

Historic Resource Study  
Dam 3 Area: Shenandoah River Lock to Lock 36  
Historical Data  
Chesapeake and Ohio Canal National Historical Park  
MD-D.C.-W.VA.

by  
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## Preface

This report has been prepared to satisfy in part the research needs for the restoration and preservation of the Chesapeake and Ohio Canal near Harpers Ferry. This area of the canal is commonly referred to as the Dam 3 Area. The area encompasses the following major canal structures: the Shenandoah River Lock, Lock 33, Lock 34, the Inlet Lock at Dam 3, Lock 35, and Lock 36. Two canal buildings are also still standing in the area. A building commonly referred to as the Engineer's House is situated between Lock 36 and the Inlet Lock. Another building commonly referred to as the Section House is located on the hill overlooking Lock 36. The stone foundations of yet another building can be found on the hill between Locks 35 and 36.<sup>1</sup> Three other structures in the area are historically related to the canal, although they were not owned or built by the canal company. These structures are: the Salty Dog Saloon opposite Lock 33, the incomplete Government Dam below Dam 3, and Dam 3.

In accordance with the National Park Service's Activity Standards of 1971, this study deals with the historical background of a previously unstudied area of the Chesapeake and Ohio Canal National Historical Park.<sup>2</sup>

1 The statements concerning the common names of these canal buildings are based on a conversation with Chief of Maintenance Dale Sipes on October 11, 1979. Another source, however, maintains that at least two of the houses were once used as lockhouses. See Thomas F. Hahn, Towpath Guide to the Chesapeake and Ohio Canal, Section Three: Harpers Ferry to Fort Frederick (Gobblers Ridge, West Virginia: Thomas F. Hahn Printer, 1972), pages 11-14.

2 In the past, only two historic structure reports (historical data) were prepared on structures in the Dam 3 Area. See John F. Luzader, Historic Structure Report, History of the Construction of Dam No. 3 (National Park Service, 1961); and John F. Luzader, Historic Structure Report, Lock No. 36, Chesapeake and Ohio Canal (National Park Service, 1961).

The study attempts to identify and discuss the tangible historical remains in the area. The study is primarily devoted, however, to documenting the area's broad historical past. Much of that past cannot be represented by tangible surviving remains.

This report was made possible by the assistance of several individuals. As always, Archivist Maria Joy of the National Archives rendered great assistance in the records of the Chesapeake and Ohio Canal Company. Ms. Hilda Staubs, curator, Harpers Ferry National Historical Park Library, kindly made available many of the historic photographs that appear in the Illustrations section of this report. Special thanks go to National Park Service Historian, Charles W. Snell, for his helpful advice on sources.

CHAPTER 1: Early Indian Inhabitants and Early European Settlers in the Shenandoah-Potomac River Area.

When the first Europeans entered the area of what is today Washington, Loudoun and Jefferson Counties, they found that it was already inhabited to a certain extent by two opposing Indian groups. For some time before the arrival of European settlers, the Catawbas from the south and the Delawares from the north had battled each other for dominance over the area. The two groups continued to contend with each other even after the arrival of the first European settlers.<sup>1</sup>

Although frontiersmen had penetrated the Shenandoah-Potomac River Area well before 1730, no permanent settlement was made near the junction of the two streams until after that date. The first person to settle near the confluence of the two rivers was probably Peter Stevens. In 1733, Stevens apparently settled on the present-day site of Harpers Ferry, West Virginia. The site was a part of Lord Thomas Fairfax's vast estate, and Stevens' position was that of a squatter. Stevens remained on the site until 1747.<sup>2</sup>

1 Thomas John Chew Williams, History of Washington County, Maryland, 2 vols. (Hagerstown: Runk and Titsworth, Publishers, 1906; reprint ed. Baltimore: Regional Publishing Company, 1968), I: 19. See also Millard K. Bushong, Historic Jefferson County (Boyce, Virginia: Carr Publishing Co., Inc., 1972), pages 9-10.

2 Joseph Barry, The Strange Story of Harper's Ferry With Legends of the Surrounding Country (Martinsburg, West Virginia: Thompson Brothers, 1903), pages 13-14. See also David T. Gilbert, Exploring Potomac Water Gap: An Outdoor Guide to History and Nature in and around Harpers Ferry (Knoxville, Maryland: The Outdoor Press, 1979), page 16.

Little is known about the history of the site of Harpers Ferry between 1733 and 1747. During that period, Stevens no doubt built a cabin of some kind and may have occasionally ferried a lonely traveler across the rivers at that point. By 1747, the site of Stevens' cabin was apparently well-known in Western Maryland and the Shenandoah Valley of Virginia. In that year, a Pennsylvania builder named Robert Harper entered into a contract with Quakers to erect a meetinghouse near the present-day site of Winchester, Virginia. While enroute to Virginia to erect the meetinghouse, Harper spent a night at an inn near Frederick Town, Maryland. During his stay at the inn, he met a man named Hoffman. Harper informed Hoffman that he intended to proceed to his destination by way of Antietam. Hoffman in turn informed Harper that there was a much shorter route to the Shenandoah Valley. Harper was advised to proceed by a route which would take him through what Hoffman called "The Hole." When Harper arrived at "The Hole," he met Peter Stevens. Harper was so impressed with the beauty and financial potential of the place, that he purchased the site from Stevens for fifty guineas. Since Stevens was a squatter, however, Harper realized that his bargain with Stevens amounted only to a good will gesture and that the real title to the land would have to be acquired from Lord Fairfax. Harper encountered little difficulty in obtaining real title to the land. As a squatter, Stevens had been a source of trouble for Lord Fairfax's agents and they were glad to be rid of him.<sup>3</sup>

<sup>3</sup> Barry, The Strange Story of Harper's Ferry, pages 13-14. See also Gilbert, Exploring Potomac Water Gap, page 16.

On April 25, 1751, Harper received a deed from Lord Fairfax for the 125 acre "Ferry Tract" that would eventually become the town that bears his name. He established a ferry on the Potomac and, within a short period, the area near the junction of the two rivers became known as Harper's Ferry.<sup>4</sup>

4. Charles W. Snell, HRS, The Business Enterprises and Commercial Development of Harpers Ferry's Lower Town Area, 1803 to 1861 (Washington:NPS, April 9, 1973), page 1. Years later, the apostrophe in Harper's Ferry was dropped and the name has since been spelled Harpers Ferry.

CHAPTER 2: The Dam 3 Area and the Harpers Ferry Story, 1751-1803.

The history of the Dam 3 Area is an integral part of the Harpers Ferry Story. In the preceding chapter, reference was made to the fact that Robert Harper, the founder of Harpers Ferry, received a patent for 125 acres of land on the Virginia side of the Potomac in 1751. On July 27, 1757, he received a patent for the Maryland end of his ferry. This patent was for a 20-acre tract of land called "Dear Bargain." In March of 1761, the state of Virginia officially granted Harper the right to operate his ferry.<sup>1</sup>

Although Robert Harper's ferry was firmly established by 1761, Harpers Ferry remained a rather insignificant settlement throughout the remainder of the eighteenth century. According to one source, as late as 1798, Harpers Ferry "was little more than a trading post occupied by a handful of residents." One of the major obstacles to Harpers Ferry's growth during the late eighteenth century was its rugged and isolated position. Many settlers no doubt used the ferry during the late eighteenth century, but few ventured to tarry at Harpers Ferry. Most of them continued into the Shenandoah Valley or to points farther west.<sup>2</sup>

Although few eighteenth century travelers were inclined to settle at Harpers Ferry, many of them were no doubt captured momentarily by the natural

1 Snell, HRS, The Business Enterprises and Commercial Development of Harpers Ferry's Lower Town Area, page 1.

2 Merritt Roe Smith, Harpers Ferry Armory and the New Technology: The Challenge of Change (Ithaca: Cornell University Press, 1977), page 33.

beauty of the place. One traveler who was captured by the beauty of the place was Thomas Jefferson. In his Notes on the State of Virginia (1785) Jefferson wrote the following poetic description of the area:

You stand on a very high point of land. On your right comes up the Shenandoah, having ranged along the foot of the mountain an hundred miles to seek a vent. On your left approaches the Potomac, in quest of a passage also. In the moment of their junction, they rush together against the mountain, rend it asunder and pass off to the sea. . . . The piles of rock on each hand, but particularly on the Shenandoah, the evident marks of their disruption and avulsion from their beds by the most powerful agents of nature, corroborate the impression. But the distant finishing which nature has given to the picture, is of a very different character. It is a true contrast to the foreground. It is as placid and delightful as that is wild and tremendous. . . . This scene is worth a voyage across the Atlantic.<sup>3</sup>

The natural beauty of Harpers Ferry probably left a lasting impression on another early American statesman, George Washington. The first president was perhaps more impressed, however, by the economic potential he saw in the area. Washington, unlike Jefferson, had a keen interest in business matters. Even before the Revolutionary War, Washington had been concerned about improving the Potomac in order to better tap the western trade. He had been the driving force behind the creation of the Potomac Company in 1784-85, and he became the first president of that company.<sup>4</sup>

3 Thomas Jefferson, Notes on the State of Virginia (London, 1787), pages 27-28, quoted in Manly Wade Wellman, Harpers Ferry Prize of War (Charlotte, North Carolina: W.J. McNally Publisher, 1960), page 2.

4 For a brief reference to one of Washington's visits to Harpers Ferry, see Snell, HRS, The Business Enterprises and Commercial Development of Harpers Ferry's Lower Town Area, page 3.

The purpose of the Potomac Company was to open the Potomac from tide-water to the "highest point of permanent navigation," which was thought to be at Fort Cumberland.<sup>5</sup> In the vicinity of Harpers Ferry, the Potomac Company made extensive improvements on both the Potomac and Shenandoah Rivers. Between 1785 and 1807, it opened "six different" skirting canals around the most difficult falls on the Shenandoah. Before these canals were opened, the Shenandoah had been almost impassable for the first seven or eight miles above its junction with the Potomac.<sup>6</sup> A section of one of these canals can still be seen just below the entrance to Harpers Ferry National Historical Park in West Virginia.<sup>7</sup> In 1815, the Potomac Company turned over its Shenandoah River rights to a new company known as the Shenandoah Company.<sup>8</sup> The new company proceeded to make further improvements on the Shenandoah. Among the improvements made were: the erection of a dam across the Shenandoah to furnish water for the Shenandoah Canal at Harpers Ferry; and the creation of a turning basin.<sup>9</sup> On the Potomac at Harpers Ferry, the Potomac Company

5 Walter S. Sanderlin, The Great National Project: A History of the Chesapeake and Ohio Canal (Baltimore: The Johns Hopkins Press, 1946), pages 28-29.

6 U.S. Congress. Senate, Letter From the Secretary of the Treasury, Transmitting a Report, Prepared in Obedience to the Resolution of the Senate of March 2, 1807, Respecting Roads and Canals, State Paper No. 250, 10th Cong., 1st Sess., 1808, pages 724-41; reprinted as S. Doc. 499, 31st Cong., 2d Sess., 1910, page 18. The canals around the falls of the Shenandoah contained a total of five stone locks.

7 Hahn, Towpath Guide to the Chesapeake and Ohio Canal, Section Three: Harpers Ferry to Fort Frederick, pages 6-7.

8 Sanderlin, The Great National Project, page 39.

9 Snell, HRS, The Business Enterprises and Commercial Development of Harpers Ferry's Lower Town Area, page 12. Snell suggests that the new company was not organized until "1824-25."

opened three "sluices" on the Maryland side between Dam 3 (the Government Armory Dam) and the ferry landing. In the late eighteenth and early nineteenth century, this area, which was about two miles long, was referred to as Shenandoah Falls. By the 1820s, however, it was generally referred to as Harpers Ferry Falls, perhaps to distinguish it from the several falls in the Shenandoah. Although the three "sluices" around Harpers Ferry Falls were simple channels, they were commonly referred to as canals. The longest channel was called the "long canal." All three of these channels lie at the foot of the mountain. The Potomac Company built a towpath along the foot of the mountain so that boats could be towed along this area when headed upstream.<sup>10</sup>

Well before the Potomac Company had completed its task of improving the navigation of the Potomac, President Washington made a decision that would shape the history of Harpers Ferry for the first half of the nineteenth century. Before 1794, the United States had obtained its arms through contracts with "importers or private manufacturers." The arms were stored in several old arsenals which were located in the states of Virginia, Pennsylvania, New York and Massachusetts. In order to get around certain problems that were perhaps inherent in the contract system,<sup>11</sup> President Washington

<sup>10</sup> Maryland, Message of the Governor of Maryland, Communicating the Report of the Commissioners appointed (in 1821) to Survey the River Potomac (Annapolis: J. Hughes Printer, 1822), pages 13, 67-69. See also American Historical Review Documents, "Washington and the Potomac: Manuscripts of the Minnesota Historical Society (1754) 1769-1796,I.," American Historical Review XXVIII (April 1923) pages 518-19, 717-20. One source believes that the "long canal" may have been incorporated into the bed of the Chesapeake and Ohio Canal. See Hahn, Towpath Guide to the Chesapeake and Ohio Canal, Section Three: Harpers Ferry to Fort Frederick, page 11.

<sup>11</sup> Smith, Harpers Ferry Armory and the New Technology, page 28.

recommended in 1794 that Congress provide for the erection of several national armories for the manufacture of arms. In early April 1794, Congress passed "an act to provide for the erecting and repairing of Arsenals and Magazines, and for other purposes." President Washington approved the act on April 2. The act authorized the President to select the sites for the establishment of "three or four arsenals with magazines as he shall judge most expedient." Each of the arsenals were to have "a national armoury." The President could decide at his discretion whether to keep the old arsenals at Springfield and Carlisle as part of the total number authorized by the act.<sup>12</sup> The President immediately decided to keep the Springfield arsenal and to erect the first national armory there. He then decided to build one large new arsenal rather than rebuild the three old arsenals which were located in Pennsylvania, New York and Virginia. The new arsenal was to be located at Harpers Ferry.<sup>13</sup>

Washington's decision to locate the new arsenal at Harpers Ferry was in line with his long-standing desire to promote the development of the Potomac Valley region. With the national capital already planned to be situated on the Potomac, Washington no doubt envisioned that the Potomac Valley would become a commercial region of national importance. The Harpers Ferry arsenal would be a substantial aid in the development of the region.<sup>14</sup>

12 Herbert H. Kissling, Historic Research Report, United States Musket Factory, 1796-1835 (Harpers Ferry National Monument, February 28, 1961), page 88.

13 Smith, Harpers Ferry Armory and the New Technology, pages 28-29.

14 Ibid., pages 27-28,30, and 32.

The Harpers Ferry arsenal project encountered many obstacles after President Washington had selected the site. Some of the obstacles were caused by the reluctance of Robert Harper's descendants (the Wager Family) to sell Harper's original 125-acre "Ferry Tract." An agreement was not worked out concerning this tract until 1796. In exchange for \$7,016.66, the Wager Family gave the federal government all of Harper's original 125-acre "Ferry Tract" except for a six-acre reservation and a three-fourth acre lot known as the "Ferry Lot." Further delay was caused by a legal dispute between the Wager Family and one Thomas Rutherford Jr. over the ownership of an adjacent 230-acre site known as the "Sawmill Tract." The project also suffered because of the strong opposition expressed towards it by two successive Secretaries of War in Washington's administration. John Adams' Secretary of War also was not enthusiastic about the project.<sup>15</sup>

The Harpers Ferry arsenal remained no "more than a paper project" until the mounting problems with France forced President Adams and the War Department to prepare for possible war in 1798. General Washington, who had never lost his enthusiasm for the project, was called upon to serve as commander-in-chief of a "provisional army." In that position Washington continued to stress the importance of executing the project. Work on the project was begun in the fall of 1798. By the end of 1799, a third of the Armory Dam (the First Dam No. 3) and most of the major buildings had been completed. The Armory Canal, however,

15 Ibid., pages 30-32. See also Kissling, HRR, United States Musket Factory, pages 3-8.

was not completed until 1801.<sup>16</sup>

Historians have encountered some difficulty in trying to determine exactly when the armory at Harpers Ferry began full-scale production of arms. According to one historian, muskets were undoubtedly being produced at Harpers Ferry between 1801 and 1808, but the "output was sporadic and certainly not determined to any extent by specific orders from the War Department." On the other hand, beginning in May of 1803, the War Department did specifically order the production of the 1803 "short" rifle at the Harpers Ferry Armory. The armory was therefore undoubtedly capable of full-scale production by 1803.<sup>17</sup>

16 Smith, Harpers Ferry Armory and the New Technology, pages 32, 36-42, 45, and 50. See also Kissling, HRR, United States Musket Factory, pages 19, and 68; and John Luzader, Historic Structure Report, History of the Construction of Dam No. 3 (National Park Service, 1961), page 1. Although Kissling and Luzader both say that the first Armory Dam was built in 1799, Smith has shown that the progress reports concerning the dam and the canal were sometimes contradictory. At the end of December 1799 the Paymaster at Harpers Ferry reported that only "a third of the dam" had been completed. Therefore, it is probably much safer to say that the dam was completed sometime between 1799 and 1800.

17 Smith, Harpers Ferry Armory and the New Technology, pages 52-54. According to Smith, some secondary sources have erroneously suggested that large quantities of arms were being produced at Harpers Ferry as early as 1798. See also Snell, HRS, The Business Enterprises and Commercial Development of Harpers Ferry's Lower Town Area, page 3. Snell says that "sustained production of weapons began in 1802."

CHAPTER 3: The Dam 3 Area and the Harpers Ferry Story, 1803-1828.

The establishment of the arsenal and armory at Harpers Ferry caused an immediate increase in the wealth and population of the town. By 1810, Harpers Ferry had a total population of 751.<sup>1</sup>

In the meantime, the government dam which had been hastily erected in 1799-1800, had become dilapidated by 1808. In that year Samuel Annin, the paymaster and storekeeper at Harpers Ferry, reported that the dam would soon fail and thereby interrupt the work at the armory. Annin and Arsenal Superintendent, James Stubblefield, agreed that a new dam should be erected across the Potomac just below the old dam. In late 1809, Annin reported that the old dam had failed and that he was presently supervising the construction of a new one. The new dam was apparently completed in 1809-10. Like the earlier dam, however, the new dam was poorly built. A considerable amount of money was spent to repair the structure during the years 1810-16. After an inspection of the armory in 1817, Decius Wadsworth, Colonel of Ordnance, complained of the unusual expenses incurred in maintaining the dam, and suggested that a new dam be built. In 1820, Colonel Wadsworth was able to obtain the necessary funds for the building of a new dam. Construction was begun on the structure (which was the third dam in twenty years) in July of 1820. The dam was completed in 1821.<sup>2</sup>

1 Snell, HRS, The Business Enterprises and Commercial Development of Harpers Ferry's Lower Town Area, page 10-A. There were 386 white males, 275 white females and 90 slaves.

2 Kissling, HRR, United States Musket Factory, pages 68-73. See also Luzader, HSR, History of the Construction of Dam No. 3, pages 1-5.

Soon after the third dam was completed, armory officials had to cope with a rather serious problem that was being caused by the Potomac Company's "long canal" on the Maryland side of the Potomac. Although the Potomac Company was nearly defunct by 1820, its skirting canals and channels were still being used by boatmen. The government dams at Harpers Ferry had always fed water to the armory canal on the Virginia side of the Potomac as well as to the Potomac Company's "long canal" (channel) near the Maryland shore. During extremely dry weather the water behind the dams would become very low, but apparently neither canal had had to be closed so that the other could receive sufficient water. When the third dam was built, however, the problem became more severe. Because of the inclination of the river bed, the Potomac Company's "long canal" continued to receive a sufficient supply of water during extremely dry weather while the armory canal received an insufficient supply. During the dry summer of 1822, the Superintendent of the Arsenal had a temporary "dam 2 feet high" constructed across the mouth of the Potomac Company's "long canal." This action closed off the water supply to the Potomac Company's canal and thereby enabled the armory to continue in operation.<sup>3</sup> The use of temporary dams, however, proved

<sup>3</sup> Maryland, Message of the Governor of Maryland, Communicating the Report of the Commissioners appointed (in 1821) to Survey the River Potomac, page 68. See also Luzader, HSR, History of the Construction of Dam No. 3, page 5. An 1833 War Department report said that the "long canal" had been "a sluice around the dam on the Maryland shore." See "Report of Captain Wm. G. McNeil on the condition of the Chesapeake and Ohio Canal, Boston, Massachusetts, December 1, 1833," in U.S. Congress, Committee on Roads and Canals, Report on the Chesapeake and Ohio Canal to accompany bill H.R. No. 94, H.R. Report No. 414, 23d Cong., 1st Sess., 1834, page 153.

to be a rather expensive remedy. The dams frequently had to be removed in order that boats could pass. By 1826, Arsenal Superintendent Stubblefield, had decided to seek permission from the Potomac Company to erect a lock gate at the upper mouth of the "long canal." The Potomac Company quickly granted Stubblefield permission to install the lock gate. The gate was installed and the problem was solved.<sup>4</sup> Two years later, however, officials of the Potomac Company notified Stubblefield that many boatmen were complaining that the lock gate had "rendered the navigation round the falls very dangerous and difficult." The Potomac Company therefore requested that Stubblefield either alter the gate or remove it altogether. Stubblefield immediately informed the Potomac Company that the problem could be remedied to the satisfaction of all parties concerned. A proposal for correcting the problem was submitted to the Potomac Company in February of 1828. The proposal was apparently approved by the Potomac Company a short time later.<sup>5</sup>

In addition to the problem caused by the Potomac Company's long canal, the government's dam soon was in need of repair. Two thousand dollars was

4 Before Stubblefield obtained permission from the Potomac Company, he had apparently raised the subject with General Mason, the president of the Potomac Company. According to Stubblefield, General Mason said that the Potomac Company was considering the possibility of employing a toll collector at Harpers Ferry. Mason agreed that the lock gate was needed and indicated that the toll collector could possibly be used to attend the gate during the two or three months each year when the gate might have to be closed. See Kissling, HRR, United States Musket Factory, page 75. See also Luzader, HSR, History of the Construction of Dam No. 3, page 5.

5 Kissling, HRR, United States Musket Factory, page 76. See also Luzader, HSR, History of the Construction of Dam No. 3, page 6.

spent in repairing damage caused by ice during the winter of 1826-27. By 1828, armory officials had decided that the dam was simply unable to supply a sufficient amount of water to run the government facilities. In mid-1828, construction was begun on a new dam. The new dam (the fourth in thirty years) was located just below the third dam. The third dam was apparently allowed to remain and the space between the two dams was filled in with gravel. The contract for the new dam was let to Lewis Wernwag. The dam was completed in 1828-29.<sup>6</sup>

6 Kissling, HRR, United States Musket Factory, pages 79-80. See also Luzader, HSR, History of the Construction of Dam No. 3, pages 6-7.

CHAPTER 4: The Dam 3 Area and the Coming of the Chesapeake and Ohio Canal, 1828-1834.

On August 15, 1828, the Potomac Company surrendered, by deed, its Potomac Valley rights to the Chesapeake and Ohio Canal Company. Well before 1929, the presence of the federal arsenal had turned Harpers Ferry into a major Potomac Valley town.<sup>1</sup> On the other hand, the Dam 3 Area on the Maryland shore, had probably experienced little development by 1828. In the early 1930s, the land which is now called the Dam 3 Area was owned by two well-known local families. The Wager Family, descendants of Robert Harper, owned a large chunk of land along the Maryland shore which included the present-day site of the Shenandoah River Lock and Lock 33.<sup>2</sup> The property adjoining the Wagers' land on the Maryland shore was owned by John and John McPherson Brien. The Brien property included the present-day sites of Locks 34, 35 and 36.<sup>3</sup>

1 The town's population in 1820 was 1,377. There were 1,255 whites, 24 free blacks and 98 slaves. See Snell, HRS, The Business Enterprises and Commercial Development of Harpers Ferry's Lower Town Area, page 10-A.

2. See Appendix A: "Property Map of the Chesapeake and Ohio Canal Co. from Brunswick to Antietam," drawn from original deeds by B.F. Mackall, ca. 1896, located in Maps and Plans Relating to the Chesapeake and Ohio Canal, 1826 to 1937, Record Group 79, Department of the Interior files, National Archives, Washington, D.C. At the same time, the Wager Family (James B. Wager, a sister named Sarah Ann Wager Swayne, and a brother named Gerald Bond Wager) jointly owned all of the private property remaining in the town of Harpers Ferry. See Snell, HRS, The Business Enterprises and Commercial Development of Harpers Ferry's Lower Town Area, page 8.

3 See Appendix A. The Briens owned a tremendous amount of land all along the Potomac shore from Sandy Hook to Antietam. Near the mouth of Antietam Creek, they owned and operated the Antietam Iron Works. For a brief discussion of John McPherson Brien and the Antietam Iron Works, see Williams, History of Washington County, Maryland, I: 247-48.

The only major development that occurred in the Dam 3 Area prior to the 1830s (except for the dams) was the construction of the Wager toll bridge across the Potomac in 1824. This "750-foot-long double wooden" structure was constructed for the Wager Family by the well-known local bridge and dam builder, Lewis Wernwag. The new toll bridge made the old ferry obsolete.<sup>4</sup>

The construction of the Wager toll bridge in 1824, coincided with a general movement to improve communication links in Western Maryland and the Shenandoah Valley of Virginia. The new bridge connected with the old road that ran from Harpers Ferry to Winchester. In 1830, the Harpers Ferry, Charles Town and Smithfield Turnpike Company was organized to construct and operate a toll road between Harpers Ferry and Smithfield. This toll road was opened between Harpers Ferry and Charles Town in 1831. In 1830, the Frederick and Harpers Ferry Turnpike Company was organized to build and operate a toll road between Frederick, Maryland and the Wager Bridge at Harpers Ferry. This road reached the Wager Bridge in 1832.<sup>5</sup>

At the same time that the two toll roads were being constructed towards Harpers Ferry, three larger transportation networks were also approaching the town. By early 1830, construction on the Chesapeake and Ohio Canal had

4 Snell, HRS, The Business Enterprises and Commercial Development of Harpers Ferry's Lower Town Area, page 11. Two other secondary sources claim that this bridge was built in 1829. See Hahn, Towpath Guide to the Chesapeake and Ohio Canal, Section Three: Harpers Ferry to Fort Frederick, page 5; and Gilbert, Exploring Potomac Water Gap, pages 16-17.

5 Snell, HRS, The Business Enterprises and Commercial Development of Harpers Ferry's Lower Town Area, page 11. See also the Virginia Free Press, August 4 and November 17, 1830 and January 5, and August 18, 1831.

proceeded as far as the Point of Rocks where it would be delayed for two more years because of injunctions obtained by the Baltimore and Ohio Railroad. By early 1830 the rails of the Baltimore and Ohio had been laid as far as Gwinn Falls.<sup>6</sup> On April 1, 1831, the Virginia General Assembly passed an act incorporating the Winchester and Potomac Railroad Company. The company was to construct a railroad from Winchester "to some point on the Potomac at or near Harpers Ferry." The company's subscription books were opened on April 30, 1831 and construction was probably begun shortly afterwards.<sup>7</sup>

Of the several transportation networks that converged on Harpers Ferry in the 1830s, the Chesapeake and Ohio Canal and the Baltimore and Ohio Railroad had the most influence upon the development of the Dam 3 Area. The story of the dispute between the railroad and the canal is well-known. Between 1828 and 1832, a series of injunctions prevented either work from proceeding beyond the Point of Rocks. In early January of 1832, the Maryland Court of Appeals confirmed the canal company's "right of prior location" in the Potomac Valley.<sup>8</sup>

In quick response to the favorable decision, the company's board of directors passed a series of resolutions on January 7. First, the Board ordered that a public notice be printed stating that contracts for the construction of the twelve miles between "the 84th Section (at the Point of

6 Williamsport Republican Banner, January 2, 1830. Construction on both the canal and railroad had been begun on July 4, 1828. See Sanderlin, The Great National Project, pages 59-60.

7 Virginia Free Press, May 5, 1831.

8 Sanderlin, The Great National Project, pages 83, 88.

Rocks), and the Dam next below Harpers Ferry" would be let on February 23, 1832. Second, the Board ordered that "at the same time" that the above notice was issued, another notice should be issued stating that contracts for the construction of the canal between Harpers Ferry and Williamsport would be let on April 4, 1832. This second resolution was an expression of the Board's desire to complete the first 100 miles within five years as was required by the company's charter. Third, the Board ordered the Engineers to survey and lay off the entire line from the Point of Rocks to Dam 5 above Williamsport. Fourth, the Board ordered the Engineers to adhere to the original plan of the canal "as high up the Potomac River as Harpers Ferry, and . . . thence. . . give to the Canal a breadth of fifty feet only." Fifth, the Board ordered that a public notice be printed stating that the contract for "the dam, across the river next below Harpers Ferry" would be let on February 1, 1832. Sixth, the Board ordered the Engineers to prepare and submit to the Board at its next meeting "the plan of a suitable Dam, across the Potomac, at the position hitherto, selected, near Harper's Ferry." Seventh, the Board ordered "that immediate steps be taken" to secure the land needed for construction between the Point of Rocks and the dam above Williamsport.<sup>9</sup> A week later the Board decided that it should take

9 Proceedings of the President and Board of Directors, C, 49-50. Unless otherwise noted, all C & O Canal manuscript source materials referred to in this report are deposited in the Department of the Interior files at the National Archives and are designated Record Group 79. See also Hagerstown Mail, February 3, 1832; and Sanderlin, The Great National Project, pages 90-91. The engineers were also requested to submit a plan for the Catoctin Creek Aqueduct at the next meeting of the Board. The contract for the Catoctin Creek Aqueduct was to be let on the same day as the contract for the Harpers Ferry Dam.

full advantage of the canal company's favorable position over the railroad. Therefore, on January 14, it directed the President of the canal company to let contracts for the first two miles above the Point of Rocks without giving the standard public notice. On the same day , the engineers presented the Board with the plans and specifications for the proposed Dam No. 3 which was to be built at Harpers Ferry. The plans and specifications were immediately adopted by the Board.<sup>10</sup>

Canal officials apparently wanted to give the Dam 3 contract to the well known local dam and bridge builder, Lewis Wernwag, of Harpers Ferry. As stated earlier, Wernwag had built the Wager toll bridge in 1824 and had recently completed the government's fourth Armory Dam in 1828-29. The canal company's clerk, John P. Ingle, sent Wernwag a copy of the public notice concerning the proposed dam shortly after the Board had ordered the notice printed. At that time, however, Wernwag was in Ohio, so the notice was received at Harpers Ferry by his son-in-law J.P. Shannon. Shannon informed Ingle that Wernwag would probably be interested in taking on the dam project. Shannon was not sure, however, if Wernwag would be able to return from Ohio "before the declaring of the contract." Shannon was inclined to accept the contract for Wernwag, but he preferred to rely on Wernwag's "superior judgment." He had already forwarded the notice to Wernwag at Millford, Ohio, and was awaiting a reply. Wernwag was apparently unable to return in time to submit a bid for the Dam 3 contract. He did eventually receive the contract for

10 Proceedings of the President and Board of Directors, C, 52-53,55. The plans and specifications have not been found. The engineers also presented the plans and specifications for the proposed aqueduct which was to be built across Catoctin Creek. These plans and specifications were also adopted by the Board.

the dam's guard lock.<sup>11</sup>

Before any contracts were let between the Point of Rocks and Harpers Ferry, the President and Board were notified that would-be contractors might encounter some difficulty in obtaining cement and in finding good quality stone. As early as January 18, the company's Superintendent of Masonry, A.B. McFarland, informed the Board that "the Shepherdstown cement establishment" would not be able to supply the line which was about to be let all the way to Williamsport. McFarland suggested that the Board begin "encouraging other individuals" along the proposed line of the canal to "commence the manufacture" of cement.<sup>12</sup>

The winter of 1832 turned out to be rather severe. Because of the severe weather, the Board was obliged in late January or early February to postpone temporarily the letting of contracts between Section 90, immediately above the Point of Rocks, and Section 112, at the head of Harpers Ferry Falls. About the same time, the Board also postponed the letting of contracts between the head of Harpers Ferry Falls and the proposed dam above Williamsport.<sup>13</sup>

The contract for the proposed dam at Harpers Ferry was finally let on February 25, 1832. The contract was awarded to William Easby "with the condition that the form or direction of the Dam in crossing the river -- should

11 Shannon to Ingle, January 17, 1832, Wernwag to Mercer, September [22] 27, 1832, and Wernwag to President and Board of Directors, April 2, 1833, in Ltrs. Recd., C & O Co.

