

EARLY DEVELOPMENT OF TRANSPORTATION ON THE MONONGAHELA RIVER

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Although the traffic on the Monongahela River from Brownsville to the Ohio had advanced from the canoe of the Indian and the Kentucky boat of the emigrant of Revolutionary times, to a water borne traffic of no mean size in passengers and miscellaneous freight, and to more than a million bushels of coal annually before the Monongahela waterway was improved by the installation of locks and dams late in 1841, yet no records remain of the constantly increasing stream of commerce passing over this route between the east and the west. Here and there remains a fragment from a traveller, a ship builder or a merchant giving a glimpse of the river activity of the later years of the 18th century and the early ones of the 19th century.

The Ohio Company early recognized the importance of this waterway, and in 1754 Captain Trent on his way to the forks of the Ohio by Nemacolin's and the Redstone trails, built "The Hangard" at the mouth of Redstone Creek. From April 17th, when he surrendered his works to the French and retreated in canoes up the Monongahela, this avenue became more and more important until the steam railways supplanted the slower traffic by water.

The easy navigation of this stream led that man of keen insight, George Washington, into error, when, under date of May 27, 1754, he writes: "This morning Mr. Gist arrived from his place, where a detachment of fifty men (French) was seen yesterday. . . . I immediately detached seventy-five men in pursuit of them, who I hope will overtake them before they get to Redstone, where their canoes lie."

These men, however, had come by Nemacolin's trail; but the force of 500 French and 400 Indians which followed close upon the heels of Washington after his defeat of Jumonville, and captured him at Fort Necessity, came up the Monongahela from Fort Duquesne in pirogues.

The expedition of General Braddock in 1755, disastrous though it was, opened the way from the East to the fertile lands of the Ohio Valley. Under date of May 24, 1766, George Groghan, Deputy Indian Agent, writes from Fort Pitt: "As soon as the peace was made last year (by Colonel

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Bouquet) contrary to our engagements to them (the Indians) a number of our people came over the Great Mountain and settled at Redstone Creek, and upon the Monongahela, before they (the Indians) had given the country to the King, their father."

A letter written from Winchester, Virginia, under date of April 30, 1765, says: "The frontier inhabitants of this colony and Maryland are removing fast over the Alleghany Mountains in order to settle and live there."

This migration was augmented by Pennsylvanians, following the act passed in 1780, which provided for the gradual abolition of slavery. At about this time, too, it became generally known that the Monongahela Valley was Pennsylvania territory rather than that of Virginia. Kentucky was an inviting district and her charms were made patent to all. So general became migration to Kentucky that the name "Kentucky Boat," was applied to the flat used in transportation on the Monongahela at that time. Boatyards for the construction of all manner of river craft were opened at Brownsville where the overland route from Cumberland and the east first reached communication with the western waters, and at Elizabethtown (now Elizabeth) fourteen miles from the mouth of the Monongahela River.

In 1784 a petition was presented at the September term of the Fayette County Court for a road from "Redstone Old Fort along the river side to the grist and sawmill at the mouth of Little Redstone and to Collo. Edw'd Cook's," since, "the intercourse along the river is so considerable, by reason of the number of boats for passengers, which are almost constantly building in different parts along the Riverside." The petition was granted.

The *Pennsylvania Journal* of Philadelphia, in its issue of February 13, 1788, carried the statement that "Boats of every dimension may be had at Elizabeth-Town, in the course of next spring and summer . . . where provisions of all kinds may be had at a very cheap rate, particularly flour, there being no less than six grist mills within the circumference of three or four miles." In its issue of August 20th in the same year the *Pennsylvania Journal* carried an advertisement that at "Elizabeth-Town on the Monongahela," the proprietor (Stephen Bayard) "had erected a Boat yard . . . where timber is plenty, and four of the best Boat Builders from Philadelphia are constantly employed."

