of canal navigation and the eastern termination of the Allegheny Portage Railroad, all the business of these great channels of improvements must pass through it.

The population of Hollidaysburg is twelve hundred, made up of an industrious, economical, intelligent class of young mechanics, who want nothgin but health and perseverance to make themselves and the town rich. It is thought by some that the pro-

(64) Coffey, Op. Cit., P. 5.

(65) I. D. Rupp, History of Northumberland, Huntingdon, Mifflin, Centre, Union, Juniata and Clinton Counties, Pa. (Lancaster: G. Hills, 1847) P. 208.

prietors of the town lots hold them too high for the town to improve rapidly, and that may be the case, but lots for mechanics may be bought in Gaysport and on the Railroad that will answer equally well for their business at reasonable prices. At present, there are more good houses being put up in Gaysport than in Hollidaysburg, but both may be said with propriety to compose the same town, being only separated by the upper basin. Our town is not oppressed with taxes, and property is not advanced by any fictitious capital in the nature of banks, and we hope it may continue in its present prosperous condition without the aid of any.⁶⁶

Indeed, the prosperity expected in 1835 arrived in Hollidaysburg almost immediately. Eight daily transportation lines operated in the town in 1836, and buildings sprang up as if by magic. Stores, taverns, hotels, and warehouses and all the other aspects characteristic of a thriving and energetic community appeared on every hand. The sound of laughter and hard working men employed in the shipment of thousands of tons of freight filled the air. Famous travelers as passengers passed in and out of the town constantly and never ceased to draw gazing and awe-struck crowds. The everyday life of the town was exciting, as the citizens never knew who or what would arrive on the next packet boat or railroad car. From their standpoint, the people expected a glorious future, as they imagined their town as a gateway city to the glorious West. For this reason, they saw themselves in a very enviable position.

Numerous small industries were started in Hollidaysburg, since the town was considered one of the most prosperous in the State. The town now had a large local trading area. There were several large warehouses on the north bank of the basin, which were unlike any buildings that the people had seen before. They seemed to be symbols of the success that was now Hollidaysburg's.

Since the growth of any town necessitated the building of churches, Hollidaysburg was no exception, and numbered among its supply, a Presbyterian,

(66) Hollidaysburg Sentinel and Huntingdon, Cambria, and Bedford County Democrat, Vol. I., No. 1., October 6, 1835.

Methodist, Lutheran, Baptist, Catholic, and two African Churches. In the field of education, the town was certainly ahead of its time. There were five public schools and one classical school; quite a record for a frontier town. In addition to everything else mentioned, there were several foundries and machine shops, a large steam flour mill, a screw dock, ten or twelve forwarding houses, and several hotels for the comfort and convenience of the many guests that visited the town.⁶⁷

When Philip Nicklin, alias Peregrine Prolix, passed through Hollidaysburg in 1835, he wrote an excellent description of the town and the problems that beset a weary traveler on the Pennsylvania System.

At half past six, P.M., the packet glided into the basin at Hollidaysburg. In this artificial basin, which is large and commodious, terminates that part of the Pennsylvania Canal which lies east of the Allegheny Mountains. The goods destined to the West, are taken from the boats and placed in Burthen Cars which are to carry them over the mountains, by means of the Allegheny Portage Railroad, which we shall describe, not now, but in a future letter.

At Hollidaysburg, we were informed that the shower above-mentioned had been pouring down for a week; whilst with us the weather had been delightful. So long a continuance of an American rain had reduced the village to a most unamiable condition. The streets were almost rivers of mud, and the houses seemed as if founded upon that yielding material. Moore's Hotel, to which we were bound, appeared on a slight elevation at the awful distance of three mortal muddy squares, and that catholic conveyance, vulgarly called an omnibus, was not in attendance; so we had no alternative but to trust to the virtue of our own legs. We stepped upon the mud-covered quay, and picked our dirty way to the hither end of a walk five feet wide, made of boards, and intended to lead passengers dry shod to Moore's Hotel. This answered very well, until we came to the two cross streets, across which the walk did not extend, to allow the passage of vehicles with wheels. The only mode of passage here, is wading ankle deep.

All these little agremens might be effectually abolished, by building a large hotel on the quay close to the basin, so that the packets could come to the steps of the piazza.

Hollidaysburg has the air of a new clearing, and looks unfinished, that one might suppose it to have been built within a year. Its site is good, rising gradually from the basin to a pleasant elevation. Many substantial buildings are going up,

(67) Rupp, Op. Cit., P. 208.

and it is evident that rapid increase is the destiny of the town.

The Allegheny Portage Railroad commences here, and leads by a gently rising grade, four miles from the foot of the mountain, whither the cars are drawn by horses.