12 McFarland to Mercer, Janaury 18, 1832, Ltrs. Recd., C & O Co.

13 Cruger to Ingle, February 17, 1832, Ltrs. Recd., C & O Co. See also Sanderlin, The Great National Project, pages 90-91; and Holman to Ingle, February 27, 1832, Ltrs. Recd., C & O Co.

be prescribed by the Engineer."<sup>14</sup>

The contracts for Section 90 (immediately above the Point of Rocks) through Section 112 (at the head of Harpers Ferry Falls) were finally let on March 14, 1832. Of these twenty-three sections, numbers 109, 110, 111 and 112 were within the present Dam 3 Area. Section 109 was awarded to Thomas and Samuel McCoy. Section 110 was awarded to Bernard Collins. Section 111 was let to H.A. and J. Stewart, and Section 112 was awarded to Henry Smith.<sup>15</sup> On the same day, the Board awarded Lewis Wernwag the contract to construct the guard lock for the proposed dam at Harpers Ferry. Wernwag's contract stipulated that the guard lock was to be built "at the price which the Engineer had estimated as the value of" the proposed structure.<sup>16</sup> Two days later (March 17), the Board proceeded to let contracts for the lift locks and culverts which were to be located between the Point of Rocks and Harpers Ferry. The contract for Lock 33 was awarded to James O'Brien and the contract for Locks 34 and 35 was awarded to Henry Smith. The contract for Lock 36, which fell within Section 113, was not declared until June 2, 1832. This contract was awarded to Frieze (sometimes spelled Fries) and McDonnell. The contract for Section 113 was awarded to John Moonan.<sup>17</sup>

14 Proceedings of the President and Board of Directors, C, 78.

15 Ibid., C, 104-105, 225, 289, 318, 433. See also McCoy to Ingle, January 28, 1832, Ltrs. Recd., C & O Co.

16 Proceedings of the President and Board of Directors, C, 105. See also Wernwag to Mercer, September 27, 1832, Ltrs. Recd., C & O Co. Wernwag had just returned from Ohio.

17 Proceedings of the President and Board of Directors, C, 109, 160-61.

The original contractors for the sections and structures within the Dam 3 Area were somewhat tardy in proceeding with their works. Much of their tardiness, however, may have been due to factors beyond their control. The five sections (109, 110, 111, 112, and 113) within the Dam 3 Area were probably classified as difficult sections.

Section 109 was 3,060 feet in length. Approximately "360 feet above the lower end of the section" would be located the following structures: Lock 32 of eleven feet lift; a Guard Lock of the same height as the lift lock; and the proposed canal dam. The section was to pass through the abutment of the Wager Toll bridge. At the bridge abutment, the canal bed was to "be reduced nearly to the width of a lock." Lock 33 was to be located "immediately above the" abutment "of the bridge. Between Locks 32 and 33 a large proportion of the excavation would "be of rock." Above Lock 33 the excavation would also contain a large proportion of rock. A part of the excavation above Lock 33 would be of solid rock, but a considerable portion of it would be "quarry rock mixed with earth excavation along a steep hillside." Much of the embankment was to be obtained from the hillside above Lock 33. Some of the "puddling," however, would probably have to be hauled from "a considerable distance." A "vertical wall" was to be built for "nearly the whole length of the section." The road (Frederick and Harpers Ferry Turnpike) which ran parallel with the section, would have to be moved "for the whole distance" of the section. On the other hand, the contractor was "required to interrupt as little as possible the public travel, during the

construction of the canal." The engineers had made tentative plans to allow boats "to enter the River at the Guard Lock" down at the dam. A towpath was to be constructed "along the River shore passing under the bridge." Boats would be able to lock back into the canal "immediately above the bridge." These plans never materialized because the dam was never constructed below <sup>18</sup> Harpers Ferry.

According to canal engineers, Section 110 would pass over "difficult" ground. The excavation would contain "a great proportion of rock." Much of the earth needed for embankment would have to come "from the hillside above the canal." The "county Road," which ran parallel with the section, would have to be "removed for the entire length of the Section." The county road apparently occupied ground on which the canal's "berm" bank would be placed. About "two thirds of the Section" would "require a protection wall." The stone for the protection wall would come from the excavation. The "foundation of the protection wall" would be situated in the old "boat channel [the Potomac Company's old long canal]." The contractor was therefore "required to interrupt as little" as possible "the public travel" on the county road and in the boat channel. <sup>19</sup>

18 See Appendix B: Profile Maps of Section 109 found in Drawings and Other Records Concerning Construction, 1828-1937, C & O Co. The profile maps that appear in this report as Appendices B, C, D, and E, were made in late 1831 or early 1832 by Alfred Cruger. See Cruger to Mercer, March 3, 1832, Ltrs. Recd., C & O Co.

19 See Appendix C: Profile Map of Section 110 found in Drawings and Other Records Concerning Construction, 1828-1937, C & O Co. I was unable to find out exactly when the "county road" was constructed through the Dam 3 Area.

Section 111 was to include Lock 34. According to canal engineers, this section would "require walling nearly its whole length." The earth needed for embankment would be obtained in part from the excavation and in part from the hillside. The engineers planned to build "a Road on the Berm Side at the lower end of this section. The road was only to be six chains in length. This road was no doubt a replacement for that part of the county road which had to be removed along this section. The "foundation of the protection wall" along this section was to be situated "in part of the present boat channel." Again, the contractor was "required to interrupt as little" as possible the public travel on the county road and in the boat channel.<sup>20</sup>

Section 112 would include Lock 35 and the feeder lock at the government dam. Since the canal company's dam was to be located farther downstream, the feeder lock at the government dam was originally planned for "temporary" use only. A protection wall was to be built for about two-thirds the length of Section 112. The old Potomac Company had probably built a protection wall in part of this area. A portion of the new wall would use the old wall as a foundation. The remainder of the new wall would be "founded in the bed of the river." Most of the earth for embankment could be obtained from the excavation. Since "a part of the protection wall" would be located in the "present boat channel," the contractor was "required to cause as little interruption to the river navigation as possible."<sup>21</sup>

20 See Appendix D: Profile Map of Section 111 found in Drawings and Other Records Concerning Construction, 1828-1937, C & O Co.

21 See Appendix E: Profile Map of Section 112 found in Drawings and Other Records Concerning Construction, 1828-1937, C & O Co.

The engineers' profile map for Section 113 is missing from the canal company's records at the National Archives. It is probably safe to say, however, that Section 113 would have been quite similar to Section 112. Like Section 112, Section 113 probably passed through a significant amount of "bottom land" and was therefore less rocky than Sections 109, 110, and 111. Since Section 113 was situated farther back from the river than any of the other four sections, it may not have required any protective walling.

Construction within the Dam 3 Area was also delayed because of a controversy that arose over the question of exactly where the dam should be placed. When the contract for the dam was let to William Easby on February 25, 1832, the canal engineers were apparently in agreement that the dam should be placed at Lock 32 approximately one-fifth of a mile below the confluence of the two rivers. A letter to the President from Resident Engineer Alfred Cruger, dated March 1, indicates that the engineers had definitely decided to place the dam at Lock 32. Cruger indicated that the engineers had also debated the question of how best to pass the canal from Lock 32 down through the abutment of the Wager toll bridge to Lock 33. Cruger informed the President that he (Cruger) had decided on a plan which was in conformity with the profile maps that had already been submitted to the Board.<sup>22</sup> Cruger's plan was to erect a guard lock of eleven feet lift at the dam. Alongside the guard lock he would erect a regular lift lock also of eleven feet lift. This height

22 The profiles mentioned by Cruger were undoubtedly the ones shown in Appendices B, C, D, and E of this report. The profile map of Section 109 says pretty much the same things that Cruger says in this letter. See Appendix B.

would probably alleviate the necessity of having "to construct an additional height of bank to form a protection or guard bank." The canal would pass through the bridge abutment at this level. Immediately above the bridge, the canal would enter a lift lock (Lock 33) of only seven feet lift. According to Cruger, this would "permit an elevation of 10 ft from the water surface of the canal to the lower face of the bridge." The bridge could thus remain in place "until boats of such elevation as may hereafter be used, shall require a pivot bridge." The two locks (34 and 35) required "to elevate the canal to its proper height above the river at the head of the fall [Harpers Ferry Falls] would also be of 7 ft lift." Cruger suggested that it would "be much cheaper to use the river" to transverse the 1,000 feet between the guard lock and Lock 33. He hastened to add, however, that such an arrangement might present "some inconveniences at times." Yet, during periods of low water, "the gates of the guard lock" could "be thrown open" and "a free intercourse" could "take place, without the delay of locking from the basin [river basin created by the dam] into the canal."<sup>23</sup>

The contractors in the Dam 3 Area made little progress on their works in March of 1832. On March 30, Henry Smith notified the Board he had not had any luck in finding face stone for Locks 34 and 35. Thus far he had looked at quarries on the Brien and Strider properties. Smith said that he and "Mr. Wernwag" had just "commenced" to examine "another place on Mr. Briens land in which he has grate [sic] confidence." Smith and Wernwag had already made an "agreement with Mr. Brien" to use the quarry. If the stone proved

23 Cruger to Mercer, March 3, 1832, Ltrs. Recd., C & O Co.

to be useful, Smith and Wernwag would have to build a road to the quarry and then boat the stone "up stream through the olde Canal."<sup>24</sup> Smith was unable to get started on his locks. In a letter dated April 10, Resident Engineer Alfred Cruger informed the Board that Smith had indicated "his intention of resigning his contract" for Locks 34 and 35. On April 14, Smith's contract was declared abandoned and on April 21, the Board relet the two locks to Frieze and McDonnell.<sup>25</sup>

In his letter to the Board, dated April 10, Resident Engineer Cruger also informed the Board that he had "thought it expedient not to press the commencement of the construction of Dam No. 3 this season." Instead, he had "merely" urged "the contractor [William Easby] to procure his timber and have it in readiness for the winter & Spring freshets." Cruger had adopted this course for several reasons. First, he felt that it would be "impracticable, to cut & raft the timber from the head waters of the Potomac this summer or the next autumn." Second, he felt that "it would be highly improvident to commence the construction" of the dam "in the fall." Third, he felt that it would be "equally impossible to obtain the timbers in [the]

24 Smith to President and Board of Directors, March 30, 1832, Ltrs. Recd., C & O Co. Wernwag was looking for stone for his two locks. On March 14, 1832, Wernwag had been awarded the contract for the guard lock at the proposed dam, and on March 17, he had received the contract for Lock 32. See Proceedings of the President and Board of Directors, C, 105, 109.

25 Cruger to President and Directors, April 10, 1832, Ltrs. Recd., C & O Co. See also Proceedings of the President and Board of Directors, C, 124, 125. For a copy of Frieze's and McDonnell's contract and Specifications for Lock 34, see Appendix F taken from Ltrs. Recd., C & O Co.

immediate vicinity of the Dam." The dam, according to Cruger, could "be built in 3 months after the timber is delivered." Therefore, if construction could begin "in April 1833," it could "be finished in the following July."<sup>26</sup>

In the meantime, no work had yet been done on Lock 33. The original contract with James O'Brien was apparently declared abandoned sometime in March or April of 1832. The lock was relet to the partnership of Charles McCann and John Lafferty. Although this partnership was soon dissolved, McCann continued to maintain the contract. In a letter dated May 8, McCann informed the Board that "after a through [sic] examination for stone & other things required to construct Lock No. 33," he had concluded that his contract price was far below the actual costs. If the Board would not consider increasing the price, he would have to abandon the work. At this time, McCann had "done nothing of any account. . . towards the construction of the Lock." President Mercer declared the contract abandoned on May 20, 1832.<sup>27</sup>

In early June of 1832, the engineers and the Board began to discuss the possibility of changing the location of the proposed dam at Harpers Ferry. On June 4, the Board directed Resident Engineer Cruger to report on "the advantages and disadvantages of changing the location of the Dam contemplated near to below Harpers Ferry, to or in the vicinity of the U States dam at the

26 Cruger to President and Directors, April 10, 1832, Ltrs. Recd., C & O Co.

27 McCoy [Lafferty] to Ingle, April 27, 1832, McCann to Mercer, May 8, 1832, and Fisk to President and Directors, May 5, 1832, Ltrs. Recd., C & O Co.

Head of Harpers Ferry falls." Cruger was also to report on the expediency of constructing "a jettee below the Shenandoah for the accommodation of the trade of that river, with the necessary locks to effect the junction between that Canal and the Potomac near the proposed jettee."<sup>28</sup>

This renewed discussion concerning the location of the dam had probably erupted when armory officials voiced their opposition to the erection of any dam below the armory dam at Harpers Ferry. On July 2, 1832, the Board requested one of its members to "confer with the Secretary of War" on "the subject of raising" the government's armory dam at Harpers Ferry, "so as to feed the Canal from that place."<sup>29</sup>

On July 7, the Chief of Ordnance within the War Department, sent the Superintendent of the Harpers Ferry Arsenal a copy of a canal company report concerning the proposed dam.<sup>30</sup> The Chief of Ordnance, Lieutenant Colonel George Bomford, requested Arsenal Superintendent, George Rust, to comment on the report. Rust in turn called upon the director of the Rifle Works, John Hall, to express his views on the proposed dam. Hall submitted a "three page report" which recommended that the government take steps to prevent the canal company from building a dam below the armory's Musket Factory. According to Hall, "the top of the dam would be only two and a

28 Proceedings of the President and Board of Directors, C, 162.

29 Ibid., C, 179. Luzader suggests that canal company officials were interested in using the government's armory dam as a means of saving money. See Luzader, HSR, History of the Construction of Dam No. 3, page 8.

30 This was probably the report which Resident Engineer Cruger had prepared in response to the Board's order of June 4.

Half feet below the level of the bottom of the new or lower grinding mill." Every "rise of the water in the river of about two feet would put this mill out of business." A "rise of more than two feet would make the upper grinding mill useless." These "rises in the river," according to Hall, occurred quite often. The proposed dam would therefore cause continuous disruptions in the operation of the armory works. In order to prevent the chance of such disruptions, Hall recommended that the government finance (in part, if not the whole project) the construction of a new dam above the armory works "even though it would be primarily of benefit to the Canal."<sup>31</sup>

The canal company and government officials apparently reached an agreement in mid or late July. On July 24, the Board passed the following resolution which suspended the construction of the proposed dam:

Resolved - That the construction of the Dam (No. 3) proposed to be erected below the Shenandoah falls be suspended, until further orders and that the Resident Engineer be instructed to effect such a connection between the Canal at the head of Harpers Ferry falls and the U.S. dam thereupon, as will suffice to make that supply the Canal with water from thence to Seneca feeder.<sup>32</sup>

Shortly after the construction of the proposed dam had been suspended, the Board proceeded to act on the several changes that were caused by the

31 Kissling, HRR, United States Musket Factory, page 82. See also Luzader, HSR, History of the Construction of Dam No. 3, page 8. At least one of the contractors on the canal had criticized the proposed location of the dam. See Wernwag to Mercer, September 27, 1832, Ltrs. Recd., C & O Co.

32 Proceedings of the President and Board of Directors, C, 191-92.

abandonment of the dam project. Lewis Wernwag, who had originally been contracted to build the guard lock at the proposed dam, was now given the contract for the Shenandoah River Lock. Wernwag was also awarded the contract for Lock 33, which had been abandoned by Charles McCann in late May.<sup>33</sup> On August 18, 1832, the Board awarded Frieze and McDonnell the contract for "the construction of a Gate or Guard Lock at the Head of Harpers Ferry falls." This guard lock, which became known as Guard Lock No. 3, was to connect the canal with the government dam.<sup>34</sup>

Soon after the question of the proposed dam was temporarily settled, work in the Dam 3 Area was again delayed. This time work was delayed because of an outbreak of Asiatic cholera. The first case of cholera appeared on the line of the canal in late August near Harpers Ferry. The disease soon spread southward along the line to the Point of Rocks. Eventually it spread upriver to Williamsport. In a letter dated September 4, Henry Boteler informed the Board that before his letter reached Washington, "the whole line of [the] canal from the point of rocks to Wms Port" would "be abandoned by the contractors and laborers." According to Boteler, the cholera had "proved fatal in almost every case." On "friday last" there had "been upwards of 30 deaths" in the vicinity of Shepherdstown, and all the workers in that vicinity were "flying in every direction." Boteler's

33 Wernwag to Mercer, September 27, 1832, Ltrs. Recd., C & O Co.

34 Proceedings of the President and Board of Directors, C, 207. Since the construction of the proposed dam below Harpers Ferry was suspended, the government armory dam became known as Dam No. 3.

own men at the "lime factory" had "taken the alarm," and had applied "for their discharge."<sup>35</sup> In a letter dated September 6, the contractor of Section 109, Thomas McCoy, reported that during the previous week his "men had got Discouraged from several Deaths near them." McCoy, himself, had contracted what he called "a small touch of the Billuos [sic]."<sup>36</sup>

The canal company was not slow in taking steps to deal with the cholera epidemic. In a letter written from Harpers Ferry on August 27, President Mercer informed the Board that "the gathering of the hands in parties and their seeming determination to abandon their work" had convinced him that the company should procure a hospital for the sick.<sup>37</sup> Four days later, the Board held a special meeting to discuss the problem. Before it adjourned, it authorized the President "to rent a suitable building near Harpers Ferry to be occupied as a Cholera Hospital." The Board also ordered that a portion of the company's "contingent fund" be used to aid the sick. Assistant Engineer Charles B. Fisk was authorized to use up to \$500.00 of contingent fund money "for the relief of such laborers as may be attacked by disease, whilst employed on the canal." On the same day, the Board authorized Joseph Hollman of Williamsport (who was then working on Dam 4 below Williamsport) to rent a house at Harpers Ferry to be used as a hospital. Hollman was also authorized to look into the possibility of establishing a hospital at the

35 Boteler to Ingle, September 4, 1832, Ltrs. Recd., C & O Co.

36 McCoy to Ingle, September 6, 1832, Ltrs. Recd., C & O Co.

37 Mercer to Ingle, August 27, 1832, Ltrs. Recd., C & O Co. Mercer indicated that it would be expedient to rent an abandoned mill owned by Casper Wever to use as a hospital. According to Sanderlin, however, Wever's terms "were so exorbitant and repulsive that they did not receive consideration." See Sanderlin, The Great National Project, page 96.

In a letter dated September 3, President Mercer informed the Board that he had just returned to his home at Leesburg from Harpers Ferry. According to Mercer, the four important sections below the head of Harpers Ferry Falls (Sections 109, 110, 111, and 112) had been nearly abandoned by the laborers. Henry Smith and Frieze and McDonnell were the only contractors with any work force in the Dam 3 Area. Mercer was sure that if two hospitals were not soon established between the Point of Rocks and Harpers Ferry, those sections would be the last ones completed "on the canal below Williamsport." With the aid of the two hospitals, the sections between the Point of Rocks and Harpers Ferry could still "be completed by the ensuing spring." Mercer wrote:

If the Board but imagine the panic produced by a mans [sic] turning black and dying in twenty four hours in the very room where his comrades are to sleep or to dine they will readily conceive the utility of separating the sick, dying and dead from the living.

Mercer suggested that the hospitals be supported by what would today be called "group insurance." Each laborer would agree to have the contractors withhold " $\frac{1}{4}$  of a dollar per month of his pay" for "the use of the hospital fund." The canal company would then be burdened with only "the rent and outfit of each hospital." Mercer estimated that the rent and "outfit" of each hospital would be approximately \$500.00. A similar type of insurance

program had been successfully tried by the workers on the James River Canal, and Mercer felt that it would work on the Chesapeake and Ohio.<sup>39</sup>

On September 8, the Board authorized the President "to provide two hospitals, if he shall deem it expedient." One of the hospitals was to be located near Harpers Ferry and the other was to be located near the Point of Rocks.<sup>40</sup> According to Sanderlin's history of the canal, crude hospitals were soon established in several rented cabins near Harpers Ferry "and in a large shanty at section 112 west of Harpers Ferry."<sup>41</sup> These buildings were used as temporary quarters. A permanent facility was established at Harpers Ferry in late September.<sup>42</sup> There is no clear indication in the canal company's records that the hospital planned for the Point of Rocks was ever built.

The uncertainty over the location of Dam 3, the scarcity of quality stone and lime,<sup>43</sup> the cholera epidemic, and the canal company's poor financial condition, were all factors which contributed to a general demoralization of the workers and contractors. Near the end of the cholera epidemic, Lewis Wernwag transferred his contracts for the Shendandoah River Lock and for Lock 33 to Littlejohn, Thompson and Company. Wernwag had originally been

39 Mercer to Ingle, September 3, 1832, Ltrs. Recd., C & O Co. See also Sanderlin, The Great National Project, pages 95-97.

40 Proceedings of the President and Board of Directors, C, 214-15.

41 Sanderlin, The Great National Project, page 96.

42 For further references, to a shortage of cement and quality stone, see Cruger's Report to President and Directors, June 8, 1832, McFarland to Ingle, June 20, 1832, and Cruger's Report to President and Directors, December 20, 1832, in Ltrs. Recd., C & O Co.

awarded the contract to build the guard lock at the proposed Dam 3 below Harpers Ferry. When the plans for this dam were virtually abandoned in late May or early June, Wernwag was given the contract for the Shenandoah River Lock and for Lock 33. Wernwag maintained that he was injured financially by the change but agreed to work on the two locks. He continued to encounter considerable difficulty in finding quality stone. Just before the outbreak of the cholera epidemic, however, he had "opened a good quarry" which contained sufficient stone to complete not only the river lock and Lock 33, but also Lock 32. According to Wernwag, this quarry was located up the mountain "in Loudon." When the cholera epidemic struck, all of Wernwag's men (except for those working at the quarry) deserted the line. It was after the epidemic that Wernwag offered to transfer his contracts to Littlejohn and Thompson.<sup>43</sup>

In a letter dated September 17, 1832, the contractor for Section 112, Henry Smith, complained to the Board that he was being injured financially because of changes made on his section. These changes were apparently caused by the abandonment of the dam project. Smith complained because his section had been moved farther away from the hillside. The change, according to Smith, would deprive him of the hillside excavation and cause him to have to bring in material for embankment. The material for embankment would have to be hauled for "nearly three fourth of a mile and placed in the river where" it would "be at all times Subject to the opperation [sic] of A

43 Wernwag to Mercer, September 27, 1832, and Wernwag to President and Directors, April 2, 1833, in Ltrs. Recd., C & O Co.

Strong Current & occasional freshets." In addition, bridges would have to be "erected over the old Canal [the Potomac Company's Long Canal]" to enable him to transport the embankment material to the river. Smith indicated that his zeal had been weakened because the Board had procrastinated before making the decision to change his section. He claimed that he was not notified of the changes until July 30. Smith's complaint was referred to Resident Engineer Cruger and certain price changes were eventually made in Smith's favor.<sup>44</sup>

In addition to the several problems that delayed construction in the Dam 3 Area in 1832, the canal company also encountered difficulty in dealing with the landowners in the area. The landowners refused to sell their land voluntarily, so the company's lawyer had to initiate condemnation proceedings. The first property condemned for a right-of-way through the Dam 3 Area was the Wager Family's property. According to Sanderlin's history of the canal, one of the Wager brothers (Gerald B. Wager) was "a bitter opponent of the canal company and the family sought the highest possible damages. An inquisition was held on the property on June 29, 1832. The jury awarded the Wager Family \$5,500.00. The company immediately filed an objection to the certification of the inquisition. The court, however,

44 Report of Cruger to President and Directors, November 5, 1832, in Ltrs. Recd., C & O Co. See also Proceedings of the President and Board of Directors, C, 224. The company, for example, agreed to pay Smith for any bridges that the Engineer agreed were necessary for crossing the "old canal."

affirmed the inquisition on April 6, 1833.<sup>45</sup>

The other property needed by the canal company for a right-of-way through the Dam 3 Area was owned by the Brien Family. An inquisition was held on this and other Brien properties on July 15, 1833. Since the Briens owned property all along the river from Frederick County to above Antietam Creek, it is difficult to determine how much they were awarded for land within the Dam 3 Area. From Frederick County to above Antietam Creek, the company permanently condemned 147 acres of the Briens' property and condemned temporarily another 4 acres. The jury awarded the Briens a total of \$13,007.50

45 Washington County Land Records, Liber 20, folio 43. See also Deeds and Other Records Concerning Land, 1828-1873, C & O Co; Notebook entitled "Lands in Washington County Maryland," page 11, in Deeds and Other Records Concerning Land, 1828-1873, C & O Co; and Sanderlin, The Great National Project, page 91. By 1833 one of the Wager brothers (James B. Wager) was nearly bankrupt. In August of 1833, the company's land attorney, William Price, informed the company of the various "liens upon the interest of James B. Wager in the land near Wager's bridge." The Board therefore ordered "that the portion of the award on the land of Wager's Heirs near Harpers Ferry accuring to James B. Wager be paid, upon the execution of a release from the wife of J.B. Wager -- and from Peter Wager her trustee." According to one source, James Wager declared bankruptcy in the fall of 1834. See Proceedings of the President and Board of Directors, C, 415; and Snell, HRS, The Business Enterprises and Commercial Development of Harpers Ferry's Lower Town Area, page 8. In July and August, the canal company paid \$1,833.34 to J.B. Wager; \$1,833.33 to G.B. Wager; and \$1,833.88 to N.H. Sawyer. Sawyer undoubtedly was the trustee for Sarah Ann St. Clair Wager [Swayne]. At this time, Sarah was apparently unmarried. See Notebook entitled "Lands In Washington County, Maryland," page 11, in Deeds and Other Records Concerning Land, 1828-1873, C & O Co.

for the condemned property.<sup>46</sup>

The end of 1832 found the contractors still proceeding with their works in the Dam 3 Area. In December of 1832, the Board ordered the closing of the Potomac Company's "long canal" so that the sections within the Dam 3 Area could be completed. Resident Engineer Cruger was to have the following notice published in the local newspapers:

Public Notice is hereby  
given that it has become necessary to  
suspend the navigation through the 'Long  
Canal' of the Old Potomac Company, in  
order to complete the sections of the  
New Canal, between the Guard Lock at  
the Head of the Harpers Ferry Falls,  
& the entrance Lock, opposite the mouth  
of the Shenandoah River, & in order to  
enable those navigating the Potomac  
residing above Harpers Ferry who may  
have Boats below that point, to order  
their return; the navigation will not  
be closed until the 25th inst, & Boat-  
men are hereafter recommended to tranship  
at Harper's Ferry, until the Part of  
the Ches. & Ohio Canal above mentioned  
be prepared for use of which due notice  
will be given.<sup>47</sup>

The first section to be completed within the Dam 3 Area was Section 113. This was without a doubt the least difficult of the sections within the Dam 3 Area. The final estimate for work done on this section was approved by the Board on January 17, 1833.<sup>48</sup>

46 Deeds and Other Records Concerning Land, 1828-1873, C & O Co. See also Washington County Land Records, Liber 20, folio 55; Price to Ingle, July 20, 1833, and Cruger to Ingle, June 18, 1833, in Ltrs. Recd., C & O Co.

47 Cruger to Ingle, December 10, 1832, Ltrs. Recd., C & O Co.

48 Proceedings of the President and Board of Directors, C, 267.

Although canal construction had been slowly proceeding west from the Point of Rocks since early 1832, the canal company was still being urged to allow for the accommodation of the Baltimore and Ohio Railroad along the Maryland shore. Following the favorable Maryland Court of Appeals ruling in early 1832, the canal company turned down several proposals by the Baltimore and Ohio Railroad Company for joint construction from the Point of Rocks to Cumberland. The railroad directors then turned to the state legislature which responded by requesting the canal company to consent to joint construction to Harpers Ferry "as a favor to the state." The canal company felt that only one transportation system should be built in the Potomac Valley. Therefore, it held fast to an earlier proposal that the railroad company should combine its resources with the canal company for the construction of the canal to Cumberland. The railroad, on the other hand, would have to cross the river at the Point of Rocks. Later, the canal company offered a new proposal that the railroad be constructed on the riverside of the canal. The railroad company quickly rejected this latter proposal because of the "economic disadvantages" it would suffer by having the canal "between it and the countryside."<sup>49</sup>

The stubborn position taken by the canal company in 1832 caused a hostile reaction among the public and in the legislature. Therefore,

49 Sanderlin, The Great National Project, pages 98-99.

in early 1833, the canal company, now hard-pressed for financial aid, decided "to make peace with Maryland" by accepting some kind of compromise with the railroad company. The compromise was worked out by the Maryland Legislature. It allowed the railroad to construct its track to Harpers Ferry where it would then have to cross over into Virginia. In return the railroad company agreed to purchase 2,500 shares of canal stock. The railroad company also agreed to pay the canal company \$266,000.00 in exchange for the grading of four and one tenth miles of extremely narrow sections between the Point of Rocks and Harpers Ferry.<sup>50</sup> The terms of the compromise were approved by the Board on May 7, 1833. The stockholders of the canal company approved the compromise on May 9.<sup>51</sup>

Soon after the compromise had been approved, the Board proceeded to accept proposals for the grading of the four and one-tenth miles of narrow railroad right-of-way between the Point of Rocks and Harpers Ferry. On May 29, the Board awarded Thomas McCubbin the contract for grading the first two miles below the Harpers Ferry bridge. McCubbin was not to grade, however, any portion of the railroad which was already under joint construction by the railroad company and the Frederick and Harpers Ferry Turnpike Company.<sup>52</sup> McCubbin apparently never graded the area opposite

50 Ibid., page 102. See also Proceedings of the President and Board of Directors, C, 341-45, 350. The full text of the compromise appears in Appendix G of this report.

51 Sanderlin, The Great National Project, page 102. See also Proceedings of the President and Board of Directors, C, 341-45, 350; and Appendix G of this report.

52 Proceedings of the President and Board of Directors, C, 358.

Section 109. On August 2, 1833, the Board awarded H. [ugh] A. Stewart the contract for grading this area of railroad. Stewart was paid the final estimate for this work on August 30, 1833.<sup>53</sup>

In the meantime, officials at the government armory had become worried about the state of the armory dam which had been completed back in 1828-29. Concern over the dam's condition had first been expressed in mid-1832. On July 10, 1832, Arsenal Superintendent, George Rust, informed the Chief of Ordnance that "the freshets of the last winter and spring" had "removed a considerable portion of the dam." The dam would have to "be repaired in order to prevent the usual operations of the Armory" from "being suspended from the want of water." Rust suggested that certain funds which had been appropriated for improving the armory canal, should instead be used to repair the armory dam. Chief of Ordnance, George Bomford, apparently agreed with Rust's suggestion. On July 12, he granted Rust permission to use armory canal funds to repair the dam.<sup>54</sup> In early 1833, armory officials moved to further improve the dam in anticipation of the opening of the Chesapeake and Ohio Canal. The major concern of armory officials was still the possibility that the canal company would eventually build a dam below Harper's Ferry. A "Special Estimate for 1833" suggested that the erection of such a dam "would reduce the power of the water available to the [armory] works." The government would therefore have to build a "higher" and "more extended"

53 Ibid., C, 408, 421.

54 Kissling, HRR, United States Musket Factory, page 83. See also Luzader, HSR, History of the Construction of Dam No. 3, page 9.

dam in order to "counteract" the harmful effects of the canal company's dam. The "Special Estimate for 1833" recommended that \$5,000.00 be used to repair and extend the armory dam. On March 17, 1833, Arsenal Superintendent Rust was notified that \$5,000.00 had been appropriated for the repair and extension of the dam. The work was completed before the end of 1833.<sup>55</sup>

During the summer of 1833, cholera again struck the line of the canal. This time the disease first appeared on the line near Williamsport. Eventually, however, it spread downriver to Harper's Ferry. Although the cholera epidemic of 1833 was not as severe as the epidemic of the previous year, it took its toll in lives, and hindered the progress on the canal. The epidemic disappeared in late September or early October of 1833.<sup>56</sup>

By October of 1833, the sections within the Dam 3 Area were nearly completed. In July, for example, Littlejohn and Thompson had been paid the final estimate for work done on the Shenandoah River Lock.<sup>57</sup> In late

55 Kissling, HRR, United States Musket Factory, pages 83-84. The sum appropriated for the repair and extension of the dam "was more than sufficient." In January of 1834, the repair and extension account still contained \$1,625.45. See also Luzader, HSR, History of the Construction of Dam No. 3, page 10.