Captain John May, who gave his name to the settlement at the mouth of Limestone Creek, Kentucky, and who in 1790 was killed by the Indians while descending the Ohio,

under date of May 5, 1788, writes in his diary: "This day was raised here (at Elizabeth-Town) a large shed for building boats. Almost all the Kentucky boats from the east pass this place: near two hundred have passed this spring."

The hardships entailed by this migration were enormous. During the severe winters when the Monongahela was ice bound the road leading through Brownsville to the river was lined on both sides with emigrant wagons whose occupants with difficulty prevented themselves from perishing from the cold.

The Indian ravages on the boats on the Ohio and on the settlers in the Kentucky country occurred with terrifying frequency. Possibly fifteen hundred people perished through these attacks in the seven years following the close of the Revolutionary War. Finally the boats going down from Pittsburgh formed in brigades. Denny's Military Journal, of April 19, 1790, gives an account of one such flotilla containing sixteen "Kentucky Boats," and two keelboats. The flat-boats were lashed together three abreast and kept in one line. The women and children, along with animals were placed in the middle boats, while the outside ones were defended and worked by the men. These boats were guarded on either flank by the keels. In this case the Indians did not attack, but the unwieldy craft were almost wrecked in a furious storm of wind and rain. Despite these drawbacks, however, by 1790 the Kentucky country had a population of approximately 74,000 people, many of whom had come down the Monongahela.

With the opening by France of the West Indies to trade, and the right of deposit secured at New Orleans from Spain, the western trade, enormously expanded, bade fair to be controlled by Pennsylvania.

Pittsburgh at mouth of the Monongahela had a commanding part of that traffic. Except for three or four months in the dry season this town was crowded with emigrants for the western country. Boat building was the chief industry of the place. Log canoes, pirogues, skiffs, bateaux, arks, Kentucky broadhorns, New Orleans boats, barges and keel boats with masts and sails—all were awaiting the emigrant. The people of the Tennessee and Kentucky country brought all their supplies from Philadelphia and from Baltimore, now almost an equal commercial rival of her northern neighbor, and shipped their produce to New Orleans.

Pennsylvania early appreciated the value of the Monongahela and its chief tributary, the Youghiogheny River. On the 15th of April, 1782, the Assembly of the state enacted a

law declaring "That the said rivers, so far as they or either of them have been or can be made navigable for rafts, boats, canoes, and within the bounds and limits of this state, shall be, and they are hereby declared to be, public highways."

In 1814 the Assembly authorized the governor to appoint "Three disinterested citizens" "to view and examine the river Monongahela" and report "the most suitable places for constructing dams, locks, works or devices necessary to be made to render said river navigable through the whole distance." Nothing resulted from this action, nor from a similar action taken the following year, although an examination was made under the act of 1815.

In 1817 the assembly authorized the Governor to incorporate a company to make a lock navigation on the river, and appropriated \$30,000 with which to buy stock in the company. No tangible good resulted from this, since the conditions of this act were not met and forfeiture resulted in 1822, when the state took the improving of the Monongahela unto itself; not, however, before it gave permission to those persons who were aiding navigation by building dams in the river to charge toll for their use.

In 1828 E. F. Gay, a civil engineer, made a comprehensive report to the state giving the result of a survey, but the assembly took no action. An effort was made in 1832 to have Congress authorize the work, as an extension, under the act of 1824, of the improvement of the navigation of the Ohio to the National Road at Brownsville. Congress provided for the survey, which was made in 1833 by Dr. William Howard, United States civil engineer. He planned to have locks of a height not exceeding four and one-half feet, which would be used only in case of low water; however, Congress refused to authorize the work.

In 1835 the National Road was turned over to the states through whose territory its course lay. On November 18th, of the same year, a public meeting at Waynesburg, Greene County, recommended the improvement of the Monongahela by the state. This suggestion was eagerly urged by practically the whole district between Brownsville and Pittsburgh, and the desired legislation was attained.