Moore's Hotel is a substantial and spacious brick building, and is as well kept as the circumstances of the place will permit. The table is good, and the landlord and his people, very obliging; but the house, though large, is insufficient for the company. We were the first to reach it from our packet, and yet we found but one room vacant; if that can be called room, in which there is no room; but, as Pat would say, its cleanliness is as great as its littleness, which is a great blessing in so little a place. The other chambers are larger, and there are two good parlours.

The condition of the streets prevented excursions to see the town.⁶⁸

Prolix's description of Hollidaysburg in 1835 is a good account of a town which suddenly found itself important and tried to grow too quickly to fit its newly won position. In spite of poor accommodations and muddy streets, Prolix still foresaw a great future. The same deplorable hotel where he had the misfortune to board, became in later years, quite a welcome place for travelers to stay. The Hollidaysburg Register of September 9, 1846, for example, carried this advertisement:

"Exchange Hotel"

The subscriber, lae proprietor of the "Bedford Hotel," has leased for a number of years, the well-known public house in the Borough of Hollidaysburg, belonging to the heirs of Silas Moore, Esq., deceased, and well and favorably known as the "Exchange Hotel." This house has been recently, at a very heavy expense, been thoroughly and completely renovated and fitted up in all its departments, and greatly improved in its convenience and comfort. It is completely furnished throughout.

The beds and bedrooms are clean, comfortable, airy, and well furnished.

The parlors are large and commodious, and richly fitted up.

The table will be, at all times, furnished with the choicest viands the market can afford.

The stable is new, extensive and convenient, and attended by careful and honest ostelers.

(68) Philip Holbrook Nicklin, A Pleasant Peregrination Through the Prettiest Parts of Pennsylvania. Performed by Peregrine Prolix (pseud). (Philadelphia: Grigg and Elliott, 1836), P. 60, 61, 62.

"Bedford Mineral Water" constantly kept on hand for the accommodation of customers. Also, Hollidaysburg "Sparkling and Bright."

This splendid establishment is conveniently situated to accommodate all.⁶⁹

There were two canal basins at Hollidaysburg, both very large and very busy. The lower basin in the town proper, was 1695 feet long and 120 feet wide, extending along what is presently South Juniata Street from Montgomery to Jones Streets. The upper basin was located in the Gaysport section of Hollidaysburg along what is presently known as Bedford Street. This upper basin was about 1100 feet long and 120 feet wide. These basins were connected to each other by a canal of approximately 600 feet in length. An inclined railroad track ran directly into the upper canal basin. Section boats were placed on these tracks, hooked to a cable which was attached to a stationary engine, and then drawn up the track to the tracks of the Allegheny Portage Railroad on Bedford Street. From this point the boats were carried across the Alleghenies en route to the Ohio Valley and the far West.⁷⁰

Since all traffic on the Main Line had to stop at Hollidaysburg to make connections with the Portage Railroad before passing on, there were crowds of people stopping in Hollidaysburg every day. It was much like a great port city where ships from all over the world brought new ideas and new people on every voyage. While Hollidaysburg did not get people from the four corners of the world on every packet that docked, it did get people from the biggest cities of the East, and to the people of central Pennsylvania, that was enough. Dr. Harry Coffey, who lived in Hollidaysburg at the time, recounts in his memoirs the kind of excitement that spread through the town on the arrival of each packet boat.

(69) Hollidaysburg Register & Blair County Inquirer, Vol. XI, No. 8., September 9, 1846.

(70) Jacobs, Op. Cit., P. 7.

One boat on the Pioneer Line had a colored steersman named Jim Rogers, who was a fine bugler. As his boat neared the basin at the weigh lock below town he would begin to play. From every part of the town the boys scampered for the bridge just below Leeche's Warehouse, to see the packet make the run up the basin to its landing. If it was a Sunday morning, there might be quite a crowd.

The passengers would, to enjoy the scene, be all on deck; the captain at the head, with his mate and men at the bow lines; the horses double-teamed for the occasion, urged by the driver to their highest speed, while the bugle rang out its splendid tones, breaking on the cliffs of Chimney ridge and repeating their echoes, far away through the mountain gorges and dying--dying--dying--until another burst would recall them and repeat again the sounding melody. No vestibuled Pullman train, no four decker Mississippi steamer, no ocean Cunarder greyhound steaming to its destination could furnish to modern eyes the thrill of pleasurable emotion that a Pioneer packet would make on its run into that port of Hollidaysburg. That was enough to stir pride and make us believe, (I was a boy then), we had a future before us, and our faith was justified. Hollidaysburg was a port! Altoona never was, and great as she is, never can be a port.