56 Purcell to Eaton, June 24, 1832 [1833], Ltrs. Recd., C & O Co. See also Sanderlin, The Great National Project, page 117; Williams, History of Washington County, Maryland, I: 223; and "Minutes of the Town of Williamsport Meetings," October 1, 1833 located in the Williamsport Town Hall, Williamsport, Maryland.

57 Proceedings of the President and Board of Directors, C, 402.

August, H.A. & J. Stewart were paid the final estimate for work done on Section 109.<sup>58</sup> A short time later, the Stewarts were also paid the final estimate for work done on Section 111.<sup>59</sup> On September 27, the Board ordered that Frieze and McDonnell be paid the final estimate for Guard Lock 3.<sup>60</sup> On October 4, the Board ordered that Bernard Collins be paid the final estimate for Section 110. Five days later, a final estimate on the Lock 33 Complex (the lock, a bridge, and a flume) was presented to the Board by Littlejohn and Thompson. The Board declined to pass the estimate, but did agree to pay \$2,000.00 to Littlejohn's and Thompson's account. At the same time, the Board ordered the Resident Engineer to "report the authority upon which such expensive work, not embraced in the contract, had been made." Two days later, Resident Engineer Cruger made a report relative to the Lock 33 Complex. The Board then immediately ordered that the final estimate for the Lock 33 Complex be paid. On October 18, the Board accepted Henry Smith's final estimate for Section 112 and ordered that it be paid.<sup>61</sup> The other canal

58 See footnote 53 of this chapter. The final estimate apparently included the grading of the railroad right-of-way opposite Section 109. The original contractors for Section 109, Thomas and Samuel McCoy, apparently had abandoned the section sometime before mid-July of 1833. See Proceedings of the President and Board of Directors,C,401.

59 Proceedings of the President and Board of Directors,C,425.

60 Ibid.,C,431. Since the original order of the Board on August 18, 1832 called for the construction of a "Head Gate, in place of this Lock - the Resident Engineer was directed to report the cause of making this change." A copy of this report could not be found.

61 Ibid., C, 433, 438, 442, 447. A copy of Cruger's report on the Lock 33 Complex could not be found.

structures in the area (Locks 34, 35, and 36) were apparently finished by October, but the final estimates on them were not paid until later.<sup>62</sup>

Those sections of the canal between the Point of Rocks and Harpers Ferry were so nearly complete by early October that the Board proceeded "to make temporary arrangements for the Superintendence of that part of the Canal, between Seneca and the Head of Harpers ferry falls." Assistant Engineer Charles B. Fisk was appointed Superintendent with a compensation of \$500.00 per year "in addition to his pay as Engineer."<sup>63</sup>

The water was first let into the Dam 3 Area of the canal in late October or early November of 1833. On November 1, Superintendent Charles B. Fisk reported to the Board "that the water had been admitted into the Canal at Harper's ferry" and that it had "nearly reached Rushville [Seneca]."<sup>64</sup>

62 The final estimate for Lock 34 was paid to Frieze and McDonnell in late December 1833. The two men were not paid the final estimates for Locks 35 and 36 until November 1834. See Ibid., D, 36, 189. Section 113 had been completed by Pat O'Brien and John Moonan as early as January of 1833. See footnote 48 of this chapter. Lewis Wernwag was paid the final estimate on a pivot bridge over the Shenandoah River Lock in April 1836. A bridge was also erected over the feeder lock at Dam 3 sometime in the 1830s. This latter bridge was ordered rebuilt in May 1844. See Edwin C. Bearss, HSR, The Bridges, Chesapeake and Ohio Canal (Washington:NPS, 1968), page 102; and Proceedings of the President and Board of Directors, G, 160.

63 Proceedings of the President and Board of Directors, C, 436.

64 Ibid., D, 3.

CHAPTER 5: The Dam 3 Area and the Coming of the Baltimore and Ohio Railroad, 1834-1836.

The opening of the canal between Seneca and Harpers Ferry in late 1833 raised the hopes of the many friends of the canal project. The canal company had been in serious financial trouble ever since the cholera epidemic of 1832. By 1834, the company was in desperate need of money.<sup>1</sup>

During the winter of 1833-34, the water was removed from the canal. On March 8, however, Division Superintendent, Charles B. Fisk, reported that the canal was again "navigable from Harpers Ferry to Georgetown."<sup>2</sup>

In the meantime, the canal and railroad companies were proceeding with the joint construction of the railroad between the Point of Rocks and Harpers Ferry.<sup>3</sup> In March of 1834, the railroad company requested that it be allowed to make certain modifications in the location of its line between the upper Point of Rocks and the Wager Bridge at Harpers Ferry. An agreement allowing these changes was eventually signed by officials of the railroad company, the canal company and the Frederick and Harpers Ferry Turnpike Company.<sup>4</sup>

1 Sanderlin, The Great National Project, pages 97-103, 113. See also Thomas to Ingle, July 7, 1834, Ltrs. Recd., C & O Co.

2 Fisk to Ingle, March 8, 1834, Ltrs. Recd., C & O Co.

3 The canal company had agreed in the Compromise of 1833 to grade sections of the railroad's right-of-way between the Point of Rocks and Harpers Ferry. See footnote 50 of Chapter 4.

4 Thomas to Eaton, March 21, 1834; Thomas to Eaton, March 21, 1834; Thomas to Eaton, March 22, 1834; Thomas to Eaton, March 31, 1834; Thomas to Eaton, April 3, 1834; Thomas to Eaton, April 28, 1834; Fisk to Ingle, April 29, 1834; Thomas to Eaton, May 1, 1834; and Fisk to President and Directors, May 21, 1834; in Ltrs. Recd., C & O Co. See also Proceedings of the President and Board of Directors, D,43, 56, 83.

In early May, the contractors who had been employed by the canal company to grade the railroad between the upper Point of Rocks and Miller's Narrows, requested an extension of the time allowed in their original contracts. On May 3, officials of the canal company and of the railroad company agreed to allow the contractors until July 1 to complete their contracts. On the same day the railroad company paid the final installment of the sum which it was required to pay to the canal company for the grading of the narrow sections between the Point of Rocks and Harpers Ferry.<sup>5</sup>

On May 21, Superintendent Charles B. Fisk informed the Canal Board that "Holman & Lyles" had "nearly completed their Railroad contract." Their work could surely be finished within two weeks. Fisk recommended that the contractor T.M. McCubbin be paid one thousand dollars out of his retained money for grading work. Fisk also suggested that the canal company "authorize the widening of the [Rail]Road near Harpers Ferry from twenty five to thirty feet." According to Fisk the width of the road in this area was made twenty-five feet "at first with the intention of widening it to thirty in case an arrangement" was made "with the Turnpike Company." Since "that arrangement" had now been made, the

5 Proceedings of the President and Board of Directors, D,85. See also Thomas to Eaton, April 28, 1834 and Thomas to Eaton, May 1, 1834, in Ltrs. Recd., C & O Co.

width of the railroad should be made thirty feet. The area to which Fisk was referring was "on that part of the [rail]road which was made by Stewart [along Section 109 of the canal] and upon which a final estimate was some time since given."<sup>6</sup> On August 22, T.M. McCubbin offered to widen the railroad near Harpers Ferry, to thirty feet for \$172.00. The Canal Board immediately accepted his offer. On the same day, the Canal Board ordered that McCubbin be paid the final estimate for grading the railroad adjacent to Sections 106, 107 and 108. By mid-September, McCubbin had apparently completed all of the grading that had been required in his contract.<sup>7</sup>

By mid-October, the railroad was nearly completed to the Wager Bridge. On October 22, the Canal Board received a letter from the President of the railroad company requesting that the railroad company be allowed to construct a bridge across the canal below the Wager Bridge. According to Railroad President P.E. Thomas, his company had originally planned to use the Wager Bridge to cross the canal and river.<sup>8</sup> The rapid progress of the Winchester and Potomac Railroad towards Harpers Ferry, however, had now made it necessary for the Baltimore and Ohio to make a connection with the Winchester and Potomac on the Virginia

6 Fisk to President and Directors, May 21, 1834, Ltrs. Recd., C & O Co. For a reference to H.A. Stewart's grading work along Section 109, see Proceedings of the President and Board of Directors, D, 93. See also footnote 53 of Chapter 4.

7 Proceedings of the President and Board of Directors, D, 147, 158, 161, and 180.

8 Thomas said that "this arrangement must from necessity be adopted for a short time." See Thomas to President and Directors, October 16, 1834, Ltrs. Recd., C & O Co.

shore. Thomas said that the new bridge "would cross the Canal about 220 feet from the present passing place at the lock [Lock 33], and land on the Virginia shore, a very short distance East of the abutment of the old Bridge." Thomas also said that "the surface of the Rail Road" opposite Harpers Ferry was "nearly 23 feet (22 92/1000) above the bottom of the canal so that a Bridge over the canal to accomodate [sic] the Rail Road would leave more than 14 feet between the lower side of its timbers and the surface of the water." This space "would seem amply sufficient to accomodate [sic] any Boats that may pass the Canal." Thomas referred to the "friendly spirit" that had "recently" been shown by the officials of both companies. He felt confident that this spirit of friendliness would aid in bringing about an agreement between the two companies relative to the proposed new bridge. The Canal Board referred the letter to Engineer Charles B. Fisk for a report. At the same time, the Canal Board requested its President-Protem "to inform the President of the railroad company of the proceedings" of the "Board on the subject."<sup>9</sup>

The Canal Board took up the railroad company's request again on November 12. Another letter was read from Railroad President Thomas

9 Thomas to President and Directors, October 16, 1834, Ltrs. Recd., C & O Co. See also Proceedings of the President and Board of Directors, D, 177. Thomas was undoubtedly referring to his warm friendship with former Canal President John H. Eaton. Eaton, however, had since been appointed Governor of Florida. See Thomas to Eaton, April 28, 1834, Ltrs. Recd., C & O Co.

requesting that the canal company reach "an early decision." The Canal Board also received two reports from Engineer Charles B. Fisk relative to the proposed new bridge. After discussing Fisk's reports, the Board ordered Fisk to meet with an engineer from the railroad company to examine the railroad's proposal more fully. Fisk was also ordered to draw up plans and details (in conjunction with the railroad's engineer) for "both a permanent and a moveable Bridge." These plans and details were to be submitted to the Canal Board. Five days later, Railroad President Thomas notified the Canal Board that railroad officials had appointed their engineer, Jonathan Knight, to confer with Fisk on the subject of the proposed bridge.<sup>10</sup>

While the two engineers were preparing plans and details for the railroad bridge, the railroad was formally opened for travel as far as the Wager Bridge opposite Harpers Ferry. A temporary station was established near the entrance to the Wager Bridge. The "first regular passenger train" pulled "up to the temporary station" on December 1, 1834. Hungerford's history of the Baltimore and Ohio provides the following summary of the formal opening of the railroad opposite Harpers Ferry:

In accordance with the custom which had been followed ever since the road had been opened to Ellicotts, the coming

<sup>10</sup> Proceedings of the President and Board of Directors, D, 186-87, 191. See also Fisk to President and Directors, November 10, 1834 and Thomas to Ingle, November 17, 1834, in Ltrs. Recd., C & O Co.

of the first train to the Ferry was made an event of some social importance. And so, upon that memorable first day of December, 1834, a party of distinguished citizens - bigwigs of every sort - left Baltimore in the early morning and journeyed through to the north end of the Harpers Ferry Bridge in an even six hours. The train was hauled by the road's best engine, the Arabian, and it was marked, too, for a great distinction in the fact that it was the first time that a locomotive had hauled a train west of Parrs Spring Ridge.

The Arabian had gone on a day or two ahead of the excursion train, and had pulled herself up over the planes - with her tender and two loaded cars, together weighing not less than eleven and a half tons - absolutely unassisted. Which, in its day, was considered something of a feat. After dinner had been concluded at Harpers Ferry, together with the inevitable toasts and speech making which had to follow, she hauled the entire party back to Baltimore, . . . .<sup>11</sup>

By December 12, Engineers Fisk and Knight had completed their consultations concerning the proposed railroad bridge. On that date, Fisk submitted his report to the Canal Board. The Board read the report on December 17, but since the plans of the bridge did not accompany the report, it was laid on the table. At the same time, however, the Board directed the Clerk to request the President of the railroad company to furnish "a plan for the bridge." Two days later, Railroad President Thomas responded that "precise plans" of the proposed bridge had not been

11 Edward Hungerford, The Story of the Baltimore and Ohio Railroad, 2 vols. (New York: G.P. Putnam's Sons, 1928; reprinted , New York: Arno Press, 1973), I: 146-47.

drawn because his engineer had not expected that such plans would be necessary to enable the Canal Board to reach a decision. Thomas promised the Canal Board, however, that he would have a detailed plan of the bridge drawn up as soon as possible. On December 24, the Canal Board referred the whole matter of the proposed bridge to a committee made up of fellow board members. This committee was to eventually meet in conference with a similar committee appointed by the President of the railroad company.<sup>12</sup>

The two committees finally reached an agreement on January 12, 1835. On the following day the committee appointed by the Canal Board submitted the following report:

The Committee which was authorized to meet a Committee from the Baltimore and Ohio Rail Road Company, in order to adjust the principles upon which the two companies might agree in reference to the construction by the Rail Road Company, of a Viaduct over the Canal near Harpers Ferry respectfully Report, That the two committees met yesterday, and finally agreed to recommend to the approval of their respective Boards of Directors, the following Items from 1 to 11 inclusive, as the basis of an agreement to be entered into by the two companies.

(Signed) W. Smith  
J.J. Abert  
Committee 13th Jany '35

Items

1. To allow of a permanent Viaduct over the Canal for the Rail Road, near Harpers Ferry.

12 Fisk (Report) to the President and Directors, December 12, 1834, Thomas to Ingle, December 19, 1834, and Ingle to Smith and Abert (Committee) December 29, 1834, in Ltrs. Recd., C & O Co. See also Proceedings of the President and Board of Directors, D, 201, 206, 209.

2. To narrow the canal to fifty feet of water surface for this purpose by an abutment on the berm side of the Canal.
3. The bottom of the bridge or viaduct to be no where less than twenty three feet above the bottom of the canal.
4. The center line of the viaduct to be not less than 210 feet nor more than 240 feet below the lower side of Wagers bridge on the Maryland shore.
5. In case Wagers bridge is moved from its present position and connected with the rail road viaduct over the Potomac, the present ground and abutments of that bridge on the Maryland side to be secured to the Ches. & Ohio Canal Co. free of cost.
6. And in such case the trade, passengers etc. for the Canal to pay no higher toll than is now paid by those who pay by the year and to have the benefit of any future reduction of the tolls.
7. The Canal Company to be allowed to construct a foot path or foot tracking path at its own cost, connected with the viaduct over the Potomac for the purpose of passing over its trade to and from Harpers Ferry.
8. The abutment on the towing path side, not to approach nearer than 8 feet to the water line of the Canal (in horizontal distance) And the construction of the Canal wall adjacent to the towing path abutments may on the judgement of the Engineers of the two companies be raised perpendicularly from the bottom of the Canal provided it does not reduce the water way more than two feet.

9. An inclined road to be constructed on the towpath to the viaduct on the upper and lower side of convenient slope.
10. A projection on the river side of the towing path abutment or a towing bridge to admit of a foot tracking path in times of high water by the abutment.
11. These arrangements not to effect the right of the Canal Company to construct a dam below, and adjacent to the river lock at Harpers Ferry.

The Canal Board immediately agreed to adopt the above report subject to the following conditions:

Conditions

- 1st The Canal Company shall have the right and authority to connect with the rail road, a track over the abutment on the towing path leading to the places of deposit which may be erected for the reception of produce on or adjoining to the towpath and near to the bridge, and also to erect if requisite; places of deposit on the Harpers Ferry side of the river, for the reception of produce from the Winchester Rail Road Cars, with such facilities as may furnish ready transfers from such deposits or Cars to the canal boats there and from the boats to the Cars.
- 2nd That the Rail Road Company will transport as suggested by its President, produce delivered at Harpers Ferry (with a view of being forwarded via the Canal) across the river or on the line of the Canal, at the same rate, say four cents per ton per mile according to distance as is now charged along the line of the Rail Road to Baltimore.

3rd The construction of the bridge over the Canal, and of the Maryland Abutment of the Potomac Viaduct, and of such other of the structures as are authorized by this agreement, and which immediately affect the interest of the Canal, to be subject to the inspection of the Engineers of the Canal Company.

On February 11, the Canal Board was notified that the President and Directors of the railroad company had agreed to the above conditions.<sup>13</sup>

Although a specific agreement had now been reached between the two companies concerning the bridge, a specific plan for the bridge had not yet been approved by the Canal Board. On February 18, the Canal Board received a plan of the proposed bridge. The plan was immediately referred to a committee; and on February 25, the Canal Board voiced its approval of the plan.<sup>14</sup>

As the railroad company prepared to build its bridge in the Dam 3 Area, several new controversies arose between the two companies. In May of 1835, shippers on the canal complained that railroad contractors were carelessly allowing falling rocks to land in the canal, thus making navigation difficult and outright dangerous.<sup>15</sup> A greater controversy had arisen a month earlier. By the Compromise of 1833, the Baltimore and Ohio had been prohibited from using steam engines between the Point

13 Proceedings of the President and Board of Directors, D.214-17, 235.

14 Ibid., D, 239, 256.

15 Sanderlin, The Great National Project, page 193.

of Rocks and Harpers Ferry until it had erected a board fence between the canal and railroad. The canal company "had insisted on this provision," so that mules would not be subjected to the frightening sight of the steam engines. In early April of 1835, however, the railroad company sought permission to experiment with steam engines without first having to erect the board fence. The Canal Board immediately tabled the request.<sup>16</sup> By this time, however, railroad officials were becoming more "blunt" in their demands. The superficial friendship that the company's officials had shown in 1833 and 1834 was rapidly disappearing by this time. In May and June, railroad officials continued to press for permission to experiment with steam. On June 16, the Canal Board flatly rejected all such requests, but this did not end the matter.<sup>17</sup> The controversy continued over into 1836. By 1836, railroad officials were suggesting that a rail, rather than a board fence, should be built. Railroad officials were also suggesting that the rail fence be placed "on the river side of the towpath to prevent the mules from bolting into the stream." The controversy was finally ended in November 1836 when the Baltimore and Ohio agreed to pay the canal company \$2,723.00

16 Ibid. See also Thomas to Washington, April 6, 1835, Ltrs. Recd., C & O Co.; and Proceedings of the President and Board of Directors, D, 272.

17 Thomas to McCulloh, May 31, 1835 and McCulloh to President and Directors, June 1, 1835, in Ltrs. Recd., C & O Co. See also Proceedings of the President and Board of Directors, D, 338; and Sanderlin, The Great National Project, page 193.

for the erection of a post and rail fence on the riverside of the towpath.<sup>18</sup>

By late 1835, the Baltimore and Ohio was apparently ready to begin construction of its bridge. Canal officials decided at this time to remind railroad officials that the canal company had the right to construct a foot path or foot tracking path on the lower side of the bridge. In late December, the president of the railroad company promised to furnish the canal company with an estimate of the cost of a foot tracking path.<sup>19</sup>

The president of the railroad was not tardy in supplying a plan and specification for the foot tracking path. According to his estimate, the structure (often referred to as a towpath bridge) would cost "One Dollar & sixty two & an half cents per foot; lineal measure." The Canal Board approved the plan and specification on January 9, and directed the president of the railroad company "to cause the Towpath to be constructed" for the canal company.<sup>20</sup>

By September of 1836, the railroad bridge (often referred to as a viaduct) was apparently nearly finished. In early September, the canal company was notified that construction could now start on the foot tracking

18 Sanderlin, The Great National Project, page 193. See also Proceedings of the President and Board of Directors, E, 161, 166, 172-75, 185. Railroad company officials also agreed to meet later with canal officials to work out a method of giving notice of the approach of locomotive engines on that part of the railroad between the Point of Rocks and Harper's Ferry.

19 Proceedings of the President and Board of Directors, D, 416, 419, 431, 436.

20 Ibid., E, 3. By this time, the railroad bridge was already under construction.

path or towpath bridge. On September 14, the Canal Board ordered that Lewis Wernwag be contracted to erect the structure "according to the plan adopted by the Board on the 9th day of January last." Wernwag was not paid the final estimate on the foot tracking path until July 12, 1837.<sup>21</sup> Trains were able to pass over the railroad bridge and enter the town of Harpers Ferry by January of 1837.<sup>22</sup>

21 Ibid., E,139, 291.

22 Hungerford, The Story of the Baltimore and Ohio Railroad, I: 150. For the progress of the construction of the railroad bridge, see Charles W. Snell, Historic Building Site Survey Report for Wager Lot No. 1 & The Bridge Lot: The Baltimore & Ohio Railroad Company's Bridge and Building at Harpers Ferry, 1835-1862, Ferry Lot Studies (Washington: National Park Service, 1958), pages 11-14, 24. Hungerford states that the bridge was completed in 1836. The bridge was not well built. On September 3, 1837, a portion of the bridge collapsed and sent an engine crashing into the river below. No one was injured. A similar incident occurred again in September of 1844. See the two sources listed above.

CHAPTER 6: Commercial Development Within the Dam 3 Area, 1834-1860.

As early as August of 1834, the G.B. Wilson and Company of Baltimore sought to rent a piece of land near the Wager Bridge for the establishment of a warehouse. The Canal Board, however, declined Wilson's application on the grounds that the canal company owned only enough land near the bridge "for its own purposes."<sup>1</sup>

In early September, the Canal Board received a request from Patrick O'Byrne to be allowed to erect a temporary warehouse for the storage of produce. O'Byrne desired to erect his warehouse "upon the land belonging to the Company, above the Bridge at Harpers Ferry." The Board apparently had plans for the future use of the site which O'Byrne desired. The Board therefore refused O'Byrne's application "except upon the following terms":

That said Patrick O'Byrne may erect at his own cost on such part of said land as C.B. Fisk may prescribe ; a temporary ware House, which when erected shall be the property of the Canal Co., and which the said company may at its pleasure remove said O'Byrne to have the use of said ware House until the 3rd of September 1837 unless it shall sooner be removed by order of said company in which case, the materials composing the same shall become the property of said O'Byrne. The use of the House not to be assigned without leave of the Canal Company, and the privilege hereby granted to said O'Byrne shall not be effectual, until he shall file in the Office of the Canal Company, his written assent to the terms herein set forth.

1 Wilson to President and Directors, August 11, 1834, Ltrs. Recd., C & O Co. See also Proceedings of the President and Board of Directors, D, 148.

A month later, O'Byrne notified the Board of his acceptance, but asked that the conditions be modified. Although the Board refused to grant any modifications, O'Byrne agreed again to accept the conditions. He erected his warehouse on "a small parcel of land on the towpath side of the canal immediately above the Harpers Ferry Bridge."<sup>2</sup>

Soon after O'Byrne was granted permission to erect a warehouse, he became associated with Harpers Ferry's great landholder, Gerald B. Wager. On April 30, 1835, O'Byrne wrote that "aided by the means, the name & the very general acquaintance of Mr. Wager" they were now "actively engaged" in transporting produce. They had been able to send to market "all most every week. . . about 1200 bus[hels] of flour and to take back an almost equal weight of Plaister [sic], fish, salt, lumber, and groceries." O'Byrne complained, however, that their warehouse was inadequate to accommodate the increasing trade in the area. The warehouse was particularly inadequate to handle the increasing trade which was coming down the Shenandoah River. O'Byrne said that he and Wager were involved in a "constant struggle" with "the agents of the Rail Road Co. [the Baltimore and Ohio]" to obtain the river trade. Since O'Byrne's and Wager's warehouse was "located on the towpath side of the Canal immediately opposite the lock;" their boats (or boats from the Shenandoah)

2 Proceedings of the President and Board of Directors, D,152, 178. See also O'Byrne to President and Directors, April 30, 1835, and Wager to Washington, April 30 [June 1] 1835, in Ltrs. Recd., C & O Co.

could only be loaded or unloaded in the lock. Therefore, loading and unloading could only be done when no other boats were passing through that vicinity of the canal. O'Byrne's and Wager's operations were therefore "often retarded" at just the time when the competition for the Shenandoah trade was strongest. In order to eliminate these problems, O'Byrne and Wager requested that they be allowed to move their operations to the berm side of the canal. The piece of ground which they desired was being "occupied by the lock house." They were willing to either remove the lockhouse or to purchase it. They were also willing to surrender their present warehouse so that it could be used as a lockhouse. O'Byrne maintained that they had been assured by both the lockkeeper and Engineer Fisk that their warehouse could be easily converted into a lockhouse. O'Byrne maintained that there was still a more important reason why they should be permitted to move their operations to the berm bank. He said that the Winchester and Potomac Railroad would certainly "be compleated [sic] in November." A "desperate effort" would "then be made by the Balt[imore] & Ohio R[ail] R[oad] Co[mpany] to monopolize its trade." Because of the difficulty in getting boats across the river, many people felt that the Baltimore and Ohio would be successful in its efforts to monopolize the trade of the Winchester and Potomac. O'Byrne and Wager, however, had a plan which they felt would prevent the Baltimore and Ohio from dominating this trade.

Wager would use his control of the Wager Bridge "& the land contiguous to its termination on the Maryland shore" to undermine the efforts of the Baltimore and Ohio. He was "determined to lay on [the Wager] Bridge a track on which the cars of the Winchester Road" could "be brought to the end of the bridge." From the Maryland end of the bridge, Wager planned to run a small track (which he was already using) of "about 70 feet in length" down the berm bank of the canal to the spot where he proposed to relocate his warehouse. As a director of the Winchester and Potomac Railroad Company, Wager was confident that the other directors would be willing to make a direct connection with the canal at Harpers Ferry. Despite urgent appeals from both O'Byrne and Wager, the Canal Board on July 10, 1835, turned down their application to relocate their warehouse to the berm side of the canal.<sup>3</sup>

As indicated by O'Byrne's and Wager's letters, the coming of the Winchester and Potomac Railroad heightened the spirit of competition that had always existed between the Baltimore and Ohio Railroad and the canal company. Since 1831, canal company officials had kept a watchful eye on the progress of the Winchester and Potomac Railroad. In the early years, canal company officials simply made sure that the new railroad company did not interfere with the canal company's rights along the

<sup>3</sup> O'Byrne to President and Directors, April 30, 1835, and Wager to Washington, April 30 [June 1], 1835, in Ltrs. Recd., C & O Co. See also Proceedings of the President and Board of Directors, D, 364.

Shenandoah River.<sup>4</sup> By January 1835, the new railroad company was ready to run its line through the "public grounds" at Harpers Ferry. On January 13, the canal company received word from Congressman Edward Lucas that the United States Congress had just passed a joint resolution authorizing the Winchester and Potomac "to construct their work through the public grounds at Harpers Ferry." Lucas suggested that the canal company should send an engineer "to attend to the interests of the canal company, in the location of that work." Charles B. Fisk was directed to carry out Congressman Lucas' suggestion. Fisk monitored the progress of the railroad from January to June in an effort to see that it did not interfere with the canal company's rights along the Shenandoah River.<sup>5</sup>

By September of 1835, some canal officials had become convinced that the company should take steps to make a connection with the Winchester and Potomac. On September 15, Division Superintendent, Charles Starbuck, suggested that it would be wise to immediately commence the erection of Dam 3 below Harpers Ferry. According to Starbuck, Assistant Engineer Fisk, was of the same opinion. Fisk, according to Starbuck, was convinced that the dam should be erected at an early date so that the canal company could secure the trade of the Winchester and Potomac Railroad. Starbuck maintained that armory officials might be willing to

4 Proceedings of the President and Board of Directors, C, 450, D, 66, 111.

5 Ibid., D, 219, 255, 339.

join in the construction of the dam.<sup>6</sup>

On September 24, Starbuck informed the Canal Board that he had made a cursory examination of the Virginia side where the abutment of the proposed dam would be located. He felt confident that the abutment would rest on government land. In "order to make the Boat navigation perfect to the Winchester [and Potomac Railroad] depot it" would "be necessary to raise the Dam two feet higher than the level below Lock 32 -- and possibly a foot more in which case it" would "flow back on Wernwag's Saw Mill." Starbuck believed, however, that Wernwag would "consent to such flowing" if the wheels of his mill were "raised at the Company's [Canal Company] expense." The location of the Winchester and Potomac depot on Wernwag's land would bring an increase in value (land value) which would outweigh "any further damage to the site." Starbuck again suggested that the United States Armory would probably be willing "to bear a portion or the whole of the expense of the Dam." Despite the enthusiasm expressed by Starbuck, however, the dam was never built.<sup>7</sup>

In the meantime, O'Byrne and Wager had not given up on their desire to tap the trade of the new railroad. On November 8, 1835, Wager wrote that the Winchester and Potomac Railroad would certainly "be opened about the 20th or 25th of next month." Since the canal would possibly be closed

6 Starbuck to President and Directors, September 15, 1835, Ltrs. Recd., C & O Co.

7 Starbuck to Ingle, September 24, 1835, Ltrs. Recd., C & O Co. See also Proceedings of the President and Board of Directors, D, 402, 419, 440.

for the winter by that time, Wager urged the Canal Board to make some arrangements "for the protection and preservation of that portion of trade descending the Rail Road which may be designed for transportation on the canal." His facilities along the canal were "utterly inadequate" to handle such trade. He urged the Canal Board to reconsider the application that he and O'Byrne had made in April and June. The Board again turned down Wager's application.<sup>8</sup>

On April 1, 1836, the Winchester and Potomac Railroad was officially opened between Winchester and Harper's Ferry. After the Baltimore and Ohio Railroad Bridge was completed in 1836-37, the Baltimore and Ohio (in compliance with its Bridge Agreement of February 25, 1835) began to carry

8 Wager to Ingle, November 8, 1835, Ltrs. Recd., C & O Co. In this letter Wager said that he and O'Byrne wished to occupy "the flume of the lock above the bridge for the purpose of building upon it a ware house." They were "willing to occupy it [the flume] during the pleasure of the Board and to put a good frame building upon it, to be surrendered at any time after three months notice upon being paid the value of the building." This last statement is somewhat confusing since O'Byrne's letter of April 30, 1835, had said: "The ground we ask is at present occupied by the lock house, this we are willing either to remove or to pay for, as shall be preferred by the Company." On September 18, 1835, Division Superintendent Charles Starbuck notified the Board that "in examining for the Lock House to Lock No. 33 next above the River Lock," he had "learned that the Wagers" claimed "all the Land on the Canal Bank Except 25 ft." That would mean that the canal company owned only "25 ft of Towpath." Starbuck said that if the above was actually true, the canal company would not have enough land "for a Lock House" unless it was to be "placed over the flume." Although Starbuck questioned the validity of the Wagers' claim, he did not want to proceed to erect a lockhouse before the dispute was settled. Starbuck apparently

some of the Winchester and Potomac trade to canal boats on the Maryland shore.<sup>9</sup>

The Baltimore and Ohio Railroad Bridge had been completed several months before the completion of the adjacent tracking path which was also to be used to transfer trade destined to and from the canal. In April of 1837, the Canal Board heard with alarm that Gerald B. Wager had begun to erect a brick warehouse on his land at the Virginia end of the tracking path. Wager's warehouse was located at such a point that it would effectively block access to the tracking path. This move by Wager was obviously part of his continuing plan to tap the trade which was destined for the canal. The Canal board immediately ordered its clerk to alert the Baltimore and Ohio of the situation. Several weeks later, the President Pro-Tem of the Baltimore and Ohio replied that

had little regard for Gerald B. Wager. He concluded:

. . . and if the question of title arises  
-- I am satisfied from what I know of the  
pettifogging grubbing Policy of the acting  
Wager, that the Interest of the Company  
(will) require a prompt adjustment of it.