On March 31, 1836, the "Monongahela Navigation Company" was authorized by Act of Assembly. It was to make a slack water navigation from Pittsburgh to the Virginia state line, and as much farther as Virginia would allow it to go. The capital was to be \$300,000, in shares of fifty dollars. The locks were to be four and one-half feet high. The

charter was issued in 1837. The state subscribed \$25,000, and later in 1840, \$100,000 more on condition "That all descending crafts owned by citizens of Pennsylvania, not calculated or intended to return, from any point between Millsborough and the Virginia state line, shall pass free of toll through any lock or dam of the lower division of said improvement until the company shall put the first dam above Brownsville in the second division under contract, and complete the same. . . ."

The ill-starred United States Bank, now an institution of Pennsylvania, was required to subscribe for \$100,000 of stock. The total subscriptions amounted to \$308,100. From Pittsburgh to Brownsville was found to be fifty-five and one-half miles, and the ascent thirty-three and one-half feet; from Brownsville to the Virginia line, a little over thirty-five miles, the ascent was forty-one feet—a total of ninety and one-half miles, and an ascent of seventy-four and one-half feet, requiring seventeen dams. Higher dams were then authorized, making four necessary below Brownsville, and three above to the state line.

Before these dams could be completed the credit of the state, which had been strained to the breaking point during the years from 1820 to 1830 for internal improvements, broke; the United States Bank collapsed, leaving unfilled \$50,000 of its obligation to the company; many of the private stockholders refused payment; the state's subscription of \$100,000, being in bonds was collected at a loss; Baltimore capitalists refused aid; and, crowning all, a break developed in Dam No. 1 in 1843, which made expensive repairs necessary. The whole project became a "mortification to its friends and projectors, and a nuisance to the navigation." The legislature, however, in order to improve the financial condition of the state, directed, by Act of July 27, 1842, repeated by Act of April 8, 1843, sales of all its corporation stocks, including the \$125,000 in this company. This stock was bought in for \$7,187,50 by a group of men—James K. Moorhead, Morgan Robertson, George Schnable, Charles Avery, Thomas M. Howe, John Graham, Thomas Bakewell, J. B. Moorhead and John Freeman—who with effective energy had on November 13, 1844, the entire improvements repaired and completed for use to Brownsville, where connection was made with the National Road, which in turn connected at Cumberland, seventy-five miles distant, with the Baltimore and Ohio Railroad from Baltimore. Pittsburgh at last was brought within thirty hours of the Atlantic seaboard.

Long before the Monongahela River had been improved, however, and the steamboat had driven the keel boat and the flat boat from the western waters, the feeble frontier settlements of the Monongahela Valley were preparing to utilize the commercial possibilities of the southwest. In 1800 certain farmers near Elizabeth built a schooner of two hundred and fifty tons burden, launched it in the spring of 1801, christening it the "Monongahela Farmer." Her cargo taken on at Elizabeth and Pittsburgh, among other things, consisted of 721 barrels of flour, 500 barrels of whisky, 4,000 deer skins, 2,000 bear skins, large quantities of hemp and flax, and firearms, ammunition and provisions for the crew of eight men. The vessel was not rigged for sailing at this time. In the instructions to the master, Mr. John Walker, he was told to "proceed without unnecessary delay to the city of New Orleans. Should the markets for flour be low at New Orleans and the vessel appear to sell to disadvantage, you in that case have it in your power to sell a part of the cargo, to purchase, rigging, fit out the vessel and employ hands to sail her to any of the Islands you in your judgment and to the best information may think best, and then make sale of the vessel and cargo."

This boat left Pittsburgh on a June rise, was attacked by the Indians, lost one man by drowning, was detained by reason of low water for three months at the Falls of the Ohio (Louisville) and for some weeks on a bar, now called Walker's Bar, above Hurricane Island, reached New Orleans and with her cargo was sold profitably, although the flour was soured by being stored in the damp hold. The master contracted yellow fever, but recovered, and returned home after an absence of fourteen months; and, during the following year (1803), superintended the construction of the brig *Ann Jane*, 450 tons burden, loaded her with flour and whisky, and sailed with profit to New York by way of the rivers, the Gulf of Mexico and the Atlantic Ocean. Thus the commerce of the Monongahela flourished until the *Enterprise*, 45 tons, the fourth steamboat on western waters, was built at Brownsville in 1814. The era of steam had begun.