To a boy, it was a splendid sight to the eye and treat to the ear, and it was over all too soon! The bugle disappeared and I have heard the greatest cornet players since, but none can recall to my mind the emotion so pleasurable as sounded to my ears then, with all the accessories of nature to emphasize its enjoyment. I never read or think of Tennyson's exquisite "Bugle Song" without its silvery swell recalling these early scenes, when my uncultured ear first responded to the lovely melody of Roger's bugle.⁷¹

This was part of the nostalgia aroused by the port of Hollidaysburg.

If nothing else, the Canal Era left many people with never-to-be-forgotten memories. However, the canal boats brought a great deal more. In addition to the passengers and goods that passed through on their way West, a great deal of merchandise stopped permanently in the town, thus affording its citizens with luxuries not normally obtainable in towns so far from the fashion centers of Philadelphia and Pittsburgh. One of the biggest events of the year was the arrival of the "store boat." This boat was a virtual traveling department store. It carried everything from

(71) Coffey, Op. Cit., P. 15.

clothes to groceries, and it attracted a great many people who believed they were getting a real bargain due to the low prices. Nonetheless, it caused the local merchants a great deal of concern, since large amounts of money were spent on the store boat and little in the community. Luckily for the merchants, the store boat came only once a year.

The Canal brought Hollidaysburg many things, some of them not as desirable as others. One of the least desirable things was a peculiar type of sickness called ague.

With the canal came ague, euproniously called "Juniata Jigs" by some of the newspapers. There were many cases during the warm weather, and when it got a strong grip on a man "he shook till his teeth rattled." The apothecaries were kept busy dispensing quinine and ague bitters to cure the dreaded disease.⁷²

Like many communities of the Period, Hollidaysburg had its own militia, of which it was very proud. As can be expected, they didn't have too much action. However, during the building of the Pennsylvania Railroad Tunnel in 1850-51, the Hollidaysburg Guards were called to arms.

During the building of the tunnel in 1850-51, the Irish laborers there engaged raised a little war among themselves, which was of such magnitude that the Pennsylvania Railroad Company could not settle the dispute or cause a cessation of hostilities. The military had to be called upon, and the Hollidaysburg Guards responded promptly. Forty rounds of ball cartridges were issued to each man, the knapsacks were supplied with the necessary clothing and blankets, and five days' cooked rations filled the haversacks. They were in the field three days, and did not leave until the last infuriated Connaughtman or Orangeman had surrendered his shotgun, laid down his "shillalah," and returned to his work, the blasting of rocks in the tunnel. The company was under fire, and the "Battle of Bennington" caused considerable sensation. The Guards captured thirty-three prisoners. Soon after this experience, the noble and gallant little company ceased to have an existence.⁷³

(72) Jacobs, Op. Cit., P. 8.

(73) Africa, Op. Cit., P. 71.

The early citizens of Hollidaysburg were of the mind that they were creating a town that would eventually grow in size to a point where they would be perhaps one of the largest and most prosperous cities in the State. In fact, they were so prosperous that in 1846, Blair County was formed with Hollidaysburg as County Seat. Their unbridled optimism was due to the fact that it was believed that the Canal and the Railroad were the swiftest mode of transportation possible. Therefore, since they were situated along the main route, they could see nothing that could retard their success. But these enthusiastic townsmen did not count on progress. In the 1830's, it was considered impossible to build a locomotive that could pull heavy loads up steep grades; by the 1850's such locomotives had been built and engineering methods so refined that the once impassable Alleghenies were now able to be crossed without resorting to a single inclined plane.⁷⁴ The Pennsylvania Railroad's successful attempt at transversing the state via an all rail route, spelled out the death of Hollidaysburg. In order to get a better line for crossing the Alleghenies, the Pennsylvania Railroad ran their main line through Altoona, just a small village in the 1850's. Shippers saw the advantage of transporting goods by the Pennsylvania Railroad rather than by the old Canal and Portage Railroad method, and consequently, the business of the public works dropped sharply. The sudden drop of business caused the sale of the Portage System to the Pennsylvania Railroad. This sale ended the former importance of Hollidaysburg as the junction point of Canal and Railroad.

Though the Portage Railroad was gone, Hollidaysburg still did some business on the canal. In fact, the Canal remained open in Hollidaysburg until 1872, though it in no way regained the glamour and excitement of

(74) Cf., PP. 40-46

the past. The last canal boat sailed from Hollidaysburg in 1872. The Democratic Standard of May 1, 1872, reflected the melancholy mood of the people, and yet also revealed their acceptance of their fate and a desire to make the best of the situation.