See footnote 3 of this chapter. See also Starbuck to Ingle, September 18, 1835, Ltrs. Recd., C & O Co.

9 Hungerford, The Story of the Baltimore and Ohio Railroad, I:150. See also Sanderlin, The Great National Project, pages 193-94. The Baltimore and Ohio had agreed to haul trade to the canal "at prevailing rates" in addition to allowing the canal company to erect a tracking path alongside the railroad bridge.

unfortunately his company did not "possess the right-of-way to the foot tracking path across the river at Harpers Ferry." Wager would allow access to the tracking path only after the payment of a toll. The Canal Board therefore decided that the only alternative was to acquire access through condemnation.<sup>10</sup>

In the meantime, the Canal Board received another application for a warehouse at Lock 33. This time the application came from John and Samuel Strider. The Striders stated that they wanted to "erect a ware house near to Lock No. 33, upon the ground occupied by the present Lock keepers' house." The Board rejected the application on July 24, 1837.<sup>11</sup>

The tracking path across the river was completed by June 1837. Lewis Wernwag was paid the final estimate for the structure in July of 1837. According to the Ninth Annual Report to the Stockholders of the Canal Company (June 12, 1837), the tracking path or "footway" had "been constructed on the lower side" of the recently completed railroad bridge

10 Proceedings of the President and Board of Directors, E, 239, 248. See also Sanderlin, The Great National Project, page 194.

11 Proceedings of the President and Board of Directors, E, 283-84, 294. Strider's application suggests that the lockhouse at Lock 33 had now been built. On April 24, 1837, the Canal Board had ordered Chief Engineer W.S. Elgin to procure proposals for building the lockhouse at Lock 33. The contract for the house at Lock 33 was probably awarded to James A. Foster in early May of 1837. The house was probably completed by Foster in June or July of 1837. See Proceedings of the President and Board of Directors, E, 245, 250, 256, 294. The house at Lock 34 was built by Michael Foley in 1836-37. The last two lockhouses in the Dam 3 Area (the houses at Locks 35 and 36) were built in 1836-37 by Jonah Hood. See Proceedings of the President and Board of Directors, E, 63, 162, 175, 192, 252.

in order that boats at Harpers Ferry (and those which might descend the Shenandoah) could "be safely towed to the lift-lock on the Maryland Shore and received into the canal." The report also made reference to the proposed dam which was to be located "across the Potomac" and "below the mouth of the Shenandoah." The dam would form "an extensive basin" and provide "ready access to the canal at all seasons."<sup>12</sup>

In the meantime, lawyers for the canal company had moved to condemn the property of Gerald B. Wager in order to gain access to the tracking path from the Virginia shore. In early January of 1838, Wager indicated that he was willing to compromise on certain conditions. He again applied to the canal company "for permission to erect a ware-house over the flume of Lock No. 33." The Canal Board agreed to grant permission "provided that the Inquisition" which was "about to be taken upon the property of Wager and others at Harpers Ferry" would prove to "be satisfactory to the Board." On September 5, however, an attorney for the canal company announced that the jury had failed to reach a verdict in the condemnation proceedings. The attorney also recommended "that no further proceedings" be "taken in the case." The Canal Board adopted

12 Proceedings of the Stockholders, B, 91-92. See also Ninth Annual Report of the President and Directors of the Chesapeake and Ohio Canal Company to the Stockholders, Made June 12, 1837 (Washington: Gales and Seaton, 1837), page 4; and Proceedings of the President and Board of Directors, E, 291.

the attorney's recommendations and directed the Chief Engineer to "place a swinging ladder from the Tracking path down to the water of the river, near the Va. Shore."<sup>13</sup> Wager appeared determined, however, to tap the Shenandoah trade. He continued to press the Canal Board for permission to erect a warehouse over the flume at Lock 33. On September 28, 1838, the Canal Board declined Wager's application except on condition that he "procure for the company the right-of-way to the tracking path." Wager was hesitant in making a reply. In the meantime, Walter Smoot, made a similar application to the Canal Board in early February of 1839. Smoot's application was tabled, however, in order to give Wager another chance to accept the conditions that the Canal Board had offered. Wager refused to accept the conditions, but continued negotiations. In the meantime, Smoot withdrew his application.<sup>14</sup>

In early May of 1839, the Board received a letter from one James H. Elgin requesting that he be permitted to erect a warehouse over the flume at Lock 33. Since Walter Smoot had withdrawn his application "and no satisfactory arrangement" had yet been made with Gerald B. Wager, the Canal Board ordered that Elgin be allowed to erect the warehouse. Elgin

13 Proceedings of the President and Board of Directors, E, 310, 379, 454, 481-82.

14 Proceedings of the President and Board of Directors, E, 497-98, F, 18. See also Sanderlin, The Great National Project, pages 194-95. Wager now maintained that he was no longer the independent proprietor of the land at the entrance to the tracking path. This land, according to Wager, was now jointly owned by himself and a group of local businessmen.

was to occupy the house for five years at an annual ground rent of fifty dollars. Elgin could remove the house at the end of five years unless the canal company should prefer to pay him three-fourths of the value of the house. The canal company could take possession of the house anytime before the expiration of five years if it gave a two month notice and agreed to pay the value of the house. The canal company insisted that Elgin take in Walter Smoot of Georgetown as "a partner in the lease." Both Elgin and Smoot agreed to this arrangement. Elgin constructed the warehouse and apparently continued to lease it until the mid-1850s.<sup>15</sup>

At the same time that canal company officials were deciding who should be given a warehouse lease at Lock 33; Baltimore and Ohio officials were renewing their company's long-standing struggle to dominate the Shenandoah trade at Harpers Ferry. Between 1839 and 1847, the Baltimore and Ohio used several bold maneuvers to place the canal company at a disadvantage in the struggle for the Shenandoah trade.

In early 1839, the Baltimore and Ohio broke its 1835 Bridge Agreement by charging a toll for transportation which was higher than that stipulated in the agreement. Canal company officials protested against the increase and the railroad company apparently gave in at least for a while.<sup>16</sup>

15 Proceedings of the President and Board of Directors, F, 54-55, 59, 63, I, 208.

16 Ibid., F, 38.

In late 1839, the Baltimore and Ohio took steps to gain complete control of bridge and ferry rights at Harpers Ferry. In December of 1839, the Baltimore and Ohio purchased the Wager Family's bridge and ferry rights for \$15,000.<sup>17</sup>

The Baltimore and Ohio had always intended to have their railroad bridge replace the Wager Bridge. This explains why the railroad bridge had been built with a "wagon way attached" to it. Wagons had apparently used the railroad bridge from the time that it was first opened. The old Wager Toll Bridge was finally removed in 1840.<sup>18</sup>

Less than two years after the Baltimore and Ohio had acquired the old Wager Toll Bridge, railroad officials again decided to undermine their 1835 Bridge Agreement with the canal company. On April 27, 1841, the railroad company's agent at Harpers Ferry was given the following instructions which were to be put into effect after May 1:

17 Snell, HBSSR, Wager Lot No. 1 & The Bridge Lot: The Baltimore & Ohio Railroad Company's Bridge and Buildings at Harpers Ferry, pages 22-47.

18 Ibid., page 42. Snell says that the Wager Bridge was removed in 1840. Dave Gilbert suggests that it was removed in 1836, but this date is obviously incorrect. See Gilbert, Exploring Potomac Water Gap, pages 16-17. In April of 1837, the Virginia Legilsature had "passed an Act authorizing the transfer of travel from the old Wager Bridge to the new Baltimore and Ohio Bridge." Tolls were collected by the Wager Family on the new bridge until the Baltimore and Ohio purchased all rights in 1839. See Snell, HBSSR, Wager Lot No. 1 & The Bridge Lot: The Baltimore & Ohio Railroad Company's Bridge and Buildings at Harpers Ferry, pages 12, 42.

Sir

On and after the 1st day of May Ensuing you will demand Bridge Tolls at the old Bridge rates, upon all that may pass from the Maryland to the Virginia Shore, whether transported in the cars of the Winchester Company over the rail Road way part or in any ordinary conveyance over the Common road part of the Bridge, and tolls at Rail Road rates upon all goods that may pass over the Bridge for transportation on the Canal, from the Virginia Shore; whether hauled in the cars of the Winchester & Potomac Rail Road Company, in the cars of the Balt. & O R R Co. or in any ordinary conveyance. And furthermore you are hereby instructed in no instance to furnish the Cars of the Balt. & O R R Co. Simply for the purpose of conveying goods over the Bridge from the Maryland to the Virginia Shore.<sup>19</sup>

At the same time that the railroad company issued the above instructions, it also ordered the removal of the canal company's tracking path. On May 10, 1841, the canal's Second Division Superintendent, W.S. Elgin,<sup>20</sup> informed the Canal Board that railroad workmen had already removed a portion of the tracking path. Elgin had been informed by

19 Elgin to President and Directors, May 10, 1841, Ltrs. Recd., C & O Co. By this time, the right span of the "Y" section had been completed on the railroad bridge and the Baltimore and Ohio had commenced construction through Harpers Ferry. See Snell, HBSSR, Wager Lot No. 1 & The Bridge Lot: The Baltimore & Ohio Railroad Company's Bridge and Buildings at Harpers Ferry, pages 23, 42.

20 Elgin had been appointed Superintendent of the Second Division in early May of 1841. See Elgin to President and Directors, May 10, 1841, Ltrs Recd., C & O Co.

the railroad's agent that the whole tracking path would be removed "and not replaced." The entire tracking path was eventually removed and the Baltimore and Ohio refused for over a year to replace it. During this time, the railroad engineers erroneously maintained that the railroad company had paid for the construction of the tracking path. After more than a year of receiving protests from the canal company and from boatmen, the railroad consented to rebuild the tracking path.<sup>21</sup>

Although the railroad company agreed to replace the tracking path (which received little use anyway), it would not allow its cars to haul goods over the bridge to or from the canal. In addition, it continued to charge the Winchester and Potomac Railroad Company a fee for running its cars over the bridge; and continued to charge high tolls on wagons using the bridge.<sup>22</sup> By 1843, the Winchester and Potomac Railroad was being hurt so badly by the high bridge tolls, that it urged the canal company to erect a dam below Harpers Ferry. Such a dam would enable the trade of both companies to cross the river "more conviently and safely."<sup>23</sup> The canal company's Sixteenth Annual Report to the Stockholders

21 Elgin to President and Directors, May 10, 1841, John H. Allstaat and Others to Turner, May 1841, in Ltrs. Recd., C & O Co. See also Sanderlin, The Great National Project, page 195; and Proceedings of the President and Board of Directors, F, 340.

22 Sanderlin, The Great National Project, pages 195-96. Sanderlin also discusses the B & O's manœuvres during the early 1840s to dominate the flour trade at Harpers Ferry.

23 Proceedings of the President and Board of Directors, G, 60. See also Sanderlin, The Great National Project, pages 195-96.

(June 3, 1844) dealt at some length with the problem of the high tolls. According to the report, the Baltimore and Ohio had adopted an interpretation of the 1835 Bridge Agreement which was somewhat different from the canal company's interpretation of that agreement. The railroad company maintained that the stipulations spelled out in that agreement should "apply only to tonnage brought from the Virginia to the Maryland side." The canal company, on the other hand, felt that the stipulations also applied to "the trade carried from the canal to the Virginia shore." Although the "distance from the canal to the point of intersection, between the" two railroads was "about a quarter of a mile;" the Baltimore and Ohio charged "twenty cents per ton for the use" of its "road and viaduct" to that point. The report said that canal company officials would continue to press the railroad company to adopt the canal company's interpretation of the agreement. If railroad officials remained stubborn, however, the canal company would be forced at some future date to erect a dam across the Potomac below Harpers Ferry. Such a dam could be erected "at a moderate cost" and would assure easy communication between the canal and the Virginia shore.<sup>24</sup> The two companies had not reached any solution to the problem as late as 1847.<sup>25</sup>

24 Sixteenth Annual Report of the President and Directors of the Chesapeake and Ohio Canal Company to the Stockholders Made June 3, 1844 (Washington: Gales and Seaton, 1844), pages 16-17. See also Proceedings of the Stockholders, C, 330-333.

25 Proceedings of the President and Board of Directors, H, 66. There are some indications in the canal records that some kind of solution to the high toll problem was reached before 1850. See for example, Proceedings of the President and Board of Directors, H, 66, 84, 145, 281, 388 and 415.

During the period from 1840-1860, the Dam 3 Area no doubt assumed a rather busy appearance. On May 13, 1841, Second Division Superintendent, W.S. Elgin, reported that boatmen were constantly loading and unloading goods at Lock 33. Because of the congestion around the lock, Elgin had decided to "prevent Boats from Receiving or Delivering their cargos, at Said Lock." Elgin said that "the places" for "the reception or delivery of Produce from or to the Canal" were "very limited" in the Dam 3 Area. He suggested that warehouses be "Erected at the Basin Below or on the Berm above said lock." There was also "the temporary ware house Erected at said lock by P. O'Byrne" back in 1835. Elgin gave a brief history of the O'Byrne warehouse. It had eventually "fell in the hands of the Messrs. Wager and Co." Sometime later, it had fallen into "the hands of the Messrs. Russell & Co." Russell and Company had eventually declared bankruptcy, and since that time the warehouse had become the property of the canal company. At the present time, someone was using it to store produce "without any compensation to the canal company." Elgin suggested that the canal company reclaim the warehouse and use it "for purposes of the Company only."<sup>26</sup> The person who was using the warehouse turned out to be Philip Coons of Harpers Ferry. On May 17, Coons wrote that he had been recently informed that the Board objected to his use of the warehouse. He therefore requested permission "to build a warehouse about

26 Elgin to President and Directors, May 13, 1841, Ltrs. Recd., C & O Co.

three Hundred and fifty yards below the Bridge and immediately at the Basin on the Berm Bank side." The canal company's records do not indicate whether Coons was ever granted permission to erect the warehouse.<sup>27</sup>

The completion of the Baltimore and Ohio to Cumberland in November of 1842 brought increased traffic and trade through Harpers Ferry. The railroad bridge at Harpers Ferry was partially reconstructed in 1841-42 in anticipation of the increased traffic. The railroad bridge, however, still proved to be inadequate. In September of 1844, a span of the bridge collapsed and hurled an engine with four men into the river below. Fortunately, all four men escaped uninjured, and the span was soon replaced. In the following year, the span, which had collapsed in 1844, collapsed again. This time, a train of 27 cars was crossing the bridge. Ten of the cars (loaded with coal) were hurled into the river. The conductor and a boy fell into the river, but there were no serious injuries. The span was again replaced. During the 1840s, the railroad bridge at Harpers Ferry was the only Baltimore and Ohio bridge upon which tolls were collected. It was therefore the only bridge with gates. At least two watchmen (one in the daytime and one at night) were employed at the bridge. In 1851, the so-called "Winchester Span" or straight span of the "Y" was removed and replaced by an iron span. The contractor for the iron

27 Coons to Board of Directors, May 17, 1841, Ltrs. Recd., C & O Co. Coons may have been associated with Gerald Wager. See Wager to Sprigg, September 7, 1841, Ltrs. Recd., C & O Co.

span was Wendel Bollman. The iron span and the wooden-covered bridge remained intact until they were both destroyed in June of 1861.<sup>28</sup>

By the late 1840s, Harpers Ferry and the Dam 3 Area had become a major transfer point for the Winchester and Potomac and the Baltimore and Ohio Railroads. In late 1846, the Canal Board authorized one George Waters "to lay down a Rail Road switch to connect [the] canal basin at Harpers Ferry." In early 1848, the Canal Board directed the Superintendent of the Second Division "to have a switch made near Harpers Ferry to facilitate the trade from the Rail Road to the canal."<sup>29</sup> A year earlier, the canal company and the Winchester and Potomac Railroad Company had agreed to jointly erect "a crane platform" near the Winchester and Potomac depot at Harpers Ferry. This platform was needed in order to expedite "the trade brought to and taken from the Canal by [the] said Rail Road."<sup>30</sup> In August of 1849, the Baltimore and Ohio Railroad Company sought permission from the Canal Board to erect an engine house (on canal property) "at or near the Eastern end of the Viaduct [railroad bridge] at Harpers Ferry." The railroad company's request was approved on November 26, 1850. The railroad company was granted a 99-year lease which was "renewable forever."

28 Snell, HBSSR, Wager Lot No. 1 & The Bridge Lot: The Baltimore & Ohio Railroad Company's Bridge and Buildings at Harpers Ferry, pages 24-33, 42. See also Hungerford, The Story of the Baltimore and Ohio Railroad, I: 150-52.

29 Proceedings of the President and Board of Directors, G, 477, H, 145. The canal company and the Baltimore and Ohio had apparently agreed to jointly build a "sideling track" to connect the canal with the railroad near Harpers Ferry. When the track needed repair in 1853, the companies agreed to share the expenses. See Proceedings of the President and Board of Directors, I, 50, 251, 344.

30 Ibid., H, 31.

The canal company, however, could terminate the lease "at any time on giving 12 months notice." The railroad company was to pay an annual rent of twenty dollars.<sup>31</sup>

The Dam 3 Area experienced further commerical development during the decade of the 1850s. On January 25, 1854, the Canal Board agreed to lease to one R.H. Hoffman a parcel of land below Harpers Ferry. The land leased to Hoffman was located "on the berm side of the Canal east of and adjoining the warehouse of Brien; between Lock No. 32 and the Shenandoah [River] Lock." On the same day, the Canal Board also agreed to allow John Preacher Jr. to build a warehouse on the berm side of the canal at Lock 34. In August of 1854, John Preacher Jr. sought permission "to rent a room under the Collector's Office at Lock No. 33." Preacher wanted to use the room to sell groceries. This application was rejected.<sup>32</sup> In September of 1854, Preacher sought "permission to put up a warehouse at Lock No. 33 for the sale of hay to boatmen." This application was referred to the General Superintendent of the canal. In the same month, Preacher's father, John Preacher Sr., sought permission to build a warehouse "on the towpath side" of the canal "near Locks 35 and 36." This application was rejected.<sup>33</sup>

31 Ibid., H, 281, 388, 415.

32 Ibid., I, 57-58, 97-98. In 1853, the Collector of Tolls at Harpers Ferry was also the Keeper of Lock No. 33. Therefore, the Collector's Office was probably located in the lockhouse at Lock No. 33. See Ibid., I, 50.

33 Ibid., I, 111, 118.

In addition to the warehouse lease at Lock 34, the Preachers were able to obtain a sub-lease on James H. Elgin's old warehouse at Lock 33. John Preacher Sr. obtained the sub-lease from R.S. Blackburn and Company sometime prior to August of 1855. Blackburn had in turn leased the warehouse from James H. Elgin. The original lease was therefore still held by Elgin.<sup>34</sup>

The Preachers were actively engaged in commerce within the Dam 3 Area from the 1850s through the 1870s, and John Preacher Sr. was constantly looking for new enterprises. In October of 1855, he sought permission to lease water "from the flume of Lock 34 for a chopping mill." This application was rejected by the Canal Board. In February of 1859, the elder Preacher asked the Canal Board to extend a lease which he held on a piece of ground that had originally been leased to one William Ray. The records of the canal company do not indicate exactly where this piece of ground was situated. This application was tabled. In March of 1860, Preacher requested that he be allowed to erect a warehouse near Lock 34. This application was referred to the General Superintendent. By October of 1860, Preacher's sub-lease on the old Elgin warehouse at Lock 33 had apparently either expired or was about to expire. Therefore, Preacher requested that he be allowed to lease the warehouse. This application was also referred to the General Superintendent.<sup>35</sup>

34 Ibid., I, 208.

35 Ibid., I, 223, K, 120, 162, 217.

In April of 1856, the Canal Board agreed to lease Israel Russell a warehouse "near Harpers Ferry." The canal company's records do not indicate precisely where this warehouse was situated. The warehouse had previously been leased to one John Gibson. Gibson's lease was about to expire. The Canal Board ordered the Division Superintendent "to make the requisite repairs of the sideling or track connecting said property with the railroad."<sup>36</sup>

As the decade of the 1850s drew to a close, United States Armory officials made plans to erect a new Dam No. 3. The old dam, which had been repaired and extended in 1833, had received considerable damage during the flood of 1852. Repairs had been made, but the inadequacy of the dam became more apparent as the 1850s neared an end. The contract for the new dam was let to Snovell and Werrebrenner in February of 1859. The engineer in charge of the work was Thomas Leiper Patterson, who would later become associated with the canal company.<sup>37</sup>

In June of 1859, Snovell and Werrebrenner requested the canal company to allow building materials (needed at the dam) to be transported on the canal free of tolls. The Canal Board rejected this request. In July, however, the engineer in charge of the dam project renewed the request. The engineer emphasized the importance of the new dam to the

36 Ibid., I, 251.

37 Charles W. Snell, Historic Research Report, The Musket Factory Buildings And Grounds, Harpers Ferry Armory, 1859-1860 (Harpers Ferry National Monument: NPS, April 27, 1959) pages 39-41. See also Luzader, HSR, History of the Construction of Dam No. 3, pages 10-11.

canal. He also pointed out that the contractors had made their bids for the dam project with "the belief that they would be charged no tolls for the transportation of stone and other materials upon the canal." After reading the appeal from Engineer Patterson, the Canal Board consented to allow the dam contractors to transport materials free of tolls.<sup>38</sup>

Snovell and Werrebrenner made little progress on the dam between June and September of 1859. In October their contract was cancelled. In March of 1860, a new contract was awarded to Hugh L. Gallaher. Gallaher made satisfactory progress on the dam until the cold weather of November ended the construction season for that year. The outbreak of the Civil War and the destruction of the armory in 1861 caused the dam to remain in an unfinished state.<sup>39</sup> The unfinished dam can still be seen a short distance below the old dam.

38 Proceedings of the President and Board of Directors, K, 115, 122-23.

39 Snell, HRR, The Musket Factory Buildings And Grounds, Harpers Ferry Armory, pages 41-43. See also Hahn, Towpath Guide to the Chesapeake & Ohio Canal, Section Three: Harpers Ferry to Fort Frederick, page 12.

CHAPTER 7: The Dam 3 Area During the Civil War, 1861-1865.

The state of Virginia seceded from the United States on April 17, 1861. On the following morning, the Superintendent of the Harpers Ferry Arsenal appeared before a crowd of arsenal workers and urged them to pledge their allegiance to the state of Virginia. The superintendent's remarks almost caused a riot. Although a majority of the workers supported the superintendent, a vocal minority called him a traitor. Lieutenant Roger Jones, who commanded the small contingent of federal soldiers stationed at the armory, took steps to protect federal property until more troops could arrive from Washington. In case reinforcements were delayed, Jones made plans to destroy as many of the federal facilities as possible, and retreat into Maryland. When a report arrived that a force of Virginia militiamen were fast approaching the town, Jones ordered the destruction of the federal facilities, and then retreated into Maryland. When the Virginia forces arrived in Harpers Ferry, they found that "a carpenters shop, the main arsenal, and some 15,000 arms" had been destroyed.<sup>1</sup>

Harpers Ferry remained in Confederate hands from April 18 until mid-June. Colonel Thomas J. Jackson assumed command of the troops at Harpers Ferry. Some of these troops were sent across the Potomac to occupy Maryland Heights.<sup>2</sup>

<sup>1</sup> Smith, Harpers Ferry Armory and the New Technology, pages 318-19. See also Edwin C. Bearss, "War Comes to the Chesapeake and Ohio Canal," West Virginia History, XXIX (April 1968): 154.

<sup>2</sup> Bearss, "War Comes to the Chesapeake and Ohio Canal," page 154.

In May, Confederate Brigadier General Joseph E. Johnston replaced Colonel Jackson as commander at Harpers Ferry. By early June, Johnston had become concerned about Union General Robert Patterson's advance into Maryland from Chambersburg, Pennsylvania. When Johnston learned that Patterson was nearing Williamsport, he decided to wreck the canal between Harpers Ferry and Williamsport, and then retreat to Winchester. On June 13, Canal General Superintendent, Alfred Spates, reported that the canal had been "badly injured in many places" between Harpers Ferry and Williamsport. On June 14, Johnston's army blew up the Baltimore and Ohio Railroad bridge at Harpers Ferry. On June 15, the Confederates abandoned Harpers Ferry and retreated to Winchester.<sup>3</sup>

Although Johnston's army withdrew from Harpers Ferry, Confederate troops continued to patrol the Virginia side of the Potomac. Union troops were posted at various points along the Maryland side of the river.

In early July, torrential rains caused further damage to the canal. On July 6, Division Superintendent, A.K. Stake, notified the Board that much of the flood damage above Harpers Ferry had been repaired. The canal, however, still suffered not only from flood damage, but also from damage caused by Johnston's troops in June. With the exception of some

<sup>3</sup> Ibid., 157. See also Spates to Ringgold, June 13, 1861, Ltrs. Recd., C & O Co.; Hungerford, The Story of the Baltimore and Ohio Railroad, II: 8; and Snell, HBSSR, Wager Lot No. 1 & The Bridge Lot: The Baltimore & Ohio Railroad Company's Bridge and Buildings at Harpers Ferry, pages 22-47.

repair work at Harpers Ferry, very little work was being done. Stake was of the opinion that any repairs that were made would be subject "to damages by marauding troops." Both Confederate and Union troops had already threatened to tear down two dams. In addition, all along the Virginia side of the river "bands of strolling soldiers" were constantly shooting toward the Maryland side.<sup>4</sup>

Union General Patterson finally led his army across the Potomac at Williamsport on July 2. Patterson's object was to guard General Johnston's forces in the Shenandoah Valley while General Irwin McDowell marched from Washington to attack General Beuregard's Confederate forces near Manassas Junction. Johnston, however, was able to elude Patterson and join Beuregard at the Battle of First Manassas on July 21. After he was eluded by Johnston, Patterson moved his army to Harpers Ferry. Several days later, he was replaced by Major General Nathaniel P. Banks.<sup>5</sup>

General Banks remained at Harpers Ferry for only a few weeks. In mid-August, he removed all of his army from Harpers Ferry, except for one regiment. Banks stationed one regiment at Sharpsburg, another regiment at Berlin, and still another regiment at the Point of Rocks. He then moved with his division to near Hyattstown. The regiment which had been left at Harpers Ferry was eventually withdrawn.<sup>6</sup>

4 Stake to Spates, July 6, 1861, Ltrs. Recd., C & O Co. See also Bearss, "War Comes to the Chesapeake and Ohio Canal," page 158.

5 Bearss, "War Comes to the Chesapeake and Ohio Canal," pages 157-58. See also Williams, History of Washington County, Maryland, I: 312-313.

6 Bearss, "War Comes to the Chesapeake and Ohio Canal", page 160.

In mid-September, Confederate forces marched on unoccupied Harpers Ferry. The Union regiments at Berlin and the Point of Rocks hurried to the Dam 3 Area to repel the Confederates. Several clashes occurred on September 13 and 14. On September 15, Colonel John Geary, commander of the Union regiments, positioned his forces within the Dam 3 Area opposite Harpers Ferry. His left flank rested near the Maryland end of the burned-out railroad bridge, while his right flank extended two and one half miles up the canal to Lock 35. With good protection from both the railroad grade and the canal towpath, Geary's forces fired at the Confederates on the Virginia side for two hours. The Confederates were eventually forced to withdraw towards Bolivar Heights. A month later, Geary's forces crossed the river and drove the Confederates from Bolivar Heights. While occupying Bolivar Heights, the Union forces boated a large supply of wheat from Virginicus Island to the Maryland shore. The wheat had been stored in a flour mill on Virginicus Island. Before the Union forces could withdraw, however, a large Confederate force under Lieutenant Colonel Turner Ashby arrived. The Union forces were able to hold off the Confederate attack; and on the following night the Union forces recrossed the Potomac.<sup>7</sup>

In early November, torrential rains again caused some damage to the canal. On November 6, 1861, Division Superintendent, John O'Byrne, reported that a break had occurred "at the Harpers Ferry bridge abutment."

7 Ibid., page 162.

The flood had "washed part of the stone wall in [to] the canal on [the] towpath side and undermined a portion of the high wall on the berm side." O'Byrne feared that the damaged portion of the high wall on the berm side would eventually fall into the canal.<sup>8</sup>

In December of 1861, Harpers Ferry was described as a "picture of desolation." The canal opposite Harpers Ferry, however, was again in good working order, and boats were again running with some regularity between Cumberland and Georgetown.<sup>9</sup>

The coming winter of 1861-62, put an end to military activities along the canal. Parts of the canal, were kept opened during the winter so that boatmen could take advantage of this quiet period. By March of 1862, however, the entire canal was again open for navigation. During the first week of March, the Monocracy Division Superintendent, George Spates, wrote that the canal from Seneca to Harpers Ferry was in good order.<sup>10</sup>

In the meantime, General Banks' army had reentered Harpers Ferry during the last week of February. In early March, Banks' army moved out of Harpers Ferry and took Winchester. Thus for the first time, the Union

8 O'Byrne to Spates, November 6, 1861, Ltrs. Recd., C & O Co. See also Bearss, "War Comes to the Chesapeake and Ohio Canal," page 164.

9 Bearss, "War Comes to the Chesapeake and Ohio Canal," pages 167-68.

10 Edwin C. Bearss, "1862 Brings Hard Times to the Chesapeake and Ohio Canal," West Virginia History, XXX (January 1969): 436.

Army had control of the Winchester and Potomac Railroad. Banks' army waited at Winchester while the railroad bridge at Harpers Ferry was being rebuilt. The bridge was opened to railroad traffic on March 18. The Union Army then employed the Baltimore and Ohio to run the Winchester and Potomac line between Winchester and Harpers Ferry.<sup>11</sup>

A freshet damaged the canal again in late April, but repairs were pretty much completed by May 8. A week later, however, another freshet caused some damage. Although navigation was not completely halted, extensive repair work was required on some divisions.<sup>12</sup>

In late May, General "Stonewall" Jackson began an offensive to dislodge Banks' army from the Shenandoah Valley. Banks' army was defeated at Strasburg on May 24 and again at Winchester on May 25. The defeated army retreated towards the Potomac and crossed at Williamsport between May 26 and June 8. In the meantime, Union General Rufus Saxon had positioned his troops on Bolivar Heights in an attempt to prevent the Confederates from entering Harpers Ferry. The Confederates were soon threatening Bolivar Heights. Word reached General Jackson, however, that two strong Union forces were converging on the Shenandoah Valley. On May 30, the Confederate forces were ordered to retreat. Following

<sup>11</sup> Ibid., pages 437-39. See also Charlotte Judd Fairbairn, Historic Harpers Ferry in Jefferson County, West Virginia: Gateway of the Shenandoah (Berryville, Va.: Blue Ridge Press, 1956), page 45.