The Monongahela products were becoming well known. Its flour "is celebrated in foreign markets, for its superiority, and it generally sells for one dollar more per barrel in New Orleans than any other flour taken from this country to that market. The best and greatest quantity of rye whiskey is made on this river. Peach and apple brandy, cider and cider-royal are also made in great abundance."

Harris' Directory of Pittsburgh (1844) says of Elizabethtown, which along with Brownsville, was the leader in developing commercial transportation on the Monongahela: "In 1797 the ship-building was commenced at that place. From that time up to 1826 a considerable trade was done in building barges, keelboats, and other craft. From the latter period to the present time, it is presumed Elizabeth has built a larger number of valuable steam vessels than any other place in the United States according to its population. Amount of steamboat tonnage built at Elizabeth from 1826 to 1837—80 boats, averaging 240 tons—is 19,200. From 1837 to 1840—30 boats averaging 200 tons is 6,000. From 1840 to 1844—47 boats averaging 240 tons each is 11,280.

Tonnage, 36,480.

The success of the ship building industry at Elizabeth led to the opening of boatyards at Bellevernon and California. The slackwater equipment multiplied commerce enormously. It was estimated that during 1837 the loss occasioned to coal alone by the ice was at least \$40,000. In October, 1838, there was approximately 750,000 bushels of coal laden on boats which had been waiting three months for a shipping stage of water. Under date of January 1, 1840, Thomas McFadden, wharfmaster of Pittsburgh, gives a statement of the number of arrivals and departures of steamboats employed regularly in the Monongahela trade: "In addition to which a number of steamboats have occasionally gone to Brownsville, and a large number of flat-boats loaded with coal, have descended the river without stopping at this port." Steamers. Tons. Voyages. Liberty 83 tons 21 voyages; Franklin 34 tons 65 voyages; Pike 35 tons 34 voyages; Shannon 77 tons 43 voyages; Ploughman 38 tons 58 voyages; Royal 68 tons 29 voyages; Excel 41 tons 13 voyages; Exact 61 tons 3 voyages; Total tons 14,196; Traveller, Ranger, D. Crockett, running constantly and employed in towing flats, rafts, etc., 686 keels and flats loaded with produce 9,482 tons; 1048 flats loaded with coal, brick, and tonnage unknown. Total tons 23,678.

During 1845 toll was received to the amount of over \$15,000 from freights and rafts, etc; above \$8,000 for passengers of whom almost twenty-three thousand were through passengers; and above \$5,000 for coal amounting to more than four and one-half millions of bushels.

This favorable showing was increased during the next year to above \$20,000 for freights; to above \$12,000 for passengers, of whom almost 35,000 were through passengers

to or from the east; to above \$10,000 for coal, amounting to more than seven and one-half millions of bushels.

Commerce continued to increase. Classified freights continued until the tolls in 1852, when the Pennsylvania Railroad reached Pittsburgh, and the Baltimore and Ohio reached Wheeling, amounted to more than \$30,000 annually. Coal tonnage grew steadily greater until in 1855 it reached the amazing total of almost 1,000,000 tons, and fifteen years later to twice that amount, this later rapid increase being due to the building in 1856 of two locks above Brownsville, which carried the slack water navigation to within seven miles of the Virginia line. Through passenger traffic reached its climax in 1848 with a total for the year of almost forty-eight thousand souls.