THE LAST BOAT--As stated last week, the last canal boat left Hollidaysburg on Monday, April 22nd, 1872; but as it was in some sort an incident worthy of note, we deem a more formal record advisable. There are, in this borough, many gentlemen who witnessed the formal opening of the canal, and the arrival of the first canal boat. These, or many of them at least, beheld on Monday a week, the departure of the last canal boat, which proved to be the "Wm. A. Fluke," Captain, James Stevens, of Williamsburg. The occurrence is only another proof of the uninterrupted progress of the race. There was a day when the slow, crawling canal boat was hailed as the benefactor of inland communities, but that day has disappeared for us forever. The mellow echoes of the boatman's horn, which were wont to reverberate amid our mountains, will be heard no more forever, and in a few fleeting months, the shrill neigh of the iron steed will be a familiar sound to ears as yet unattuned to its peculiar melodies. Gladly we bid a final adieu to the mule teams, the terribly profane drivers, and the inevitable accessories of inland navigation and right cheerfully do we bid a hearty welcome to the tireless steed that travels with winged feet.⁷⁵

With the passing of the Portage Railroad and the Pennsylvania Canal, came the passing of an Era and the passing of all the things that went with it. Such was the case with Hollidaysburg. Though memories remained, the excitement and splendor that once was Hollidaysburg's was now gone, and four miles away a new era, the Railroad Era, created a new boom town, Altoona, that was to enjoy all the success and glamour that once belonged to its neighbor.

(75) Jacobs, Op. Cit., P. 17.

APPENDIX A

Additional Accidents

Sad accident--We regret that we have to report another of those painful casualties incident to railroads. On Monday last, the 18th, a young man who had been in April in the employ of Messrs. Kenip and Cunningham, as a car conductor, named Wheeler Dolph, when in sight of Johnstown with his train, seated on the front board, and running rather fast, attempted to check their speed by bearing on the lever, but unfortunately, missed his hold and fell on the track, and in a moment had both arms and legs severed from his body. He expired with but scarcely a struggle. Immediate measures were taken to have him decently interred, and as no one here knows anything of his relations, we trust editors will republish this in hopes that it may meet the eye of someone who knew him. From some papers found, it seems he came from Carbondale, where we infer from the language of his correspondence that he left a wife and child.⁷⁶

The Hollidaysburg Register relates the details of an accident that happened in July, 1850..

A most shocking accident occurred on the "long level" of the Portage Railroad on Saturday afternoon last. The following are the particulars.

Whilst the train was running at ordinary speed, the locomotive, and tender were thrown from the track by some cause not understood. At the time, a man named S. S. Smith, of Erie County, selling stoves, and the brakeman of the train named Ruth, were sitting upon the tender reading a newspaper. The moment the locomotive and tender ran off, the car passed over Mr. Smith's right thigh and crushed it to the knee, and over his left ankle, crushing it and the foot. Mr. Ruth escaped with the loss of the calk of one of his legs, which was pared to the bone. Medical attendance was immediately called, but Mr. Smith's case was hopeless, and he expired about 11 o'clock on the same evening.⁷⁷

- (76) Hollidaysburg Register and Blair County Inquirer, Vol. XV., No. 1., July 24, 1850.
 (77) Dem. Standard and Huntingdon County Gazette, Vol. I, No. 27 August 30, 1839.

APPENDIX B

Letter to Board of Trade of Pittsburgh from Board
of Canal Commissioners

In recommending to the consideration of your honourable Board the importance of affecting at least a portion of the requisite repairs during the present winter, your memorialists would respectfully suggest that the unceasing efforts of the states, both on our northern and southern borders, to deprive Pennsylvania of the portion of the western trade and travel which her public works enjoy, can only be neutralized by at least an equal degree of energy on her part; that as the expected completion of the Pennsylvania Railroad to Huntingdon in the course of the ensuing Spring, will shorten the time occupied by the transit so far increase the trade and traffic on the mountain summit as to render the completion of the repairs thereon after that period very difficult if not absolutely impracticable, it becomes in the utmost degree important that these improvements should be completed before the commencement of the spring business.

Your memorialists in common with their fellow citizens of other portions of the state are much grieved at finding that the liberal appropriation for the repairs of the portage road which was introduced into both houses of the Legislature last winter unfortunately failed on its final passage, but they feel confident that under existing circumstances your honorable Board will be sustained by all her friends of the state in making the requisite expenditure for these repairs even if the contemplated repairs or some other portion of the line less immediately connected with the vital interests of the public works were suspended until the Legislature shall be enabled to make such additional appropriations as may be requisite and would therefore respectfully request that your Honorable Board would immediately adopt the means requisite for reconstructing the boilers, repairing the engines upon the portage railroad and would further present to the next Legislature such other plans as your experience may suggest for rendering the portage sufficient in capacity to meet the increased amount of transportation which may reasonably be expected to be conveyed over it by the gradual completion of the other improvements of the state and the regular increase of her produce and manufactures.⁷⁸

(78) Board of Trade of Pittsburgh, Memorial to Board of Canal Commissioners, Oct. 30, 1849 (in Reports and Miscellaneous Documents, 1844-57, Vol. 2).

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