<sup>12</sup> Bearss, "1862 Brings Hard Times to the Chesapeake and Ohio Canal," page 442. See also Spates to Ringgold, May 24, 1862, Ltrs. Recd., C & O Co.

the Confederate retreat from the Shenandoah Valley, Colonel Dixon Miles was placed in charge of Union forces at Harpers Ferry.<sup>13</sup>

On June 4, another freshet struck the Potomac Valley. This time, the recently rebuilt railroad bridge at Harpers Ferry was washed away. Although Monocracy Division Superintendent, George Spates, reported that his division had "suffered but very little from this late freshet," the canal above Dam 3 had been seriously damaged. By the end of June, the railroad bridge at Harpers Ferry had been replaced, but "the canal above Dam No. 3 was still dry." Through navigation between Cumberland and Georgetown was not made possible again until July 24.<sup>14</sup>

Even after through navigations had been restored to the canal on July 24, the canal's troubles were not over. Navigation on the canal was continuously interrupted because of dam leaks and other maintenance problems. Many of these maintenance problems were apparently caused by negligence on the part of canal company employees. In late August, Captain R.C. Bomford, the commander of federal forces at the Point of Rocks, reported that George Spates was not properly performing his duties on the Monocracy Division. According to Bomford, the feeder lock at Dam 3 had been allowed to fill with sediment, thus causing a delay for

13 Bearss, "1862 Brings Hard Times to the Chesapeake and Ohio Canal," pages 443-44. See also Fairbairn, Historic Harpers Ferry in Jefferson County, West Virginia, page 45. By June 4, Union forces again occupied Winchester.

14 Bearss, "1862 Brings Hard Times to the Chesapeake and Ohio Canal," pages 444-46. See also Spates to Ringgold, June 7, 1862, Ltrs. Recd., C & O Co.

heavy boats. The lift locks on the Monocracy Division were also said to be in bad condition, and some of the bridges were considered dangerous. Bomford also considered Spates to be disloyal to the Union.<sup>15</sup>

Major units of General Lee's Army of Northern Virginia entered Maryland in early September of 1862. They crossed the Potomac at White's Ford in Frederick County and marched north to Frederick, where they set up camp. On September 9, General Lee ordered Generals Jackson, McLaws and Walker to take their troops and capture the large federal force that had been occupying Harpers Ferry since late May. With the federal garrison at Harpers Ferry eliminated, Lee would be able to supply his army from the Shenandoah Valley. General Jackson took his troops across Light's Ford at Williamsport on September 11. McLaws crossed Pleasant Valley and positioned his army on Maryland Heights overlooking the Dam 3 Area and the town of Harpers Ferry. Walker had intended to destroy the Monocracy Aqueduct and then cross the river at Cheek's Ford. He was eventually forced, however, to cross at the Point of Rocks. The combined forces eventually closed in on Harpers Ferry and forced the 11,000 federal troops under Colonel Dixon Miles to surrender on September 15.<sup>16</sup>

15 Bomford to Directors, August 28, 1862, Ltrs. Recd., C & O Co. See also Bearss, "1862 Brings Hard Times to the Chesapeake and Ohio Canal," page 447.

16 Bearss, "1862 Brings Hard Times to the Chesapeake and Ohio Canal," pages 449-50. See also Williams, History of Washington County, Maryland, I: 330-31; and Spates to Ringgold, September 13, 1862, Ltrs. Recd., C & O Co.

Following the retreat of Lee's army after the Battle of Antietam (September 17-18), canal officials began to assess the damage that had been done to the canal. Monocracy Division Superintendent, George Spates, reported that substantial damage had been done by the Confederates near the mouth of the Monocracy. Spates did not report on any damage within the Dam 3 Area. The superintendent of the Antietam Division, however, reported that the gates of the stop lock at Dam 3 had been burned.<sup>17</sup>

The damage to the canal had been repaired by mid-October of 1862. Although the canal had been repaired, continued dry weather coupled with a serious breach at Dam 5 prevented through navigation until the middle of November.<sup>18</sup>

During the remainder of 1862, the canal was not the scene of any major military activity. There were isolated Confederate raids across the canal, but the waterway and its structures were not damaged. The

17 Spates to Ringgold, September 25, 1862, and Spates to Ringgold, September 30, 1862, in Ltrs. Recd., C & O Co. See also Bearss, "1862 Brings Hard Times to the Chesapeake and Ohio Canal," page 454. The guard or feeder lock at Dam 3 along with Locks 35 and 36 were sometimes reported to be within the Antietam Division.

18 Bearss, "1862 Brings Hard Times to the Chesapeake and Ohio Canal," pages 452-58. General McClellan aided in the swift repair of the canal. McClellan needed the canal repaired so that he could establish a large supply depot near Harper's Ferry. This depot (along with one at Berlin) supplied McClellan's troops as they crossed the Potomac at Berlin and White's Ford and marched towards Fredericksburg.

war activity had now moved southeast towards Fredericksburg, and the shippers and boatmen tried to take advantage of the relative quiet. The canal was kept open for navigation until mid-January of 1863.<sup>19</sup>

In early January of 1863, the division superintendents submitted reports outlining the various repair needs of their divisions. According to Monocracy Division Superintendent, George Spates, Locks 33 and 34 were in good order. The feeder lock at Dam 3 was also in good order, although it did contain a large amount of sediments. Spates believed that the feeder lock could easily be cleaned out with the "mud machine" which was in use at Dam 4. There were also several sand bars between Lock 33 and the dam. The towpath on the Monocracy Division was in good order despite the fact that it was being "used by a cavalry patrol" both "day and night." The "carpenters & blacksmiths shop at Harpersferry" had been burned back in September of 1862. Because of the shop's destruction no carpenter had been employed and therefore many lockgates needed to be replaced. Spates reported that he intended to construct "a waste way on the feeder level in order to draw out the sand and sediment that always gathers there." Spates also said that he had raised the slope wall adjoining the railroad bridge at Harpers Ferry. The wall had been raised "some three feet[,] therefore preventing the river [from] overflowing the canal at that point [and] partially filling the canal with sediments[,] logs[,] etc." On March 1, Spates reported that he had drawn the

19 Ibid., pages 459-462.

water off his division, and had proceeded to make several repairs. The only work done within the Dam 3 Area, however, involved the partial removal of a sand bar from the feeder lock at Dam 3. Spates said that he had re-watered his division on February 28. The entire division was now in "good boating order and boats [were] passing over the Division." On March 31, Spates again reported that his division was "in good boating order" and boats were still "passing freely each way with little or no Interruptions."<sup>20</sup>

At the end of May, Spates reported that the Monocracy Division was still in good order, but the "river at Dam No. 3" was getting somewhat low. He was making arrangements to repair the dam so that there would be no interruption in navigation. Spates then reported the more encouraging news of the month. He had had constructed that month "a good and substantial carpenter shop" and "also a Blacksmith shop." The two structures had been "built at the upper end of the Division out [of] a warehouse that was likely to fall into the canal at Lock 33." The old warehouse had supplied "all the framing [sic] and roofing for both Buildings except [for] the weather boarding."<sup>21</sup>

On June 30, Spates reported that the Monocracy Division was again in good boating order after suffering several days of interruption. The interruption had been caused when Confederate and Union forces crossed the

20 Spates to President and Directors, January 1, 1863; Spates to President and Directors, March 1, 1863; and Spates to President and Directors, March 31, 1863, in Ltrs. Recd., C & O Co.

21 Spates to President and Directors, May 30, 1863, Ltrs. Recd., C & O Co.

Potomac at the beginning of the Gettysburg campaign. The Dam 3 Area suffered no damage. At the end of July, Spates again reported that his division was "in good boating order" in spite of the recent heavy rains.<sup>22</sup>

For the remainder of the months of 1863, Spates reported that his division was in good order. In November of 1863, however, Antietam Division Superintendent, Levin Benton, reported that the lockgates at Lock 36 had been broken twice that month. Benton urged the Board to attach Lock 36 to the Monocracy Division. Benton said that he had absolutely "no control of the lockkeeper" and it was impossible for him (Benton) to keep the lock in order. The Board had earlier suggested that Lock 36 be attached to the Monocracy Division, but Benton had voiced his objection to the idea.<sup>23</sup>

Despite continued raids and skirmishes along the canal, the Dam 3 Area suffered little damage during the remaining year of the War. Harpers Ferry had been occupied by a federal garrison ever since General McClellan's army had left Maryland for Fredericksburg back in October of 1862. This garrison was forced to retire from the town for a brief period during the Gettysburg campaign in mid-1863. During that brief period, General Lee's troops held the town. Following the departure of Lee's troops, however, the federal garrison returned and held the town until July 4, 1864. On

22 Spates to President and Directors, June 30, 1863; and Spates to President and Directors, July 31, 1863, in Ltrs. Recd., C & O Co.

23 Spates to Ringgold, September 19, 1863; Spates to President and Directors, September 30, 1863; Spates to President and Directors, October 31, 1863; Spates to President and Directors, November 30, 1863; Benton to Bringle, November 8, 1863; Benton to Bringle, November 17, 1863; and Benton to Bringle, November 22, 1863, in Ltrs. Recd., C & O Co.

that date, General Early's troops forced the garrison to retreat first to Maryland Heights and then towards the city of Washington. The federal garrison eventually returned and held the town until the end of the War.<sup>24</sup>

24 Fairbairn, Historic Harpers Ferry in Jefferson County, West Virginia, pages 45-47.

CHAPTER 8: The Dam 3 Area During the Period 1865-1889.

The extant records of the canal company contain only fragmentary information on the Dam 3 Area between 1865 and 1889. This scarcity of information is probably a reflection of Harpers Ferry's decline during the Civil War. The town's only industry, the United States Armory, was destroyed at the beginning of the conflict. Many of the inhabitants deserted the town at the beginning of the war and many did not return after the war had ended. The town would never regain the importance that it had enjoyed prior to 1861.<sup>1</sup>

The Chesapeake and Ohio Canal was operating smoothly when the Civil War came to an end in April of 1865. Although the major canal structures within the Dam 3 Area had survived the ravages of war, the nearby Baltimore and Ohio Railroad Bridge had not been so lucky. The railroad bridge was destroyed and replaced many times during the war.<sup>2</sup> After the war, the railroad company announced that it was ready to build a permanent structure to replace a temporary one that had been erected in mid-1864. On February 6, 1866, the president of the Baltimore and Ohio notified the Canal Board that the railroad company was about to rebuild the abutment

1 Joseph Barry Jr., The Annals of Harpers Ferry from the Establishment of the National Armory in 1794, to the Present Time, 1869; With Anecdotes of Harpers Ferrians (Hagerstown, Maryland: Dechert & Co., Printers, 1869), page 5.

2 Gilbert, Exploring Potomac Water Gap, page 17. See also Hungerford, The Story of the Baltimore and Ohio Railroad, II: 23-24.

wall of the canal portion of the bridge. The railroad company desired to build "a thicker and more substantial wall." The Canal Board was therefore requested to grant the railroad "permission to build the face of said wall five feet further into the canal." The railroad company's request was approved by the Canal Board on February 8.<sup>3</sup> The new bridge was built by Wendel Bollman in 1865-66. The Bollman Bridge carried both railroad and highway traffic until the Baltimore and Ohio built a separate railroad bridge in 1892-93. The Bollman bridge continued to be used for highway traffic until the flood of 1924 washed away two of its spans. These spans were eventually replaced, however, and the bridge again carried highway traffic until the 1936 flood washed away all but one of its spans.<sup>4</sup>

At the end of the Civil War, there were probably several buildings standing in the Dam 3 Area. The two shops which Division Superintendent Spates had erected in 1863 were no doubt still standing somewhere in the Dam 3 Area.<sup>5</sup> Since Spates' monthly (or periodic) reports during the war made no mention of lockhouses being destroyed near Harper's Ferry, it is probably safe to conclude that the Dam 3 Area lockhouses were still standing at the end of the war. During the 1850s, the Preacher Family had leased

3 Proceedings of the President and Board of Directors, K, 476-77.

4 See photograph of bridge in Plat 16 of the Illustrations section of this report. See also Hungerford, The Story of the Baltimore and Ohio Railroad, I: 154, II: 23-24; and Gilbert, Exploring Potomac Water Gap, page 17. The piers of this bridge can still be seen.

5 See footnote 21 of Chapter 7 of this report.

warehouses at Locks 33 and 34, and Israel Russell had leased a warehouse somewhere "near Harpers Ferry." It is not known if these warehouses were still standing at the end of the war.<sup>6</sup>

Local businessmen continued to express their interest in the Dam 3 Area of the canal after the war. As early as March of 1868, one S.M. Williams applied for permission to build a store at Lock 33. The application was declined on April 15. In 1870, John Preacher Jr. made application to lease a parcel of land in order to engage in some type of enterprise at Lock 35. Preacher's application was referred to the President. The Board also received applications in 1870 from two individuals who desired to use water from the canal at the Harpers Ferry Dam.<sup>7</sup>

In 1873, the Canal Board reported that it had received a letter from the well-known local businessman, James H. Elgin. Elgin wanted a deed for a building described as "the House near the Harpers Ferry Bridge, now occupied by John H. Reed." The house was also described as being a "stone house." The Board refused to grant Elgin such a deed.<sup>8</sup>

In 1874, John H. Reed made application for a "lease of land at Lock No. 34, for a grocery & Feed Store." The application was eventually rejected

6 See footnotes 32, 34, and 35 of Chapter 6 of this report.

7 Proceedings of the President and Board of Directors, L, 88, 339, 354, and 364.

8 Ibid., M, 122, 135.

by the Board. Reed was a prominent individual in Harpers Ferry and the Dam 3 Area. Back in 1858, he had held the position of keeper of Guard Lock 3, and, in 1873, he occupied a house along the canal near the railroad bridge. One secondary source maintains that "for at least two generations" the Reed Family held "several buildings" at Lock 33 from which they "sold feed for mules and groceries to canallers."<sup>9</sup> Also in 1874, John Howard made application to build a warehouse above one of the locks at Harpers Ferry. Howard's application was approved, but the canal company's records do not state precisely where the warehouse was to be located.<sup>10</sup>

The great flood of 1877 no doubt caused considerable damage within the Dam 3 Area of the canal. The full extent of that damage, however, is not known. The even greater flood of 1889 completely wrecked the canal in the Dam 3 Area. Two canal buildings were completely washed away by the raging waters.<sup>11</sup>

9 Ibid., K, 19,M, 122, 159, 172. For reference to the Reed Family store at Lock 33, see Hahn, Towpath Guide to the Chesapeake and Ohio Canal, Section Three, Harpers Ferry to Fort Frederick, page 9. Hahn does not give the period in which the Reed Family operated their enterprise at Lock 33.

10 Proceedings of the President and Board of Directors,M, 159.

11 For a view of some of the damage done along the Dam 3 Area of the canal, see Plats 14 and 15 in the Illustrations section of this report. See also Second Report of Maryland Receivers, June 9, 1890, "Exhibit A," in C & O Canal Restoration Group files, Seneca, Maryland. The location of these manuscripts will be cited hereinafter as Report of Receivers.

CHAPTER 9: The Dam 3 Area, 1890-1979.

The flood of 1889 caused the canal company to be placed in the hands of receivers. On June 9, 1890, the receivers reported that the company owned the following properties within the Dam 3 Area of the canal:

Lock 36  
[Lot No.] 163 - Lockhouse in fair order.

Lock 35  
[Lot No.] 164 - Lockhouse of brick much injured.

Lock 34  
[Lot No.] 165 - Lockhouse of brick nearly destroyed.

Lock 33. Harper's Ferry.  
[Lot No.] 165.5 - Lockhouse swept away by flood.  
[Lot No.] 166 - B & O Railroad Company use of land, at Harper's Ferry; expires 1950; rent per annum as Lease Book [\$] 20.00.  
[Lot No.] 167 - Storehouse berm side, swept away; lease to A. Spencer, expires 1897; rent per annum [\$] 36.00.  
[Lot No.] 167.5 - One acre land, more or less; A. Spencer, rent unknown.<sup>1</sup>

1 Second Report of Receivers, June 9, 1890, "Exhibit A."

The extant records of the canal company contain only fragmentary information on the Dam 3 Area from 1890-1936. As stated in the previous chapter, the Baltimore and Ohio Railroad Company built a separate bridge to carry its railroad over the river and canal in 1892-93. The Bollman bridge, however, was left standing to carry highway traffic.

During most of the receivership period, George L. Nicholson served as General Manager of the canal. During the period from roughly 1900 to 1910, the Superintendent of the Monocacy Division was apparently Samuel Sterling. The Dam 3 Area was included within this division. Two important business enterprises at Harpers Ferry used the canal frequently during this period. The A. Spencer & Company was a wholesale and retail dealer in flour, groceries and canal supplies. Spencer had owned a storehouse below Lock 33, but it had been washed away during the 1889 flood. Since Spencer apparently carried on a thriving business, however, the storehouse may have been rebuilt. The B & A Kaplon & Co. of Harpers Ferry was also involved in some canal trade.<sup>2</sup>

During the early 1920s, the canal company began to share the water of Dam 3 with the Harpers Ferry Paper Company. This plant was probably located on the Harpers Ferry side of the river opposite the canal's feeder lock. The Paper Company's "Mill Building and Machinery" were destroyed by

2 Sterling to Nicholson, July 7, 1908, July 8, 1908, and August 31, 1909; Spencer to Pearre, March 2, 1906, January 22, 1903, in Ltrs. Recd., Office of the Chesapeake and Ohio Canal Co. and the Canal Towage Co., 1900-15.

fire during the winter of 1924-25. The facilities were rebuilt, however, during the same winter.<sup>3</sup>

In late 1923 and early 1924, considerable excitement was created over the news of a fight at Lockhouse 34. On December 24, 1923, the keeper of Lock 34, Millard Goodhart, shot to death one Chester Smith. Goodhart was arrested and spent some time in jail. There was general agreement among the local residents, however, that Goodhart had acted in self-defense. Canal company officials at first hesitated to pay Goodhart for the first half of January. They finally agreed to pay his wife during the period in which he was jailed. Goodhart eventually returned to the lock and was keeper at the time of the 1936 flood.<sup>4</sup>

The flood of late March 1924 finally caused the permanent closing of the canal. The Bollman bridge at Harpers Ferry (which by now carried only non-railroad vehicles) lost its two spans nearest the Maryland shore during this flood.<sup>5</sup> The full extent of the damage within the Dam 3 Area,

3 Savery to Nicholson, September 9, 1921, January 28, 1925, September 10, 1926, August 19, 1926, Ltrs. Recd., Correspondence of the Office of Trustees.

4 Fisher to Nicholson, January 14, 1924, Fisher to Nicholson, January 14, 1914 / 1924 /, Goodhart to Nicholson, January 21, 1924, Goodhart to Fisher, March 23, 1936, Ltrs. Recd., Correspondence of the Office of Trustees. See also copy, Nicholson to Fisher, January 23, 1924, Ltrs. Sent, Correspondence of the Office of Trustees. Thomas F. Hahn's Towpath Guide is incorrect on two points concerning the Goodhart affair. First, Goodhart's first name was Millard rather than "Willard." Secondly, the shooting occurred on Christmas Eve of 1923 and not "sometime before 1919." See Hahn, Towpath Guide to the Chesapeake and Ohio Canal, Section Three, Harpers Ferry to Fort Frederick, page 11.

5 See footnote 4 of Chapter 8 of this study report.

however, is not known. Another minor freshet apparently occurred in May of 1924. On May 9, William R. Reynolds of Harpers Ferry telegrammed Nicholson that the water at Harpers Ferry was seventeen and a half feet and rising five inches per hour.<sup>6</sup>

Although the canal ceased operation after the 1924 flood, General Manager Nicholson and a team of canal company employees continued to maintain the canal to some extent. Much of the maintenance was necessary so that millers could continue to purchase water at various points. On April 20, 1925, Division Superintendent, S.E. Fisher, notified Nicholson that he would "put the water in the Canal from Harpers Ferry to Brunswick" as soon as "Mr. Hogan" had finished "repairing his Turbine wheel." On June 26, Fisher reported that he was "feeding a Paddle and a half at [the] Harpers Ferry feeder." He said that he would eventually "run more water through to Seneca." This was necessary because the large amount of grass on the various levels was effecting the quality and quantity of the water on those levels.<sup>7</sup>

On November 20, 1925, Superintendent Fisher reported that he had "nailed up the Bridge across the canal at [the] Harpers Ferry lock to keep people from crossing it with horses." The bridge was apparently still suffering from the damage it had received during the 1924 flood, and Fisher considered it unsafe. Fisher also said that he had asked Abe Greenwalt,

6 Reynolds to Nicholson, May 9, 1924, Ltrs. Recd., Correspondence of the Office of Trustees. Reynolds was apparently one of Fisher's assistants on the Monocacy Division. In late 1927, rumors were circulated that Reynolds was "running whiskey from Harpers Ferry to Lock 29." Superintendent Fisher believed that there was little truth to the rumors. See Fisher to Nicholson, December 21, 1927, Ltrs. Recd., Correspondence of the Office of Trustees.

7 Fisher to Nicholson, April 20, 1925 and June 26, 1925, Ltrs. Recd., Correspondence of the Office of Trustees.

keeper of the Harpers Ferry Lock (Lock 33) to stop "having dances in the lock house." Fisher feared that someone would eventually "get drowned at some of the dances." The Greenwalts lived in their own house at Sandy Hook, and Fisher suggested that they have their "dances in their own house" rather than in the lockhouse.<sup>8</sup>

In December of 1925, Fisher apparently received directions to use the old repair scow at Harpers Ferry to perform some work on the canal. On December 12, Fisher wrote that although the old scow had just about sunk, his team could raise it within a short time. His team would probably have trouble, however, in getting through two of the Dam 3 Area locks. Lock 34 had accumulated "a good deal of sand;" some of which would have to be scooped out before the lower gates could be opened. The team would probably encounter only minor trouble at Locks 32 and 33.<sup>9</sup>

The water on the canal between Harpers Ferry and Seneca was apparently drained during the winter of 1925-26. Fisher reopened the Harpers Ferry feeder on April 5, 1926.<sup>10</sup>

In August 1930, the Baltimore and Ohio Railroad (which now controlled the canal) announced that it was about to build a second railroad bridge at Harpers Ferry. Since one span of the bridge would cross the canal, the railroad company submitted blueprints of the proposed bridge to the

<sup>8</sup> Fisher to Nicholson, November 20, 1925, Ltrs. Recd., Correspondence of the Office of Trustees.

<sup>9</sup> Fisher to Nicholson, December 12, 1925, Ltrs. Recd., Correspondence of the Office of Trustees.

<sup>10</sup> Fisher to Nicholson, April 5, 1926, Ltrs. Recd., Correspondence of the Office of Trustees.

General Manager of the canal. The proposal was eventually approved by the canal trustees and the bridge was built. The 1892-93 railroad bridge was allowed to remain.<sup>11</sup>

In late February and early March of 1936, another great flood struck the Potomac Valley. On March 25, Superintendent Fisher wrote that "the guard lock at [the] Harpers Ferry feeder" had "broken in two places." The lockhouse at the foot of the feeder level [at Lock 34] had been washed away. The house at Lock 33 had also been washed away; and the short level between Locks 32 and 33 was full of stones. Along with his letter, Fisher also enclosed a letter from Mr. and Mrs. Goodhart, who were the former keepers of Lock 34. The Goodharts had been living in Lockhouse 34 at the time of its collapse during the flood. In the letter, the Goodharts requested that they be allowed "to Build 2 Rooms on the same floor [the house had been a two-story brick structure]" so that they would "have a place to Stay." The house at Lock 34 was never rebuilt.<sup>12</sup>

On April 5, Fisher reported that he had thoroughly examined the damage between Dam 3 and Sandy Hook. A "considerable portion of the dam appeared to be gone." Fisher assumed that the dam would "be restored by the Electric

<sup>11</sup> Lane to Nicholson, August 12, 1930, Ltrs. Recd., Correspondence of the Office of Trustees. See also Nicholson to Lane, August 15, 1930, Ltrs. Sent, Correspondence of the Office of Trustees. The tracks of the second bridge merged with those of the 1892-93 bridge inside the tunnel which had also been built in 1892-93. See Appendix H: Blueprint showing the Baltimore and Ohio Railroad's Proposed Bridge No. 40 and the then existing Bridge No. 40.

<sup>12</sup> Fisher to Nicholson, March 25, 1936 and Goodhart to Nicholson, March 23, 1936, in Ltrs. Recd., Correspondence of the Office of Trustees.

Co." At the feeder there was a break in the guard bank of about forty feet long and twenty-five deep. The top of the guard bank was "pretty badly washed and many of the stone[s] in the wall next to the river" had been washed into the feeder. The feeder also contained stones that had been washed from the towpath and from the break in the guard bank. The towpath had been "roughed up pretty badly for a few hundred feet below the dam." The brick lockhouse at Lock 34 had been washed away. The lock-gates at Lock 34 had also been washed out. From Lock 34 "down to the lock at [the] Harpers Ferry Bridge [Lock 33] the towpath was not badly damaged." At Lock 33, however, "there was severe damage." The lockhouse and gates had been washed away and "the stone wall" had been badly damaged. The filling around the lock had also been washed out. The "guard wall, bank, and towpath from the bridge to a few hundred feet below the highway bridge" were badly damaged. The canal in the vicinity of Lock 33 was full of stones. Damage was also heavy from Lock 33 down to Sandy Hook. Fisher estimated that the total damage from Dam 3 to Sandy Hook ranged from \$25,000 to \$40,000.<sup>13</sup> The flood also washed away all but one span of the old 1865-66 Bollman Bridge which crossed the river and canal at Harpers

13 Copy of undated and unsigned letter in Ltrs. Recd., Correspondence of the Office of Trustees. Although this letter is undated and unsigned, it is obviously a report from Fisher to Nicholson. The date of the letter can be surmised from the fact that the letter begins with: "I was at Harpers Ferry yesterday, Sunday Apr. 4th. . . ."

Ferry. The remaining span was eventually removed.<sup>14</sup>

The flood debris along the canal was eventually cleaned up and some repairs were made along some sections of the canal.<sup>15</sup> The canal company records do not indicate what repairs (if any) were made in the Dam 3 Area. We do know, however, that the two lockhouses (which were washed away) were never replaced.<sup>16</sup>

In September of 1938, the Chesapeake and Ohio Canal officially became the property of the people of the United States. Since that time, the remains of the waterway have been maintained by the National Park Service. Between 1938 and 1956, the Dam 3 Area of the canal was poorly maintained. Trees were allowed to grow up in the canal bed and the structures were allowed to deteriorate. In 1956, the National Park Service started to improve its maintenance of the canal above Seneca. In that year, a large breach in the towpath between Locks 34 and 35 was finally repaired. This spot proved to a source of frustration for maintenance officials. Almost everytime the Potomac Valley would experience a flood, a break would occur in the towpath between Locks 34 and 35. A breach occurred at this spot two or three times between 1960 and 1972. Finally, after the Hurricane

14 See Plat 1 in the Illustrations section of this report.

15 Nicholson to Preston, December 4, 1936, Ltrs. Sent, Correspondence of the Office of Trustees. Over \$25,000 was spent for cleanup and repairs between Georgetown and Little Falls in 1936.

16 My assertion regarding the destroyed lockhouses is based on a conversation with Chief of Maintenance, Dale Sipes, December 14, 1979.

Agnes flood of 1972, National Park Service officials decided to simply erect a bridge over the breached area rather than repair the towpath. In the 1970s, the National Park Service also took steps to stabilize the so-called Section House on the hill overlooking Lock 36. Boards were nailed over the windows so that vandals would find it harder to get inside. A new roof was also put on the house. During this same period, the National Park Service also did some stabilization work at Lockhouse 36 (the so-called Engineer's House). A contract was also let for the reconstruction of the Mule Bridge over Lock 35. The contract was eventually declared void and the bridge has not yet been rebuilt.<sup>17</sup>

17 The statements made concerning maintenance and stabilization work within the Dam 3 Area are based upon conversations I had with Thomas N. Crellin, Acting Chief of the C & O Canal Restoration Group, and with George Hicks, Maintenance Supervisor for the Piedmont Division of the C & O Canal National Historical Park. Both conversations were held on December 14, 1979.

**Recommendations for Preservation and Interpretation.**

The preservation of the canal within the Dam 3 Area should present no problems in the future. The entire canal is listed on the National Register of Historic Places and is theoretically protected by a body of preservation laws passed over the last two decades. A final draft of the Interpretive Prospectus for this area of the canal has already been prepared.

Recommendations Regarding Further Historic Research.

The author has thoroughly investigated the records of the canal company for this report. Primary and secondary sources relating to the history of Harpers Ferry and the Dam 3 Area were also examined at the Library of Congress, the Harpers Ferry National Historical Park Library and at the Department of the Interior Library. The author feels that no further historical research is needed on the canal "structures" within the Dam 3 Area. The author does feel, however, that more research is needed on three "buildings" within the Dam 3 Area. The so-called Salty Dog Tavern deserves a full historic structure report. Although the Salty Dog is not a part of the Chesapeake and Ohio Canal National Historical Park, it is historically related to the canal. Officials at the Harpers Ferry National Park (which has supervision of the building) know almost nothing about the history of the building. Additional research should also be done on the so-called Section House opposite Lock 36, and on the remains of the so-called Lockhouse 35. It is my belief that neither of these houses were originally owned by the canal company. These structures could be covered in one historic structure report.

## **Appendices**

#### **Appendix A**

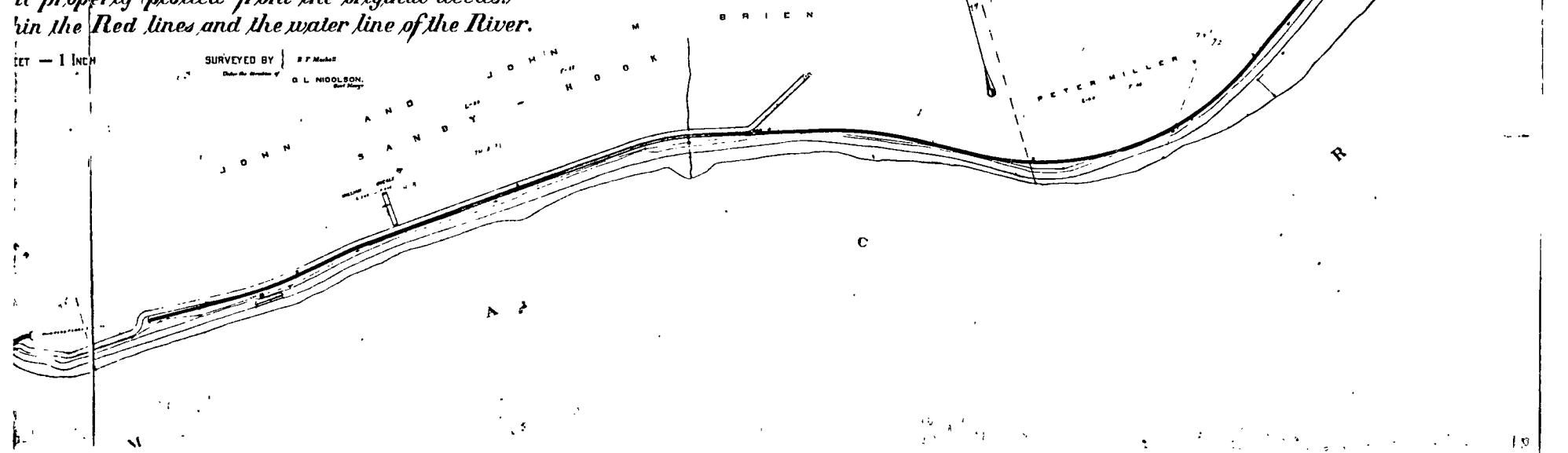
Property Map of the Chesapeake and Ohio Canal  
Co. from Brunswick to Antietam, drawn from  
original deeds by B.F. Mackall, ca. 1896; lo-  
cated in Maps and Plans Relating to the  
Chesapeake and Ohio Canal, 1826-1937, Record Group  
79, Department of the Interior files, National  
Archives, Washington, D.C.