To this latter traffic and classified freight the National Road contributed largely. For from the time it was thrown open to the public in the year 1818 until 1852 it was the one great highway, over which passed the bulk of trade and travel, and the mails between the east and the west. As many as twenty, four horse coaches have been counted in line at one time. During the eight years before the coming of the railroads more than two hundred thousand passengers travelled over the road by way of the Monongahela; almost another one hundred thousand travelled between Brownsville and Pittsburgh and over four hundred and fifty thousand travelled part of the way between these two places. William Henry Harrison as President-elect of the United States, used this route, and his body was returned by the same way. It looked more like the leading avenue of a great city than a road through rural districts. One man in 1848 counted 133 six-horse teams passing along the road in one day, and took no notice of as many more teams of one, two, three, four, and five horses. "It looked as if the whole earth was on the road, wagons, stages, horses, cattle, hogs, sheep, and turkeys being there without number," this man wrote. In the year 1832 six commission houses in Wheeling received approximately five thousand loads of merchandise, and paid nearly \$400,000 for its transportation. About two-fifths of this passenger and freight traffic after 1844 when the slack water improvements reached Brownsville, was directed through the Monongahela.

High hopes had earlier been maintained of the benefits to commerce by building dams in the Youghiogheny, one of the chief tributaries of Monongahela. The Youghiogheny Navigation Company was incorporated in 1816. Another Youghio-

gheny Navigation Company was incorporated in 1843, which by November 7, 1850, has constructed two dams and opened navigation to West Newton, 18 miles from the river's mouth. The terrific force of the turbulent spring freshets soon rendered them permanently useless. The traffic on this river by reason of its uncertain moods was slight. Following a memorial to the legislature in 1845 boats going down the Youghiogheny, not intending to return, were passed without toll through the Monongahela locks. The largest commercial venture on its waters possibly was in 1843 when 13,000 bushels of coke was boated from near Connellsville to Cincinnati.

"If they (the Navigators) can contrive to keep near the middle of the stream, they are hurled onward through white caps and billows, with a frightful degree of safety; otherwise they are doomed to destruction, and frequently to a melancholy loss of life."

Of the classified freight in the commerce of the Monongahela, salt occupied a large place, as immense quantities were brought from the salt works in New York. Whisky, butter, lard, cheese, flour, oats, sand, apples, hoop poles, nails, tobacco, wool, feathers, bacon, pork, staves, brick, ginseng, and beeswax were staple articles of commerce. Pittsburgh continued to be the distributing point. The Monongahela proved to be a valuable feeder to the state canals. Of the 80,000 barrels of flour which came down it in 1851, more than nine-tenths were reshipped eastward by the Pennsylvania canal; and other items in like manner.

It is not to be thought that the improvement of navigation in the Monongahela was secured by the harmonious co-operation of the Valley, or that its practical operation was materially helped by the shippers. "It is a remarkable fact," says the engineer, Sylvanus Lothrop, in his report to the President of the Company, January 4, 1847 that with so many unanswerable arguments to recommend it, and enforce it upon the public attention, no work in the country has ever encountered greater obstacles than this. Instead of being, as it ought to have been fostered by our citizens, and hailed by the inhabitants of the Monongahela Valley as a blessing to themselves, it met with nothing but the most chilling regard from the one, and with either the most violent prejudice, or the most determined hostility from the other." Protests were made against the toll charges, and in 1848 the Valley was aflame with the cry that the locks should be cut down to a height of four and one-half feet, so that in times of freshet the boats might

float, unhindered by locks, to the Ohio. Much difficulty was encountered in securing rapidity of movement through the locks. Rival boat crews fought, in the face of definite regulations, for precedence in passing through the locks. The company early established rules, but in vain. The state legislature (1851) passed special legislation to facilitate passage, and later (1864) made the penalties more severe, yet many times the locks for hours at a time were idle while the fighting crews blocked the entrance, and the prosperity-carrying Ohio "rise" receded below the boating stage.

When the Monongahela River was about to be bridged at Smithfield Street, in Pittsburgh, it was seriously proposed that the bridge be built so low that the boats could not pass under, thus necessitating the transfer of freights, and a profitable business for longshoremen.

Out of such strife and from such humble beginnings arose the mighty traffic which now yearly sweeps down the Monongahela through locks, augmented in number and increased in size, and now owned and operated without charge to the traffic, by the United States Government. No longer does the Ohio wait upon the "rise" of her tributary from the south, but rather is the waiting reversed, until such time as the United States shall have done her "perfect work" for "the beautiful river."