PROPERTY MAP  
of the  
LAKE AND OHIO CANAL CO.  
sunswick to Antietam.

all property (plotted from the original deeds.)  
in the Red lines and the water line of the River.

SCAL - 1 INCH

SURVEYED BY J. P. NICHOLS  
G. L. NICHOLSON  
Surveyors.



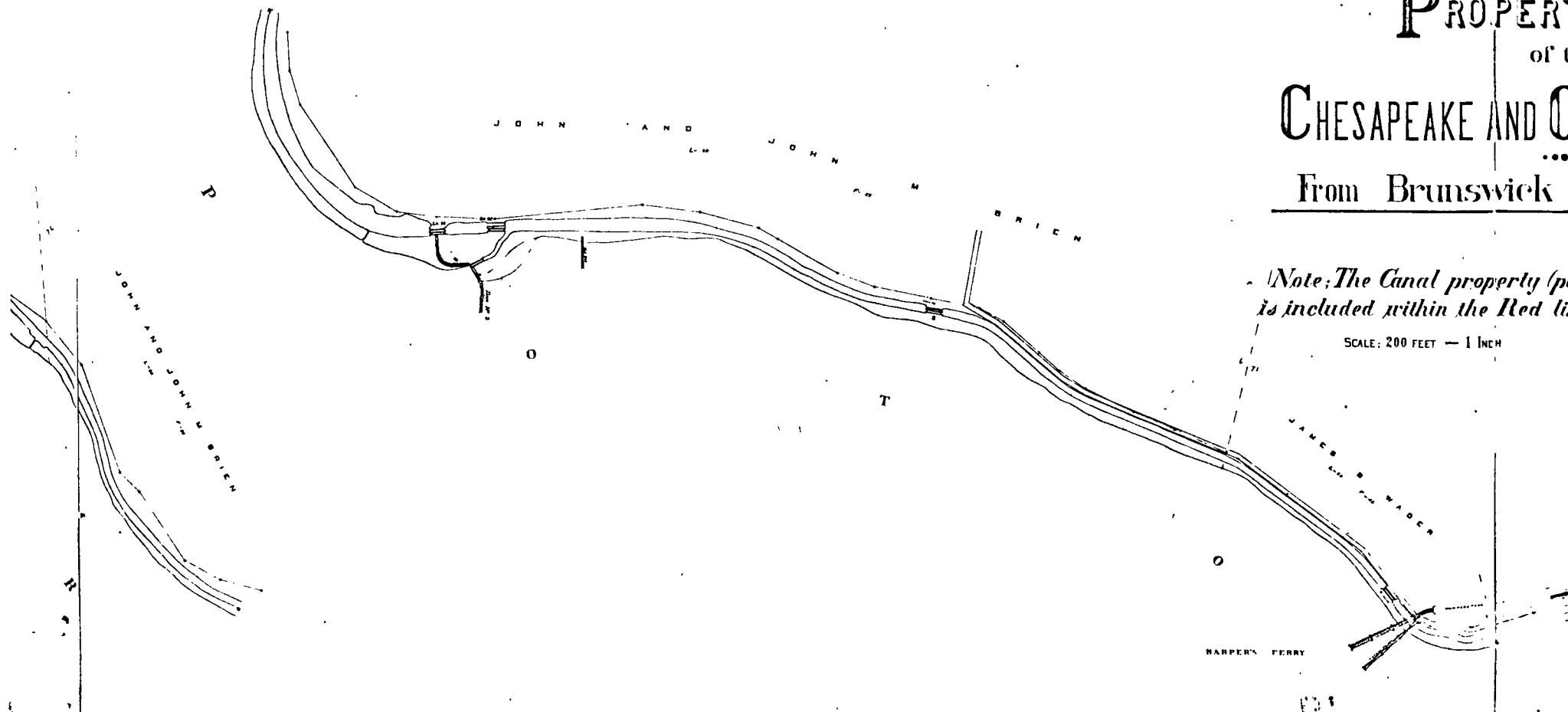
PROPERTY  
of  
PEAKE AND CO

From Brunswick

From Brunswick

*Note: The Canal property (p) is included within the Red line.*

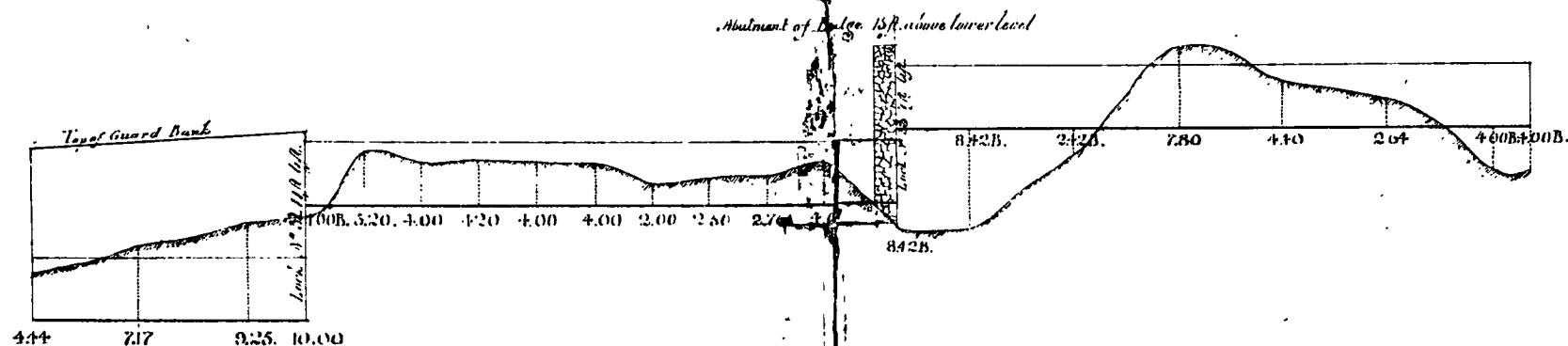
SCALE: 200 FEET — 1 INCH



**Appendix B**

**Profile Map of Section 109 found in Drawings  
and Other Records Concerning Construction,  
1828-1937, C & O Co.**

## Section 109

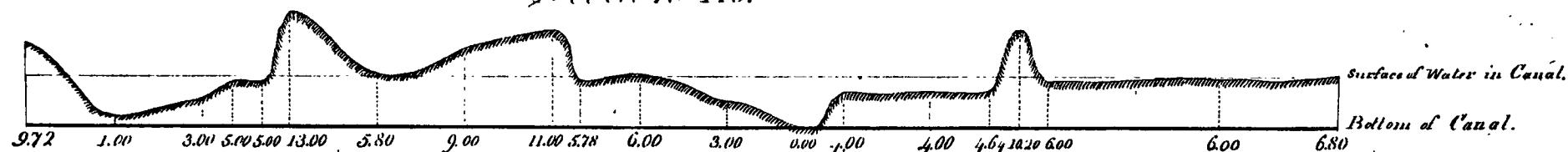


The length of this elevation is 3600 feet. 360 feet above the lower end of the section is Lock No. 31 of 11 feet lift & also a Guard Lock of the same height as the lift lock, and the dam. 1360 feet above the lower end of the section the Canal passes thru' the abutment of the Hargrave's Ferry Bridge, the width thro' the abutment will be reduced nearly to the width of a Lock. The surface of water in the Canal at the abutment will be 9 feet below the top of the abutment or foot of the present road. Immediately above the abutment is lock No. 32 of 7 feet lift. On 360 feet at the lower end of the Section about  $\frac{1}{2}$  of the excavation will be of large detached rock, and in part below the River surface. The Tow Path Bank, for this distance (360 ft.) will be raised, to serve as a guard bank, from 16 1/2 feet to 18 feet above bottom of Canal. Between Locks 31 & 32 a large portion of the excavation will be of rock. Above Lock No. 32 there will be a large proportion of rock as part of it solid but a considerable portion quarry rock mixed with earth excavation along a steep hill side. It is supposed that much of the embankment will be obtained from the hill side referred to, the probably some portion of it, for Puddling, may be required to be hauled a considerable distance. A vertical wall will be required nearly the whole length of the section. The present road will require moving for the whole distance. The excavation for which & the partition wall between it & the Canal have been included with the excavation and wall of the Section. The Contractor will be required to interrupt as little as possible the public travel, during the construction of the Canal. It is proposed to enter the River at the Guard Lock and construct a Tow Path along the River shore passing under the bridge and rising up into the present line immediately above the bridge. Whether this change will be made or not has not been determined.

**Appendix C**

**Profile Map of Section 110 found in Drawings and  
Other Records Concerning Construction, 1828-1937,  
C & O Co.**

## Section 110.

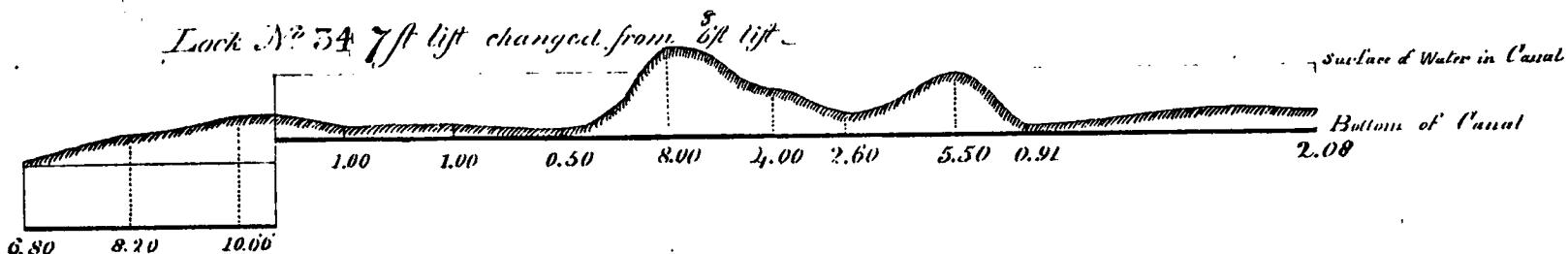


The ground over which this Section passes is difficult. The excavation will include a great proportion of rock, & much of the earth for the embankment must be obtained from the hill side above the canal, as the excavation does not furnish the requisite quantity. About two thirds of the Section will require a protection wall, the stone for which will be furnished from the excavation. The county road, running parallel with the line, and on the ground necessary for the berm, must be removed for the entire length of the section. — The contractor will be required to interrupt as little as in his power the public travel during the construction of the Canal. — The same will be required in relation to the river navigation, as the foundation of the protection wall will be in part in the present boat channel. —

**Appendix D**

**Profile Map of Section 111 found in Drawings and  
Other Records Concerning Construction, 1828-1937,  
C & O Co.**

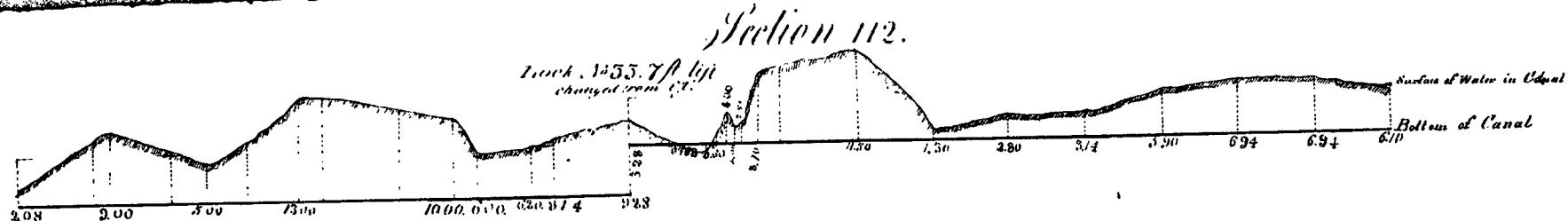
### Section III.



This section will require waiting nearly its whole length. The earth for the embankment will be obtained in part from the surplus excavation, & in part from the hill side. Provisions have been made for the construction of a Roma on the Barm side at the lower end of this section, in chains. The Contractor will be required to interrupt as little as is in his power the public travel during the construction of the canal - The same will be required in relation to the river navigation, as the foundation of the protection wall will be in part in the present boat channel.

**Appendix E**

**Profile Map of Section 112 found in Drawings and  
Other Records Concerning Construction, 1828-1937,  
C & O Co.**



For about two thirds its length this section will require a vertical protection wall - the foundation for a part of which will be on the wall already built, while a part will be founded in the bed of the river - Most of the earth for the embankment will be obtained, from the earth excavation of the upper 1000 feet of this section, there being surplus materials for that distance in bottom土; a part of the embankment will be obtained, from a temporary feeder that will be made through the same bottom to the river near the government dam - The excavation of this feeder is included with the excavation of the section - For about 600 feet the canal will be excavated from 3 to 4 feet below the usual bottom in order to take in boats from the river - This excavation below bottom will cease at lock #35, of 7 feet lift - Below the lock & for 500 or 600 feet above it there will be a large amount of rock excavation -- Some of the embankment will probably be obtained from widening the canal at its entrance upon the bottom - The Contractor will be required to cause as little interruption to the river navigation as possible as a part of the protection wall will be in the present boat channel.

**Appendix F**

**Copy of Frieze's and McDonnell's Contract and  
Specifications for Lock 34; taken from Ltrs.  
Recd., C & O Co.**

Lock No. 34

Friese & McDonnell



# CONTRACT FOR Lock No. 34.

## ARTICLES OF AGREEMENT.

Entered into this twenty first day of April  
in the year 1832, between Simon Frize & Son McDonnell

of the State of Maryland of the first part, and the Chesapeake and Ohio Canal  
Company, by the President - - - thereof, of the second part.

Witness, That the said Frize & McDonnell  
promise and agree in conformity with the annexed Specification, and with the plan of  
Locks exhibited by  
the Canal Company at the time of making this agreement, and with such changes or alterations  
thereof as may be hereafter adopted, either by an Engineer of the Company, or by the President and  
Directors thereof, to construct in a substantial and workmanlike manner, on the  $\frac{1}{4}$  Section of the  
Chesapeake and Ohio Canal, Lock No 34 of eight feet  
lift -

and to furnish all the materials which may be necessary or proper therefor, according to the  
annexed specification, and of such quality as an Engineer of the Company shall approve.

Some competent Engineer in the employment of the President and Directors of the Chesapeake  
and Ohio Canal Company, shall from time to time, not more frequently than once a month, estimate  
the quantity and value of each species of work done pursuant to this contract, at the prices con-  
tained in the annexed proposal, and also of any extra work done in consequence of any alteration  
of the plan of the Lock - or of the materials required for its construction, when  
such alteration shall have been made under the authority of a written order, and shall  
have caused an increased expense to the Contractor; and where any alteration of the  
plan or materials shall have caused a saving of expense to the Contractor, the Engineer shall make  
a reasonable deduction from the estimate so made, for such saving of expense; and he shall deter-  
mine every question necessary for the payment of the monthly as well as the final estimates.  
And it is mutually agreed and understood between the contracting parties, that any estimate  
made as aforesaid, shall be final and conclusive, unless objected to before payment thereof, and  
within twenty days after it shall have been returned to the President and Directors; in which case,  
notice must be given by the party objecting, to the other party, in writing, and any estimate so  
objected to, shall thereupon, be referred by the President and Directors to the acting Resident  
Engineer, or the Engineer having the superintendance of that portion of the Canal comprehend-  
ing the aforesaid Lock or in case of his death, resignation, absence, or in-  
ability, to such one of the Resident or Assistant Engineers as the President of the Company may depute  
to fill his place, and the decision of such Engineer thereupon, whether he shall have previously ap-  
proved and signed the estimate or not, shall be conclusive against both parties, without further appeal;  
and in like manner, shall be conclusive the decision of any such Engineer, upon any question that  
may arise as to the meaning of this agreement, such question having been referred as aforesaid, by  
the President and Directors.

Within ten days after the return of any estimate to the President and Directors, not less than  
four-fifths of the sum appearing to be due for work performed since the preceding estimate, shall  
be paid, in the mode in which payments are mad by the regulations of the Company, the balance  
being reserved by the President and Directors to ensure the fulfilment of this contract; no portion

of which reserved money will under any circumstances be paid until this contract is fulfilled, and the work approved by the Resident Engineer. And within thirty days after the completion and approval of the aforesaid *Lock* according to the terms of this contract, the final estimate shall be made, and the balance due thereon shall be paid.

The works shall always be open to examination during their progress by the President and Directors, their Engineers, or any persons they may depute for that purpose; and the Contractor shall at all times, keep open, at his own expense, for that purpose, a horse path way, through or along the side of his *Lock*, so that the officers of the Company and their Engineers, may readily pass through the same, to the Section above or below.

At the expiration of every week's work, a report shall be made by the said Contractor to the Resident Engineer, or to his Assistant, upon the residency of which the said *Lock* is a part, of the average force of hands, carts, &c. employed on the same for the past week, according to such forms as may be supplied by order of the President and Directors of the Company.

It is mutually agreed between the parties, that the work on the aforesaid shall be commenced within ~~the eight~~ days from this date; and thereafter steadily prosecuted without intermission, with such force as shall in the opinion of the resident Engineer secure its completion by the *first* day of *December*, 1832 at which time it shall be fully completed and delivered up; and it is further agreed that in the event that the said work shall not be so commenced, or prosecuted and completed, or, if the Contractor on being required thereto by the Resident Engineer, shall fail or refuse to increase the force employed thereon, to such extent as in the opinion of the Engineer, shall be necessary to ensure its completion in the stipulated time; or in case the Contractor shall disobey any of the orders of the acting Resident Engineer for the time being, or shall violate any of the express conditions of this agreement; then on a certificate of the fact by any Engineer of the Company, the President of the Chesapeake and Ohio Canal Company may declare this Contract abandoned, and the said Canal Company shall thereupon be exonerated from every obligation thence arising; and the reserved percentage on the Contract price shall become the property of the Canal Company, to indemnify them for such breach of Contract. And the President and Directors, or President of the said Company, may thereafter let the said *Lock*, or the unfinished work thereof, to any other Contractor in the same manner as if this Contract had never been made.

No Contractor shall give or sell to to the man employed by him, or suffer to be given or sold to them by others, if in his power to prevent it, any spirituous liquor; and if any Contractor shall become notorious for bad temper, or shall be himself, subject to intoxication, or shall allow drunkenness, or disorder, or violence, among his hands, or any injury to be done by them, to the peace of the neighbouring country, or to any property or person in the vicinity of the Canal; or, having in his service the authors of any such violence, shall not promptly dismiss them, when discovered; on such fact being proved, by the certificate of an Engineer, or in any other satisfactory manner, to the President and Directors, such Contractor shall be, at their pleasure, discharged, and his contract considered abandoned, as in the case already mentioned.

This Contract shall not be let, or assigned, either in whole or in part, to any other person, without the consent of the President and Directors of the Chesapeake and Ohio Canal Company, nor will any account be kept by the President and Directors with any sub-contractor; but should any part of the work be let to a sub-contractor either with the consent of the President and Directors, or without, then the aforesaid *Finger K. McDonnell*

## SPECIFICATION

of LOCK No. 34 of 3 Feet lift, to be built on Section No. 111.

of the Chesapeake and Ohio Canal.

The foundation shall be excavated ~~29~~ feet wide, and about two feet below the bottom of the Canal on the lower level. At each end of the Lock the excavation, so far as may be necessary for the wing walls, will be forty-six feet wide. The length of the Lock will be one hundred and forty-eight feet, the width of the Chamber fifteen feet; and the length between the Gates one hundred feet. The inlet walls will be fourteen feet long, measured from the upper hollow quay; the outlet walls will be fourteen feet long; and from the termination of the inlet and outlet walls there will be wings splaying sixteen feet in ten feet in length, measured in the continuation of the Lock walls.

When the foundation shall have been excavated to its intended level, seventy timbers, hewed ten by twelve inches, and ~~29~~ feet long, and twelve other timbers, of an average length of forty-feet, and of the same size as the last, shall be laid thereon, so that each timber shall rest firmly on the bed prepared for it. The whole of the upper surface formed by these timbers shall be dressed to an uniform plane. Three courses of sheet pile plank, two inches thick, and extending at least five feet below the bottom of the timbers, shall be driven entirely across the Lock and its walls, and be fitted, secured, and arranged, as directed by the Superintending Engineer. The space between these timbers and in front of each row of sheet piling, shall then be well rammed and puddled. The whole of these timbers will be covered with a course of well jointed three inch yellow pine plank; each and every plank to be secured to the timbers below by at least nine locust tree-nails, one and a quarter inches square and nine inches long.

When the masonry is completed, there shall be a second course of planking, of first rate heart pine, two inches thick, well jointed and squared, and laid, as nearly water tight as possible, over the whole of the other planking, from the breast of the Lock throughout the chamber, and ten feet below the lower gates. There shall be two spikes, not less than eight inches long, at each end of each plank, and at least ten tree-nails, of one inch diameter, and nine inches long, in each plank, to secure it well to the timbers below.

### MASONRY.

The main walls will be ~~7~~ feet thick at the bottom, and four feet at the top, but the thickness may be increased or diminished as local circumstances may require or justify.

All the face stone to be well cut and coursed in every part of the Lock which is exposed to view when the Lock is completed. No course of stone to be less than a foot thick, and no stone for face work to have less than eighteen inches bed. The stone to be of a quality to endure frost and sun, and such as shall be approved by the Engineer or Superintendent of Masonry of the Company. The stone for the backing or dead work, to be of such size and quality as shall make the best of durable and solid wall. Should the cutting of the face stone be dispensed with, either in whole or in part, a reasonable deduction shall be made from the price of the masonry, to be determined by the Engineer.

Of the cut stone, for face work, there shall be a header or bond stone for at least every ten feet in length on each course, dividing the spaces in every upper course between the headers in the course below, which shall not be less than two feet in width on the face, and generally wider, and shall extend at least four feet into the wall.

The cut stone shall have parallel beds in all cases; or, at most, not deviating one quarter of an inch from parallel beds, so as to lie firm and solid on each other. No stone called a stretcher shall be less than three feet long, nor its ends make an even joint with the ends of the adjacent stones of less than twelve inches throughout. The coping shall not be less than twelve inches thick and three feet wide, of a uniform thickness, and be so laid as to present a nearly uniform width on the top, which shall be fairly and handsomely cut. There shall be iron cramps of such sizes as shall be directed, to connect the coping around the Gates, and from the Gates to the lower and upper ends of the Locks. If bolts at the head of the Lock shall be found better to connect, in one solid mass, the three upper courses of the splayed corners, so as to prevent any stone from being started by the stroke of a loaded boat, they shall be put in, in such manner as shall be directed, and secured by lead.

The backing against the face work of the Lock shall be well selected flat stone, of durable quality, and the whole masonry, both backing and face work, shall be grouted at each course in height, in such a manner as that there shall be at least three bushels of cement used to each perch of masonry. This cement must be of the best quality which the upper country will afford, to be approved by the Superintending Engineer, and shall be transported from the mill to the works and preserved there until used, in such manner as the Engineer may in writing direct. The sand must be clean and sharp, and if not found naturally combining these qualities it must be washed

The walls of the Locks will rise to the height of one foot above the intended surface of the water, in the upper level, the depth of water in each level being six feet. The lower wings will be sloped downwards inclining to the level of the lower towing path.

The breast of the Lock shall be of masonry similar to that prescribed for the Lock walls; its thickness will be six feet at bottom and four feet at top. The breast is to be coped four feet wide, and the coping may be formed of two pieces clamped together; the position of this breast will be above the recess of the upper gates.

The plan of the masonry, as to its foundation, elevation and thickness of the courses of the face stone, shall be furnished each Contractor, and if any explanations are necessary, they shall be given by the Engineer or Superintendent of Masonry, at all times when required.

When the masonry of a Lock is completed, according to the intention as above, the Lock walls shall be banked up with earth behind them, so as to be level with the coping, and in such manner as shall be directed by the Engineer. Pudding behind the walls may be required as the work progresses.

The mitre sills shall be of good locust timber; they shall be nine inches thick, planed, jointed and framed, in the best manner; the lower mitre sill shall be placed immediately on the flooring of three inch plank before mentioned, and the upper sill shall be placed on a platform of well jointed timbers one foot thick, laid close together, of the breadth of the chamber of the Lock, and a length of six feet; these mitre sills and platform to be secured by tree-nails and iron bolts of a size and quality to be directed by the Engineer of the Company.

Dry walls of good stone will be built from the wing walls, to the berm bank or left side of the Canal.

#### LOCK GATES.

The upper will be one foot shorter than the lower Gates of the Lock, and the Lock will be filled and emptied through the Gates by means of cast iron paddle valves placed therein, of such size and form as the Engineer may adopt. There will be two of these paddles in each Gate, or eight to each Lock.

The Heel and Toeposts, and Balance Beams shall be made of the best straight grained, sound white oak timber; the Heelposts will be twelve by fourteen inches, the Toeposts will be ten inches square, and the Balance Beams will be ten inches square at the smaller, and sixteen inches square at the larger end, and the length will be twenty four feet each.

The arms of the Gates must be made of the best sound locust timber; the upper and lower arms to be ten inches, and the intermediate ones eight inches thick; these arms are to be framed so as to be two inches longer on the upper side, than they are on the lower side of the Gate, and the Heel and Toeposts to be so bevelled as to form the mitre with the arms. The arms of each Gate will be about two feet apart, measured vertically. The Gates shall be planed on the upper side with two inch heart yellow pine, and by rabbeting the Heelposts, Toeposts, and the upper and lower arms, the surface of the plank shall be made to range flush with the surface of these timbers. The arms of each Gate shall be secured to the Heel and Toeposts by six sets of L's and T's with shanks eighteen inches long two inches broad, and five-eighths of an inch thick. Each set of L's and T's to be secured by five screw bolts about five-eighths of an inch square. The lower side of the Gates shall be planed up as the Engineer may direct.

Each Heel and Toepost, shall be secured at the lower end with an iron band half an inch thick by two inches broad. The Balance Beams shall be fastened to the Toeposts by approved iron straps.

The entire Gates shall be smooth planed, well-framed, and put together in the best manner, and the whole painted with three coats of paint. The iron rods which are intended to work the valves shall be two inches diameter, of suitable length and furnished with proper iron handles.

Any stone or other material excavated from the Lock pit, if approved by the Engineer, may be used in the construction and embankment of the Lock, but the surplus material excavated shall be deposited at any place the Engineer may direct within the distance of one hundred and twenty feet from the pit.

Where stone may be required for the construction of the Lock, and the Contractor cannot agree with the owner thereof, for the same on reasonable terms, the President and Directors will, upon application, cause the same to be condemned according to the Charter of Company, the Contractor paying the expense of the condemnation, as well as the sum awarded by the Jury, for the stone.

Should the Lock be placed on rock, and the foundation of timber be dispensed with, either in whole or in part, the Engineer shall adjudge the difference in cost between the timber foundation dispensed with, and the extra masonry necessary for the foundation as high up as the floor of the Lock, which difference shall be deducted from, or added to, the estimate on the Lock as the case may be.

The Canal Company reserve the right of substituting culverts, for filling the Lock, after the same manner as those in Georgetown are filled, and with short gates at the ends of the Lock, in lieu of long gates, as now proposed, in which case the Canal Company will pay an additional price of three hundred dollars, which is understood to cover all expenses incidental to, or growing out of, such change, excepting only the increased quantity of masonry, which will also be paid for, at the same price per perch, at the body of the Lock.

## PROPOSAL.

*W. C.* — propose to furnish all necessary materials and to construct Lock No. 224 on Section No. III — of the Chesapeake and Ohio Canal, and do the necessary excavation, embankment, and puddling, in conformity to the foregoing specification, for the annexed prices.

For Masonry, including cut stone, coping, clamps, cement, and all other materials laid into the Lock, per perch of twenty-five cubic feet \$ 7.00.

For foundation of timber and plank, including sheet piling, puddling, iron work, laying and all materials, if required, a gross sum of \$ 7.00 —

For Gates made and put up; including materials, paddle valves, mitre sills, rods, iron work, painting, and all things necessary to form a complete set of Gates \$ 6.00 —

For dry walls at the extension of the wings, per perch of twenty-five cubic feet \$ .75

### FOR EXCAVATING THE LOCK PIT.

Rock quarried or blasted, per cubic yard	<u>\$ 1.00</u>
All other materials, per cubic yard	<u>.25</u>
For embankment, not excavated from the Lock pit, per cubic yard	<u>.21 1/2</u>
For puddling behind the walls, per cubic yard	<u>.15</u>

The Lock is to be embanked, so far as the material excavated from the pit will embank it, without charge.  
The above prices include all pumping or bailing of water.

Signed this 21<sup>st</sup> — day of April — 1832.

*Witness*

*Simon Frey*  
*W. M. Donnell*

No partner will be admitted into the Contract whose name does not appear on this Proposal.  
No spirituous liquor will be allowed to be used on the work.

*Scale according to the lift of the Lock.*

	Six Feet Lift.	Seven ft Lift.	Eight ft Lift.	Nine ft. Lift.	Ten ft. Lift.	Eleven ft Lift.
Thickness of the main Walls, at bottom	6.	6.6.	7.	7.8.	8.	8.8.
Breadth of Foundation	27.	28.	29.	30.	31.	32.
Length of Foundation timbers under the body of the Lock	27.	28.	29.	30.	31.	32.

Persons proposing can from this Scale fill up the blanks in the Specification according to the lift of the Lock proposed for.

hereby assume and bind ~~himself~~ to pay all just debts contracted by any such subcontractor, either for labour performed on the before mentioned ~~Lock~~ or for supplies furnished for it; and also to be responsible for all the acts, and negligence, of any such subcontractor, and further, to be responsible to the owners of land, through which the Section may pass, for all damages done to their property, by any persons employed upon the ~~Lock~~.

No Draft will be accepted by the President and Directors from any Contractor.

The superintending Engineer shall have power to prescribe the manner of preparing for, beginning and conducting every species of work to be done under this Agreement, with reference to its purpose, and the durability of such work, and his instructions shall be promptly obeyed; and if he shall disapprove of the quality of any work, it shall be the duty of the Contractor to take down at his own expense and rebuild so much thereof as shall be disapproved of, and if the Contractor shall neglect or refuse to take down and rebuild work so disapproved of, the Engineer shall cause the same to be done at his cost.

And it is mutually agreed between the parties to this Contract, that all the terms and conditions herein expressed, as well as the terms and conditions contained in the annexed specification and proposal, which are deemed and taken to be a part of this contract, shall be binding upon the parties respectively, according to their true intent and meaning.

IN WITNESS WHEREOF, the said parties have hereunto set their hands and seals;  
the day and year first abovementioned.

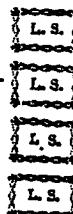
C. F. Mercer

President of the Chesapeake and Ohio Canal Company  
by order of the President and Directors, in behalf  
of the Company.

WITNESS,

W. B. Donaldson  
*to whom to the signature  
of Mr. Fries*  
Charles B. Fish

Sirress, Fries  
W. M. Dennell



NOTE.—It is expressly declared by the President and Directors that no increase of the prices agreed upon in this contract, will be allowed under any circumstances whatever; nor will they consider any application that may be made for that purpose.

**Appendix G**

**Terms of Compromise With Baltimore and Ohio Rail-Road Company, 1833; taken from Proceedings of the President and Board of Directors,C,341-345.**

Proceedings of the President and Board  
May 7, 1833, C, 341-345

Terms of Compromise with RR Co.

The Chesapeake and Ohio Canal Company and the Baltimore and Ohio Rail-road Company, by their respective committees, covenant and agree to the following terms, of compromise, subject to confirmation or rejection by their respective companies.

1st - To accept the act of the General Assembly of Maryland entitled "An Act to provide for the continuation of the Baltimore and Ohio Rail-road to Harpers Ferry, and for other purposes," within the time limited by the said act for the acceptance thereof by both companies, so as to secure to each its intended benefits. And as the purpose which the Legislature of Maryland had in view in passing the same, will be more effectually attained by a modification of some of its conditions, the said companies mutually and reciprocally covenant and agree, in the event of such acceptance by both, faithfully to fulfill the conditions hereinafter inserted for their common benefit, and so far to modify those stipulated in their behalf by the act aforesaid vis ~

The Baltimore and Ohio Rail-road Company, in consideration of the damages that may be done the Canal, and of the interruption or hazard to which its navigation will be unavoidably exposed, in the construction of the Rail-road along the margin thereof, bind themselves to pay to the Chesapeake and Ohio Canal Company, for grading the four miles and one tenth of the road between Harper's Ferry and the Point of Rocks, hereinafter described, the sum of two hundred and sixty-six thousand dollars - The Said four miles and one-tenth of road shall consist of a space to be laid off between the entrance of the bridge at Harper's Ferry, and a point two miles therefrom, according to the location of the said road, which point will be below Miller's Narrows; of one mile and one twentieth, extending from a point opposite to the door of the chief public house, at the Point of Rocks, up the valley of the Potomac, comprehending the Lower Point of Rocks; and of one other mile and one twentieth, extending above and below the Upper Point of Rocks, so as to comprehend the same; embracing all that part of the Canal border at those places in which an interference exists between the location of a canal and railroad. In making as well as locating the said road, the Chesapeake and Ohio Canal Company shall act in conformity with their own judgement [sic], subject to the conditions, as to the curvature, inclination of surface, and the breadth of the said road, which the act of the General Assembly of Maryland prescribes; except that so much of the said road as is expected to be hereafter common to the Frederick and Harper's Ferry Turnpike Company and the Railroad Company, shall be of the breadth, at the surface, of not less than thirty feet, instead of twenty for the better accommodation of both these companies~

Should the Canal Company prefer it, they may begin the lowest section of the said road, at any elevation opposite the tavern at the Point of Rocks, not exceeding four feet above that of the road now constructed at that place; and, in case of a change of the present elevation, the expense of raising the present road and its appurtenant fixtures, so as to adjust the same to the road below, and to its extension above, shall be at the cost of the Rail-road Company; and shall be done at such time as they may please to direct: Provided, however, that at the lower termination of the pass by the Lower Point of Rocks, the Baltimore and Ohio Rail-road Company may, if they please, in fixing the elevation of these points, or termini, unite an Engineer of their own appointment, with the Engineer of the Canal Company, charged by the same to make the location thereof, so as to adjust those points to the intermediate rail-road, according to the terms of the said Act of the General Assembly of Maryland; and the Canal Company may, in like manner, unite their Engineer with the Engineer of the Rail-road Company, in fixing the intermediate location of the Rail-road according to the said terms~

In the construction of the graduated road aforesaid, for the four miles and one-tenth, beforementioned, and in satisfaction of all injuries that may be done the Canal in the construction of the said road, and as indemnity for any injuries that may be done the navigation thereof, during the construction of the said road, payment, of the \$266,000 shall be made monthly by the said Rail-road Company, in the following propositions, viz: one twelfth part thereof on the first day of June next, and one twelfth part on the first day of each of the following months, until the said graduation shall be completed; but if the same be completed earlier than the twelve months, allowed therefor, the residue unpaid, at the time of such completion, shall be paid on the first day of the month next ensuing the same.

The passage to the Harper's Ferry bridge, across the Canal, from the Rail-road, shall be, by a pivot, or draw bridge; the expense of attending which, shall be equally divided between the two Companies; and the elevation of which, above the bottom of the Canal, shall remain, as at present adjusted, at three feet above the bridge across the Potomac, unless it be, hereafter, the pleasure of the Rail-road Company to elevate it still higher. And the curves of the road, at the entrance of the defile or pass at the Point of Rocks, and at the crossing of the said pivot or draw bridge, being not provided for by the act of the General Assembly of Maryland, shall be adjusted to the residue of the road, as conveniently, as can be done, in the graduation of the Railroad by the Canal Company~

All expenses to be incurred, in condemning, or purchasing ground, or materials for the location and graduation of the rail-road, through the four and one-tenth miles aforesaid, shall be, as, at all other places, where the land required, is not, now, the property of the Canal Company, at the proper cost of the Rail-road Company; and where the said road shall occupy ground,

now the property of the Canal Company, the Rail-road Company shall obtain and convey to the Canal Company, an equivalent breadth of ground, along the northern side of the Rail-road for the future supply of materials to the Canal~

It is, already, herein provided, that the portion of the Rail-road, at Harper's Ferry Narrows, shall be thirty feet in width, for the common use of the Harper's Ferry and Frederick Turnpike, and the Railroad Companies. The Canal Company will allow the use by the Railroad Company, of any authority, which they possess, to obtain permission from the Turnpike Company, to the Rail-road Company to lay their rails on the part of the said road common to both, the Canal Company being bound by their articles of agreement, only for the graduation of the said road, from the Harper's Ferry bridge, down to the point at which the said Turnpike will diverge from the Rail-road to ascend the hill above Miller's Narrows: and the Rail-road Company shall, also, adjust the surface of that bridge to the elevation of the pivot bridge across the Canal at their own cost~

The Rail-road Company agrees not to continue the Rail-road further up the valley of the Potomac than Harper's Ferry, until the Chesapeake and Ohio Canal shall be completed as far as Cumberland, provided that the Canal be completed thereto, within the term allowed by the Charter of said Canal Company~

The period of twelve months, from the date of the acceptance of these articles of compromise, shall be allowed the Canal Company, to complete the graduation of the four miles and one-tenth

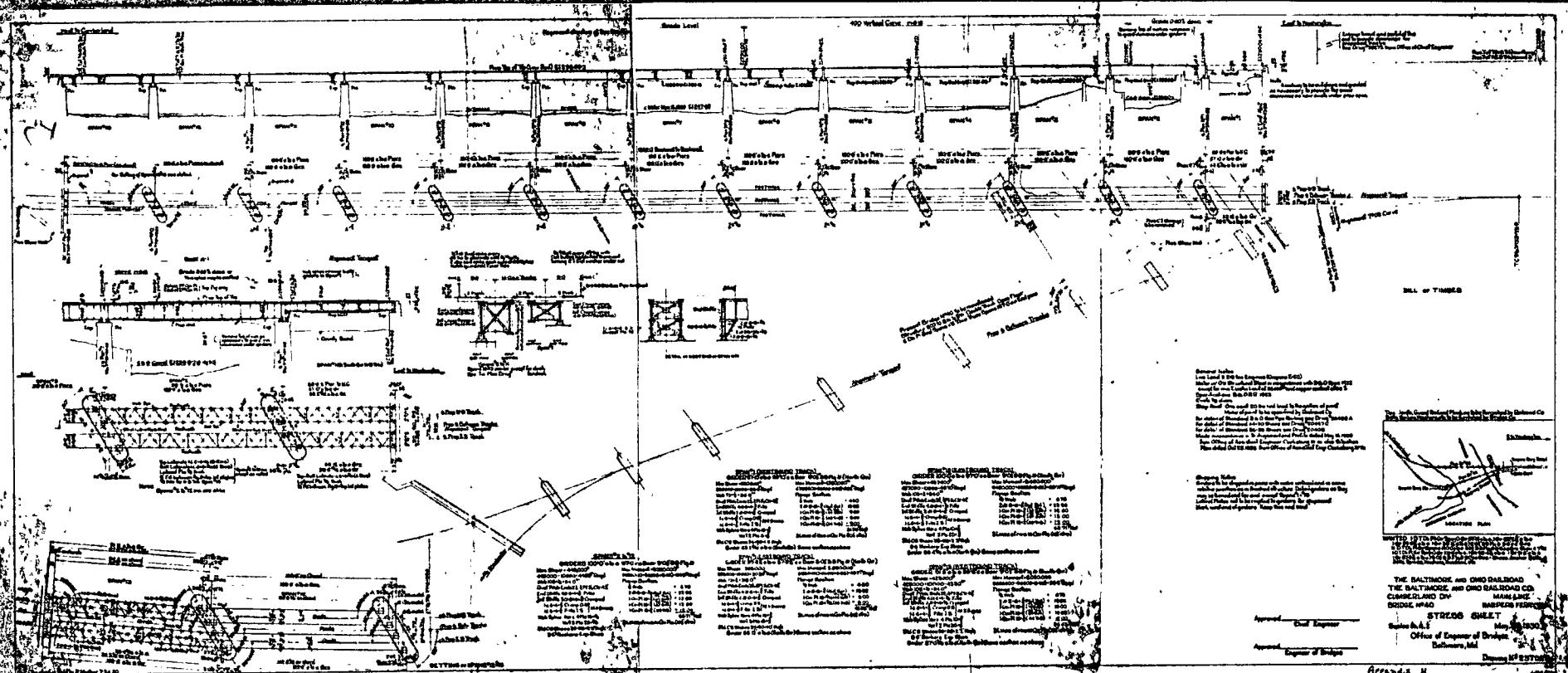
of Rail-road before described; but the President and Directors of the Canal Company shall urge the contractors, who may undertake the same, to proceed with diligence, and to complete the graduation in the shortest time practicable, consistently with the health of the country~

In case of any possible difference of opinion, or disagreement, between the two companies, in relation to the construction of these articles of compromise, such difference or disagreement, shall be settled in the mode provided by the act aforesaid, for the settlement of the construction thereof, by the same parties~

The report having been read and considered, was accepted and approved ~

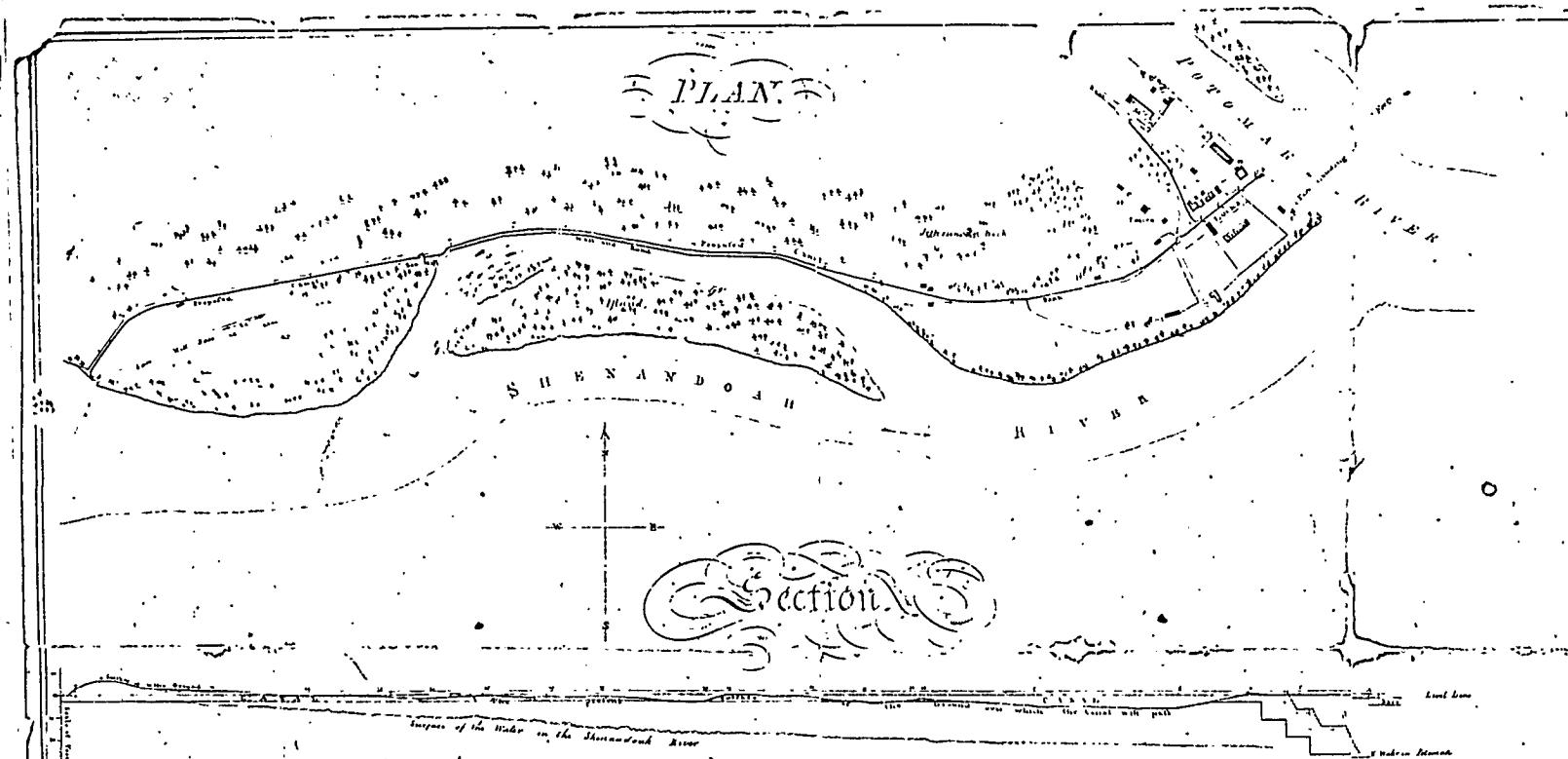
Appendix H

Blueprint Showing the Baltimore and Ohio Rail-road's Proposed Bridge No. 40 and the then existing Bridge No. 40; taken from Ltrs. Recd., Correspondence of the Office of Trustees, C & O Co.



Appendix I

Plan and Section of a Canal at the lower falls  
of the Shenandoah, and its junction with the public  
Canal at Harpers Ferry and the necessary Locks.  
Surveyed and Levelled by N. King, and L. Harbaugh  
for the United States and the Potomac Company.  
February 1803; located in Record Group 77, Depart-  
ment of the Army files, National Archives.



*PLAN and SECTION*  
of a Canal at the lower falls of the Shenandoah, and its junction with  
the public Canal at Harpers Ferry, and the necessary Locks.

Surveyed & Traced by W. King and L. Starbrough  
for the U. S. and the Potowmuck Company  
July 1803

Scale of Plan 16 Miles or 100000 Yds to an Inch  
Scale of Section height 30 feet to an Inch

APPENDIX T

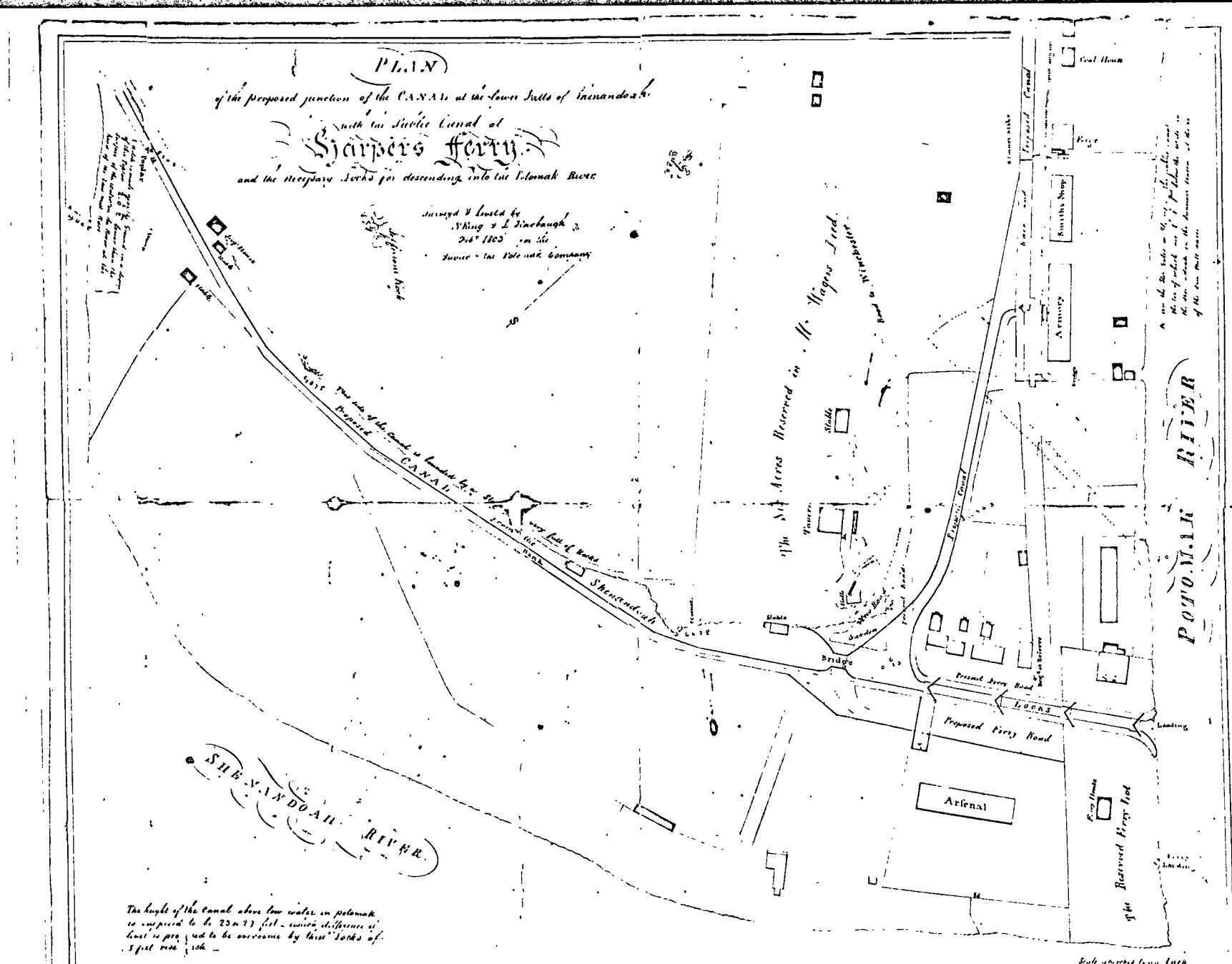
Appendix J

Plan of the proposed junction of the canal, at the lower Falls of Shenandoah, with the Public Canal at Harpers Ferry and the necessary Locks for descending into the Potomack River; Surveyed by N. King and L. Harbaugh. February 1803; located in Record Group 77, Department of the Army files, National Archives.

P.L.N.

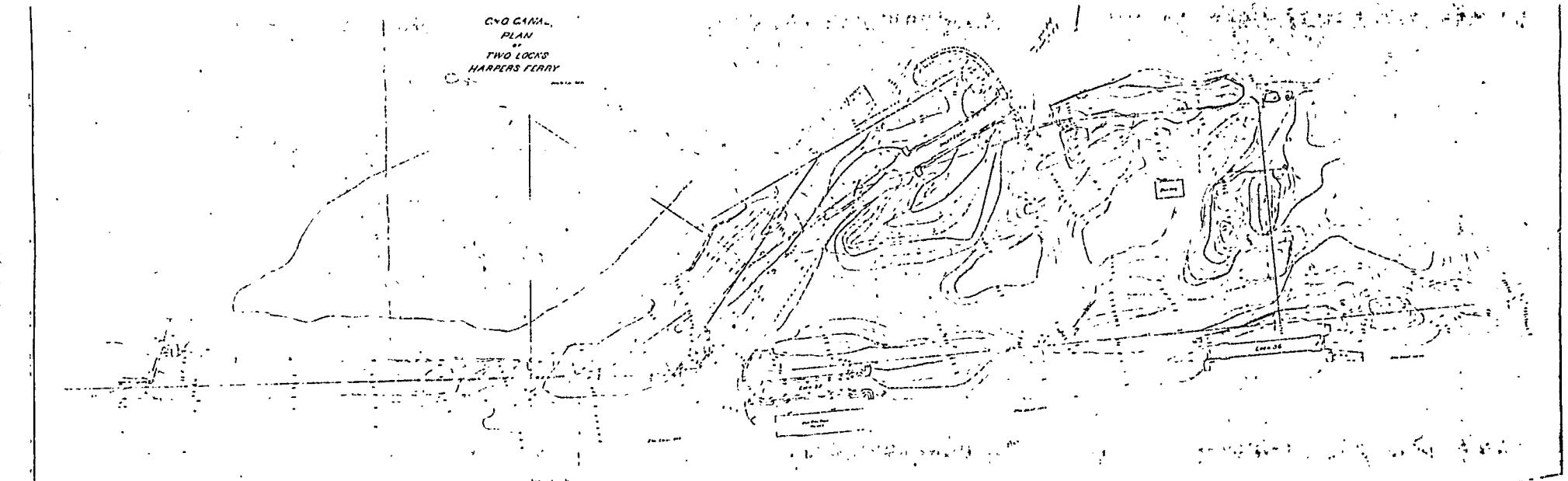
of the proposed junction of the CANAL at the Lower Falls of Shenandoah  
with the Shoo-funal at  
**Harper's Ferry**  
and the necessary locks for descending into the Potomac River

Surveyed & Laid out by  
Wing & L. Simbaugh  
Feb 1863  
for the Potowmack Company



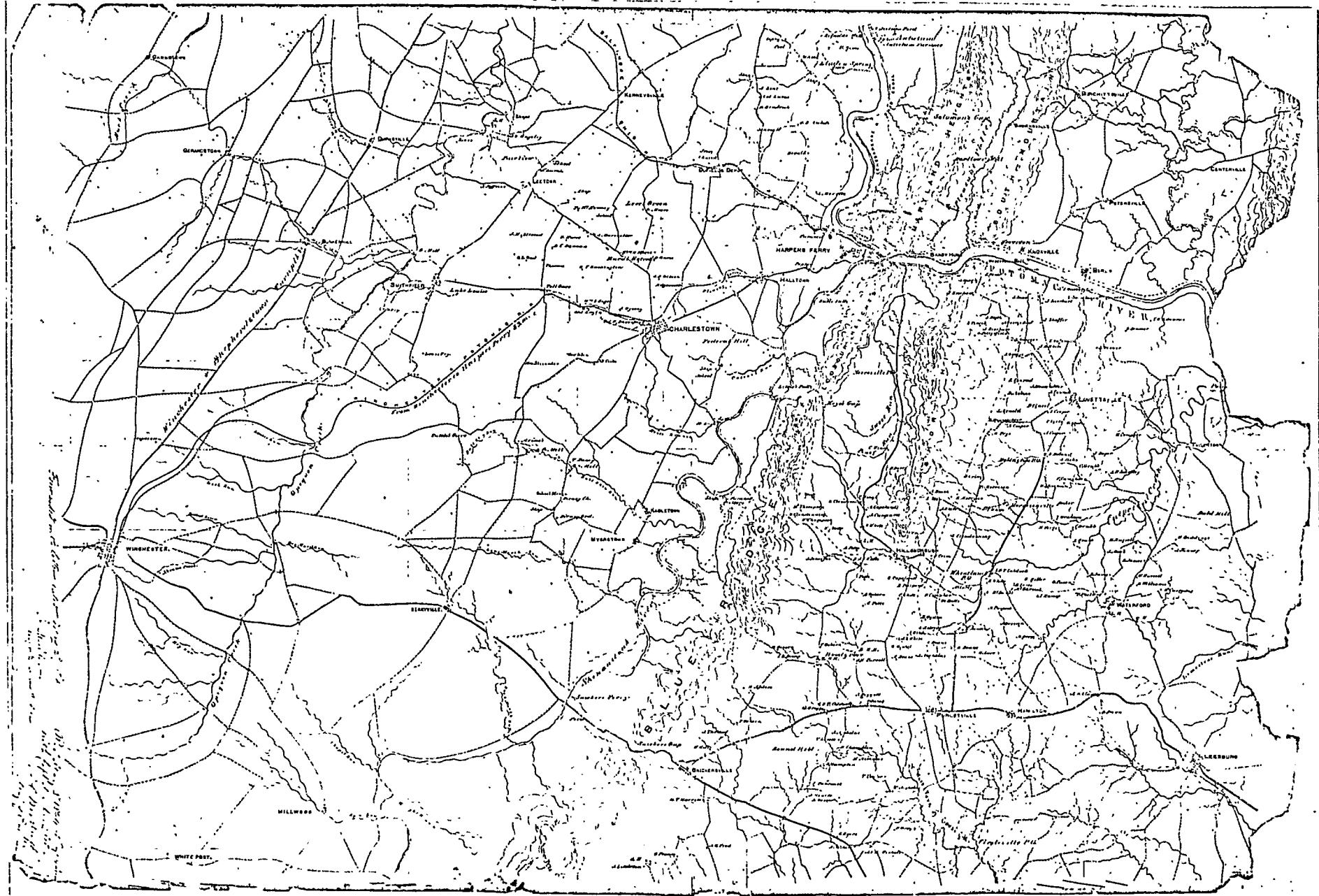
#### Appendix K

Plan of two locks at Harpers Ferry (undated);  
located in Maps and Plans Relating to the  
Chesapeake and Ohio Canal, 1826-1937, Record  
Group 79, Department of the Interior files,  
National Archives.



#### Appendix L

Map of Loudoun, Jefferson, Berkeley and Frederick Counties in Virginia showing turnpike roads. The map was compiled for the use of Major General G.B. McClellan probably in 1862.



Appendix I.

**Appendix M**

**Incomplete List of Lockkeepers in the Dam 3 Area,  
1840-1924.**

Lock 33 and Collector of Tolls

1840	William S. Elgin - was also in charge of Shenandoah River Lock.
1850	William S. Elgin
1852	Alex Dent
1853	Alex Dent
1855	William McGregor
1858	Elizabeth A. McGregor
1862	M. Walsh
1924	Abe Greenwalt (?)

Lock 34

1850	John Crowley
1854	John Crowley
1854	Harmon Hardy
1856	Adam Hull
1858	George Hardy
1862	_____ Hardy
1923	Millard Goodhart
1924	Millard Goodhart

Locks 35, 36 and Guard Lock No. 3

1843	William McKay
1843	Charles Wright
1844	Charles Wright
1844	John Kercheval

1850	John Kercheval
1856	Henry Drenner
1864	George Hardy

Locks 35 and 36

1854	John Kercheval
1854	John Savin
1860	Henry Drenner
1862	John Reed

Guard Lock No. 3

1858	John H. Reed
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Lock 36

1906	Sidney Cross
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Hahn, Thomas F. Towpath Guide to the Chesapeake & Ohio Canal, Section Three: Harpers Ferry to Fort Frederick. Gobblers Ridge, W.Va., 1972.

4. National Park Service Studies

Bearss, Edwin C. HSR, The Bridges, Chesapeake and Ohio Canal. Washington, 1968.

Comer, Douglas C. Archeological Investigation At The Lock 33 Complex, Chesapeake and Ohio Canal. Denver, 1977.

Hannah, David Hardgrave. Archeological Excavations On Virginius Island, Harpers Ferry National Historic Park, 1966-68. Harpers Ferry, March 1969.

Kissling, Herbert H. HSR, United States Musket Factory, 1796-1835. Washington, February 28, 1961.

Luzader, John F. HSR, History of the Construction of Dam No.3. Washington, 1961.

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Meltzer, David J. Archeological Excavations At An Historic Dry Dock, Lock 35, C & O Canal. Denver, March 1979.

Sarles, Frank B. Jr. Social & Economic History of Virginius Island. Washington, June 20, 1969.

Snell, Charles W. HRS, The Business Enterprises and Commercial Development of Harpers Ferry's Lower Town Area, 1803-1861. Washington, April 1, 1973.

HRR, The Musket Factory Buildings And Grounds, Harpers Ferry Armory, 1859-1860. Harpers Ferry, April 27, 1959.

HBSSR, The Lot South of the Winchester & Potomac Railroad Tracks, The Gault House Saloon, Ferry Lot Studies. Harpers Ferry, October 7, 1958.

HBSSR, Wager Lot No. 1 & The Bridge Lot, The Baltimore & Ohio Railroad Company's Bridge and Buildings at Harpers Ferry. Harpers Ferry, September 22, 1958.

**Illustrations**

Plats 1 through 16 offer a pictorial history of the Dam 3 Area and Harpers Ferry from 1836 to 1936. These drawings and photographs are located in the files of the Harpers Ferry National Historical Park and copies were provided for this report by Ms. Hilda Staubs, curator, Harpers Ferry National Historical Park Library.

Plat 1

~~NO PRINT IN FILE 10/62~~

NEGATIVE NO. HF-257

SEE CLASSIFICATION NO.

Form 10-107  
(April 1957)

SUBJECT: HARPERS FERRY , 1838- Bartlett

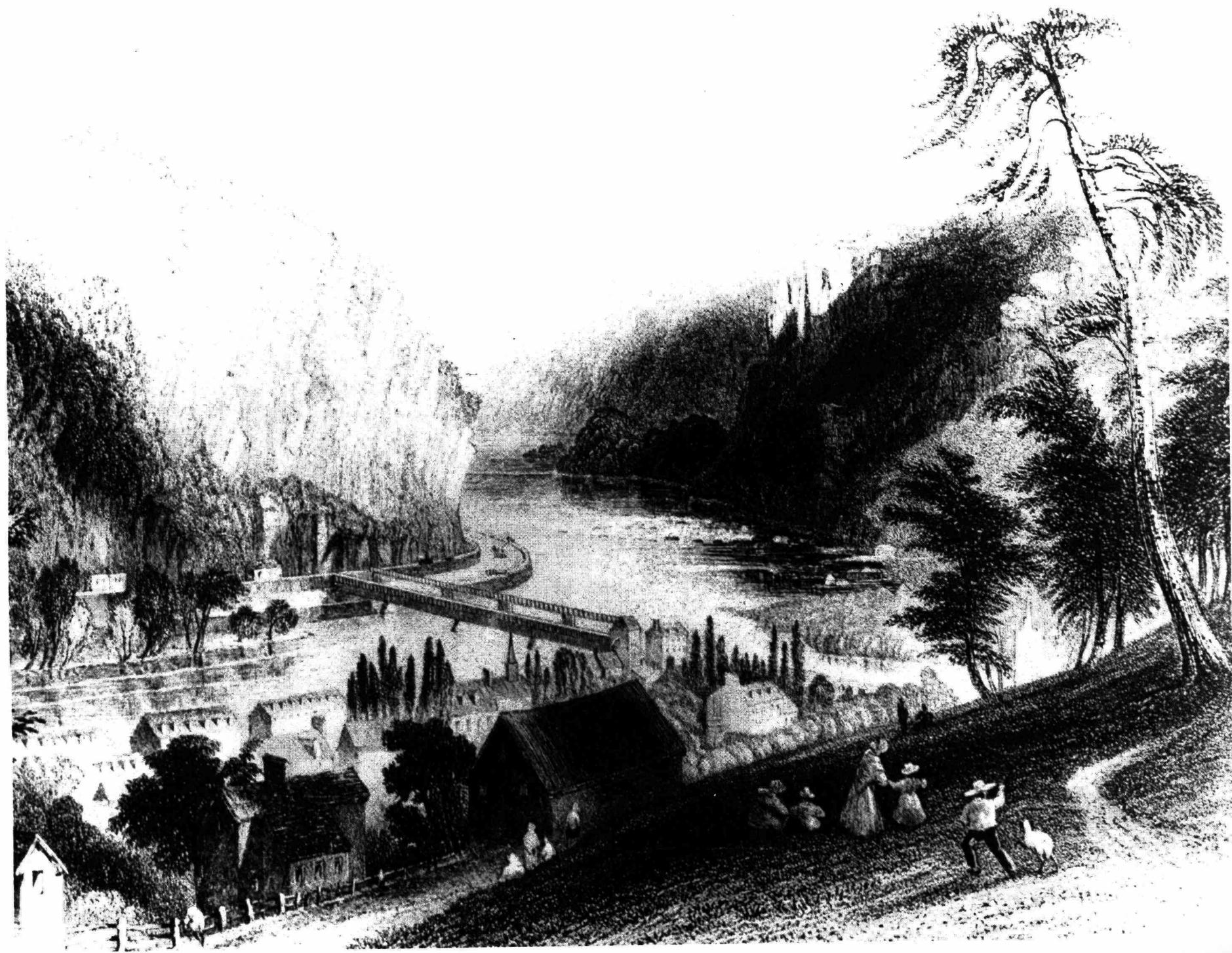
"Harpers Ferry From the Virginia Side" - Drawing by W. H. Bartlett and W. Radclyffe. Published for the Proprietor, by George Virtue, 26 Ivy Lane, London, 1838. From the Library of Congress. Excellent and accurate Lithograph showing Maryland and Loudoun Heights, C&O Canal, B&O RR, new Potomac B&O Bridge and Wager Potomac Bridge. Also Catholic Church, Bldgs 1-A and 1-B, Wager Ferry Lot Bldgs and Musket Factory Buildings.

PHOTOGRAPHER  
AND COMPANIONS:

DATE:

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NEGATIVE FILE ENVELOPE



Plat 2

Form 10-107  
(April 1957)

NEGATIVE NO. HF-23

SEE CLASSIFICATION NO. 4

also lge negative  
w/ print

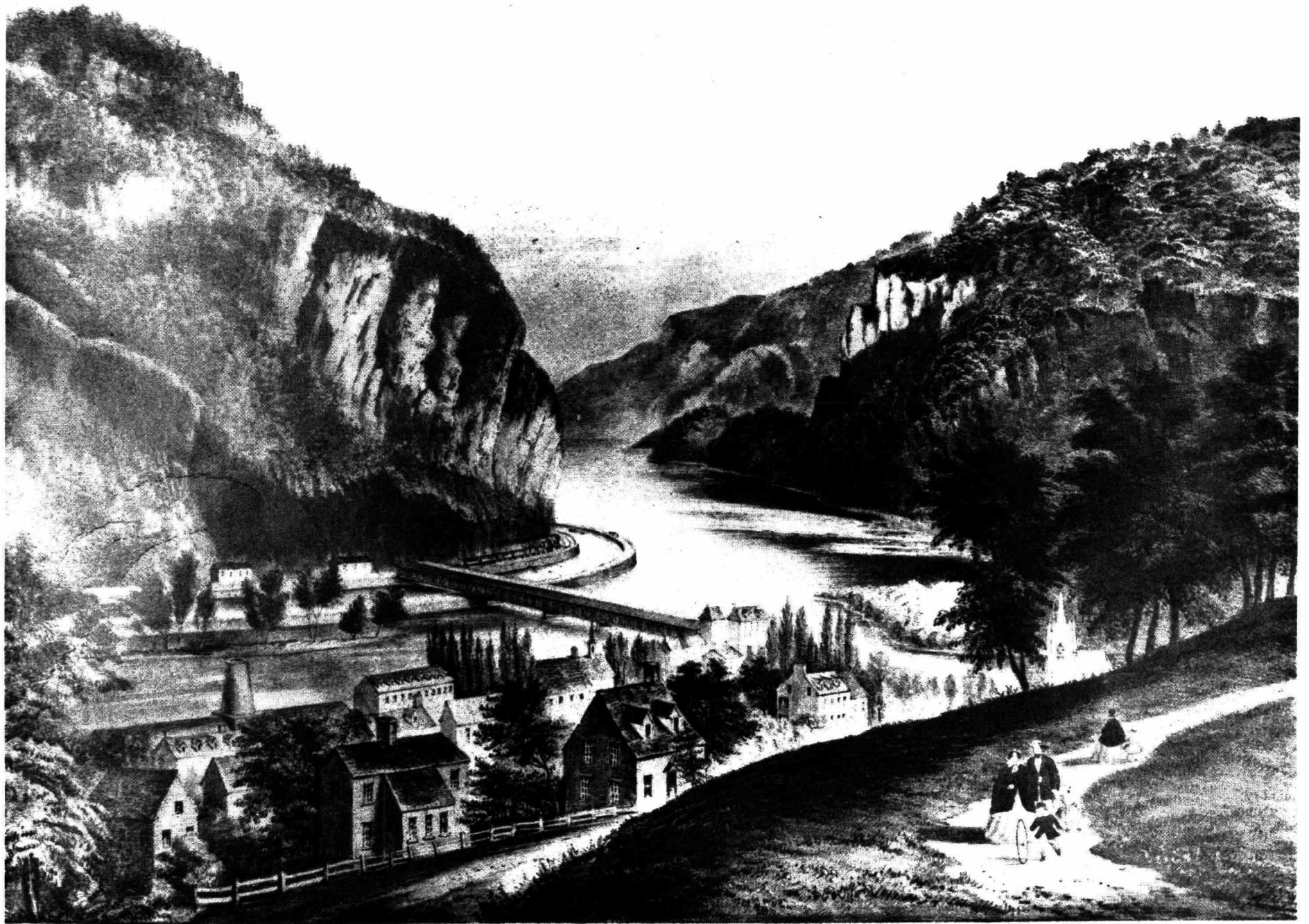
1857-1861

**SUBJECT:** Harpers Ferry-~~1854-36~~ "View of Harpers Ferry, Va., From the Potomac Side"- Published by Currier and Ives, 152 Nassau Street, N. Y. Excellent and accurate drawing made from Camp Hill showing Maryland and Loudoun Heights, C&O Canal, B&O train, Wager Potomac Bridge, Wager Ferry Lot Buildings, Catholic Church, Bldg No. 1-A, 1-B, and Musket Factory Bldgs.

**PURPOSE:**

**PHOTOGRAPHER  
AND COMPANIONS:**

**DATE:** ~~1854-36~~ 1857-early 1861 (Currier & Ives formed partnership 1857 & there, UNITED STATES DEPARTMENT OF THE INTERIOR after all prints were imprinted with NATIONAL PARK SERVICE Currier & Ives. Scene of Harpers Ferry is before Civil War damage which first incurred 4/1861.  
NEGATIVE FILE ENVELOPE



Plat 3

NEGATIVE NO. 27-74

SEE CLASSIFICATION NO.

From 1859  
(Armen 1857)

SUBJECT: MARYLAND HEIGHTS—1859 "Base of Maryland Heights and upper side of Potomac Bridge." National Geographic File # 140324-A - Closeup view of base of Maryland Heights and of buildings along C&O Canal on upper side of Potomac Bridge. Also upper side of bridge over

LOCATION: C&O Canal and lock, and two piers cut into the river.

From original in John Perry Collection

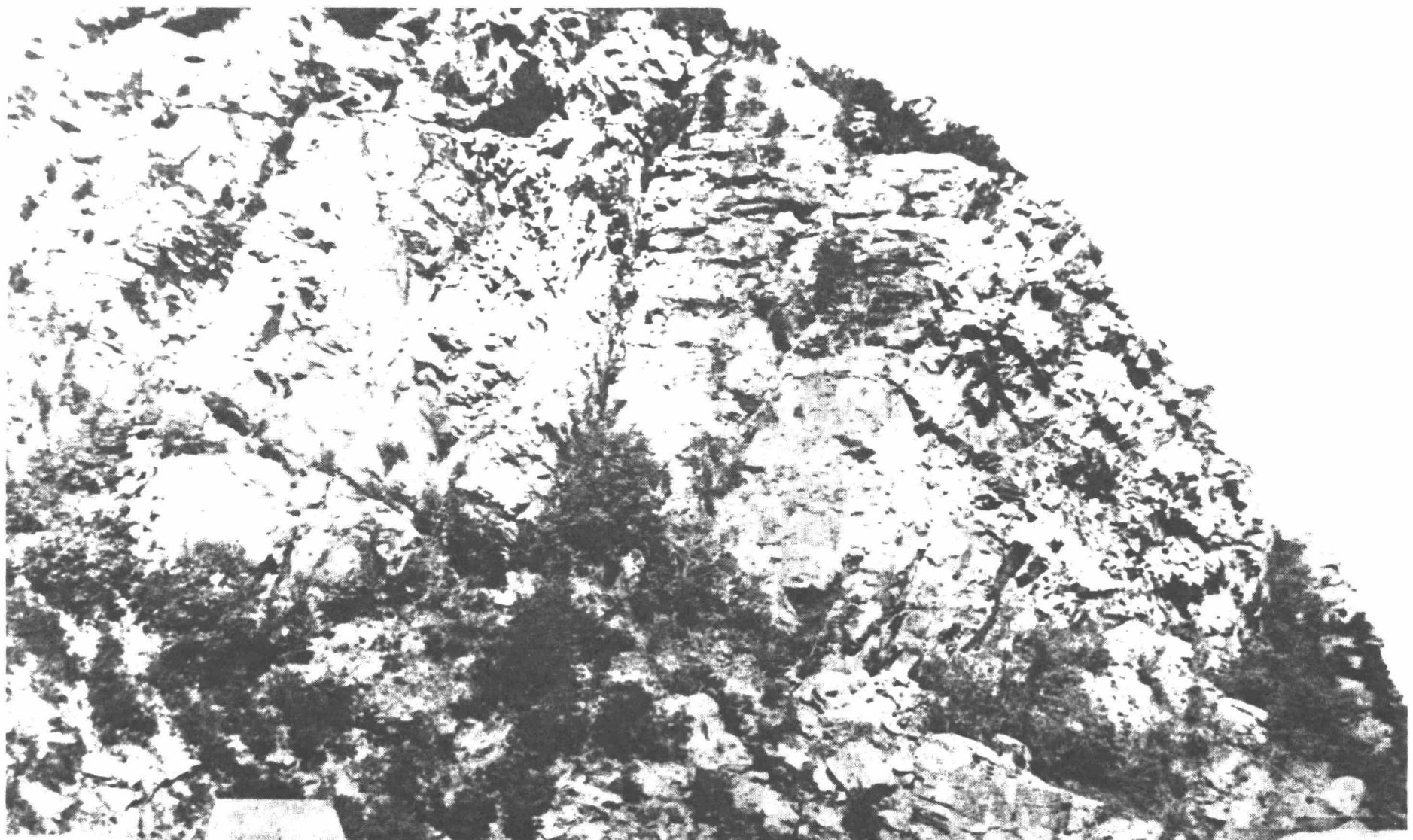
PURPOSE:

PHOTOGRAPHER  
AND COMPANIONS:

DATE: 1859

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NEGATIVE FILE ENVELOPE



Plat 4

NEGATIVE NO. HF-93

SEE CLASSIFICATION NO.

FORM 10-107  
(APRIL 1957)

SUBJECT: BRIDGE- Covered Wooden- ca. 1859  
View probably from boat or island in Potomac, close-up of  
Maryland end of covered bridge, buildings along base of Maryland  
Heights, C&O Canal, Maryland Heights above bridge. Important photo.

LOCATION: National Geographic File No. 140324-A

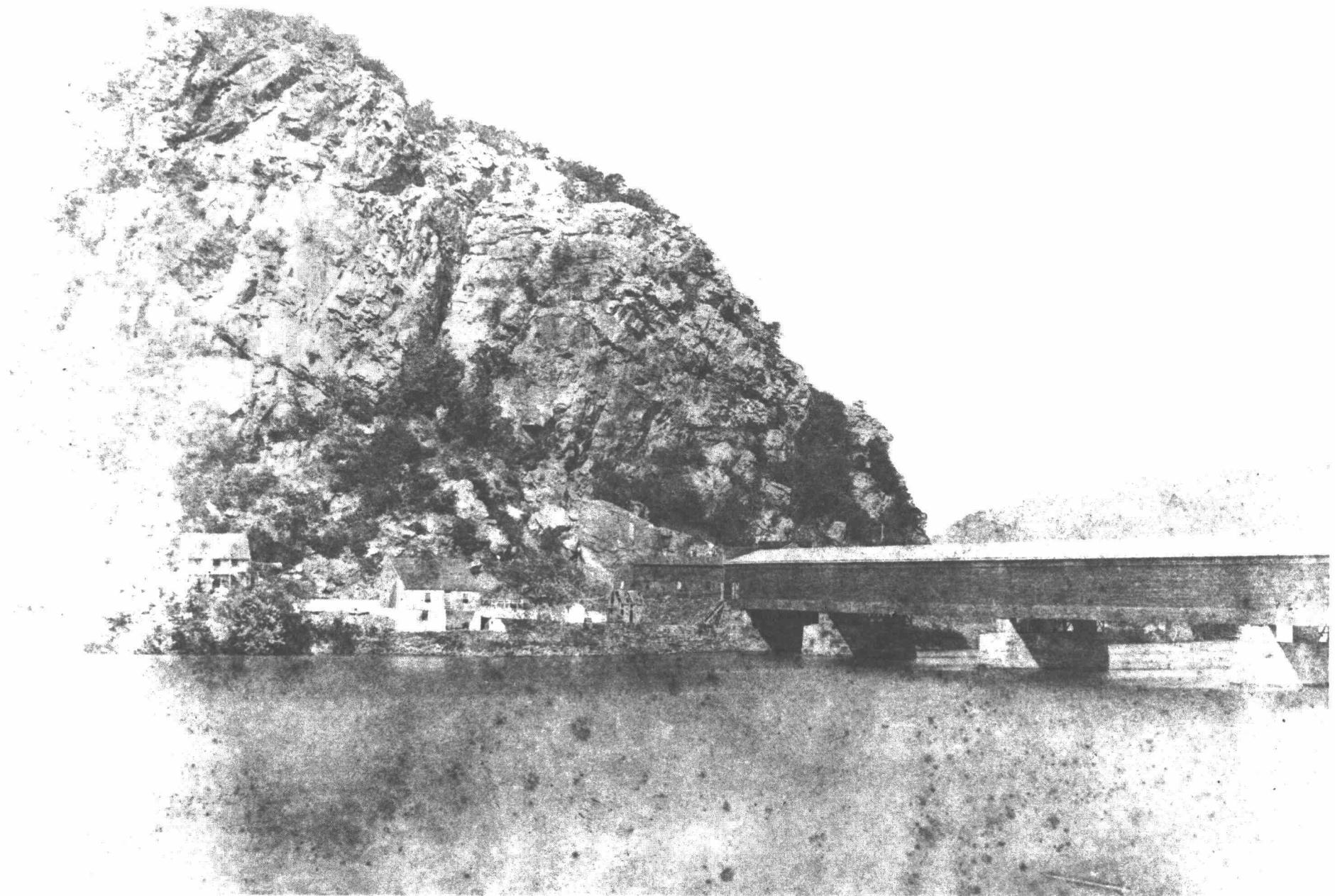
PURPOSE: From original in John Perry Collection

PHOTOGRAPHER  
AND COMPANIONS:

DATE: ca. 1859

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NEGATIVE FILE ENVELOPE



Plat 5

Form 10-107  
(April 1957)

NEGATIVE NO. HF-30  
8x10 " filed w/print (HF-617 3miles)  
SEE CLASSIFICATION NO.

**SUBJECT:** Civil War- 1862 "General View of Harpers Ferry and Maryland Heights", photograph by Brady, made from Magazine Hill. Published as a drawing in Harpers Weekly, October 4, 1862, p.628. Excellent and remarkable view of Musket Factory shops, pontoon bridge,  
**LOCATION:** damaged railroad bridge and C&O Canal, also parts of Maryland and Loudon Heights.

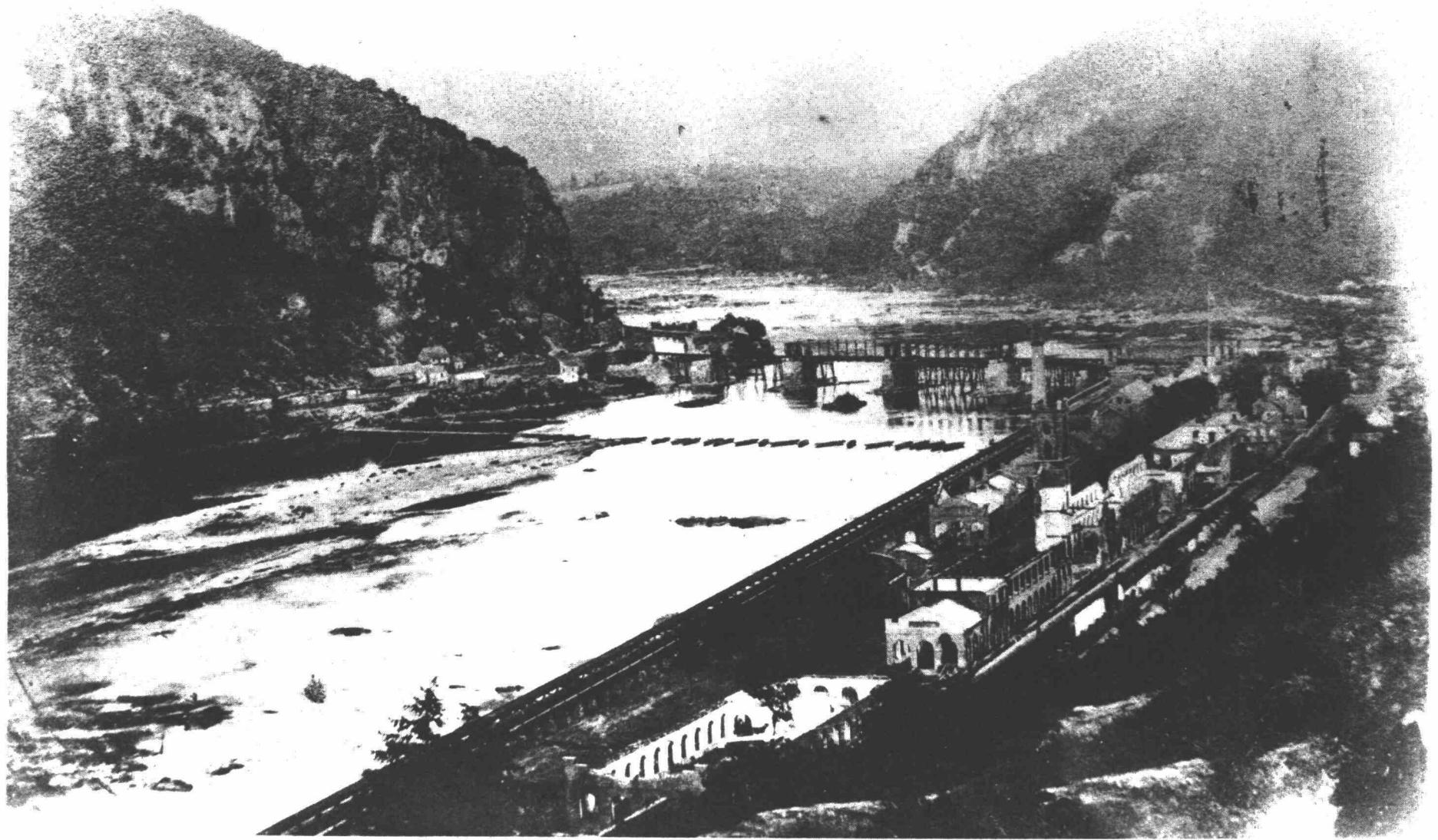
**PURPOSE:**

**PHOTOGRAPHER  
AND COMPANIONS:**

**DATE:** 1862

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NEGATIVE FILE ENVELOPE



Plat 6

Form 10-107  
(April 1957)

NEGATIVE NO. HF-61  
~~Transferred to Mus. Coll.~~  
SEE CLASSIFICATION NO.

**SUBJECT:** HF-61 - Harpers Ferry- 1864 "Harpers Ferry and Potomac River Bridge from the Base of Maryland Heights"- Four iron spans missing from Railroad Bridge. Excellent photograph of Musket Factory, Camp Hill, Arsenal Square and Bldgs No. 9,11,12,  
**LOCATION:** Wager Lot # 51, Bldgs No. 38,40 and 43, also C&O Canal

**PURPOSE:**

**PHOTOGRAPHER  
AND COMPANIONS:**

**DATE:** HF-61

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NEGATIVE FILE ENVELOPE



HARPER'S FERRY



*Plat 7*

NEGATIVE NO. HF-25

Form 10-107  
(April 1957)

SEE CLASSIFICATION NO. \_\_\_\_\_

**SUBJECT:** Harpers Ferry- 1865- "Potomac River From Harpers Ferry Hill"-  
Photograph from Library of Congress. View taken from Harper  
Cemetery on Camp Hill. Visible are Maryland Heights and Loudoun  
Heights, C&O Canal, Potomac RR Bridge, new hotel, "Shenandoah  
**LOCATION:** Hotel", and Adams Express Co., Arsenal Square, Bldg 48-A and  
Musket Factory Bldg # 12.

**PURPOSE:**

**PHOTOGRAPHER  
AND COMPANIONS:**

**DATE:** HF-25

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

**NEGATIVE FILE ENVELOPE**

Plat 8

NEGATIVE NO. HF-353

Form 10-107  
(April 1957)

SEE CLASSIFICATION NO.

SUBJECT: C&O Canal- 1868.  
"No. 330- View of Harpers Ferry"- Stereoptican view  
photographed and published by Kilburn Brothers, Littleton, N. H.  
Excellent view of C&O Canal, lock houses, locks, and Canal  
boats at the base of Maryland Heights opposite Harpers  
Ferry.

PURPOSE:

PHOTOGRAPHER  
AND COMPANIONS:

DATE:

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NEGATIVE FILE ENVELOPE



No. 330. View from Harper's Ferry.

Plat 9

NEGATIVE NO. 17 F-36

Form 10-107  
(April 1957)

SEE CLASSIFICATION NO. \_\_\_\_\_

**SUBJECT:** Harpers Ferry- 1866-69 "Harpers Ferry After the War. Showing the Wrought-Iron highway and railroad bridge built by Bollman and still (1927) in partial use for highway traffic". Photograph taken from Harpers Garden looking over roofs of Bldgs 1-A and 1-B, Bldg No. 11- a three-story building. Burned-out ruins of structure on Wager Lot No. 5 still standing. Good view of C&O Canal.

**PURPOSE:**

**PHOTOGRAPHER  
AND COMPANIONS:**

**DATE:** 1866-69

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NEGATIVE FILE ENVELOPE



HARPERS FERRY AFTER THE WAR.

Showing the wrought-iron highway and railroad bridge built by Bollman and still (1927) in partial use for highway traffic.  
From a photograph.

Plati 10

NEGATIVE NO. HF-101

Form 10-107  
(April 1957)

SEE CLASSIFICATION NO.

SUBJECT: Harpers Ferry, 1870-1871, From Church Street  
"View from Church Street, Camp Hill, of Junction of the Potomac  
and Shenandoah Rivers", C&O Canal, Potomac Iron Bridge, New Wager  
Lot Hotels, and Bldg # 23, erected in 1870. Also ruins of house  
on Wager Lot # 5. Upper part of Harper Garden stone fence.

LOCATION: visible.

PURPOSE:

PHOTOGRAPHER  
AND COMPANIONS:

DATE: 1870-1871

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NEGATIVE FILE ENVELOPE



*Plat 11*

NEGATIVE NO. NF 675

SEE CLASSIFICATION NO.

Zone 10-107  
(April 1957)

SUBJECT: C&O CANAL- near Harper's Ferry, 1870's  
Stereoptican drawing, showing Canal boats, Maryland Heights.  
From collection of Major T. T. Perry, Charles Town

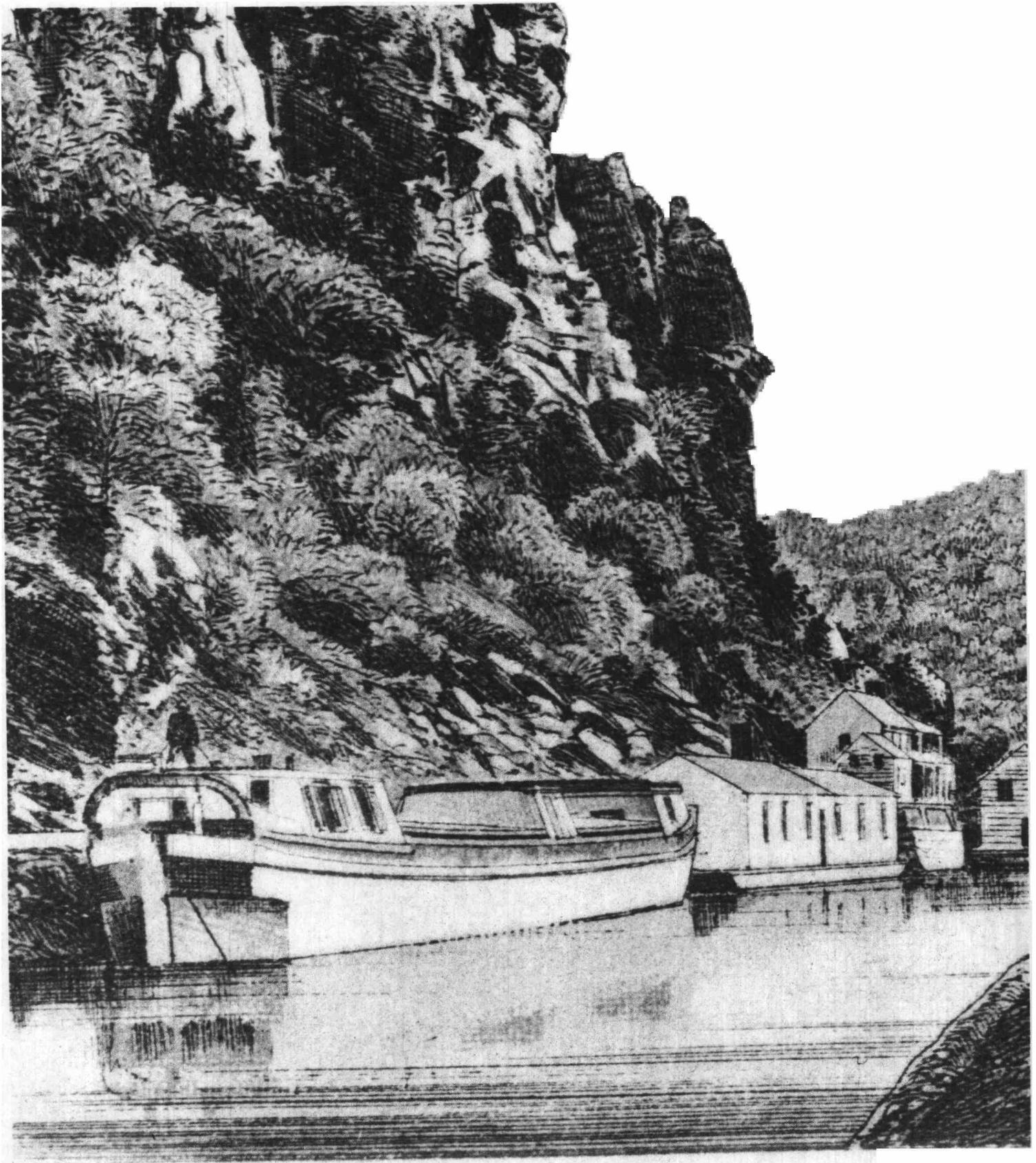
LOCATION:

PURPOSE:

PHOTOGRAPHER  
AND COMPANIONS:

DATE: UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NEGATIVE FILE ENVELOPE



SCENE ON THE POTOMAC.  
NEAR HARPER'S FERRY.

Plat 12

NEGATIVE NO. HF-670

SEE CLASSIFICATION NO.

Form 10-107  
(April 1957)

SUBJECT: HARPER'S FERRY, from Camp Hill, 1870's  
Stereoptican drawings, showing buildings on Point, Arsenal ruins,  
Hollman Bridge, C&O Canal.

LOCATION: From collections of Major T. T. Perry, Charles Town, W. Va.

PURPOSE:

PHOTOGRAPHER  
AND COMPANIONS:

DATE:

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NEGATIVE FILE ENVELOPE



HARPER'S FERRY. LOOKING DOWN THE POTOMAC.

Plat 13

NEGATIVE NO. HF-615

SEE CLASSIFICATION NO.

Form 10-107  
(April 1957)

SUBJECT: FLOOD, 1889, Potomac View from Camp Hill  
Excellent photo, shows Potomac flooded, 2 Potomac bridges, 1  
span of Shenandoah Bridge still standing, buildings on Camp Hill  
C&O Canal flooded

LOCATION:

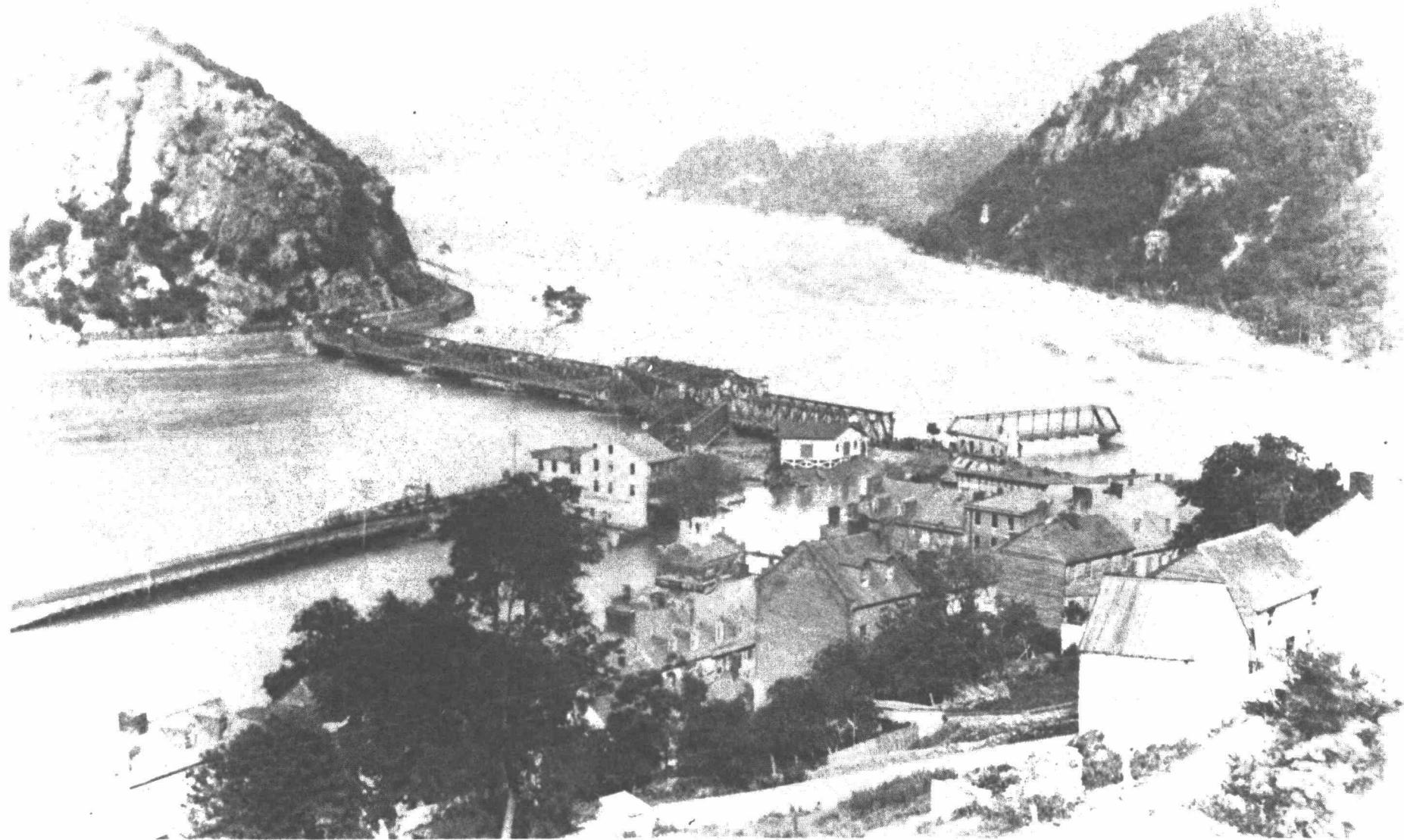
PURPOSE:

PHOTOGRAPHER  
AND COMPANIONS:

DATE:

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NEGATIVE FILE ENVELOPE



Plat. 14

27 Neg

Form 10-107  
(April 1957)

NEGATIVE NO. HF-80

SEE CLASSIFICATION NO. \_\_\_\_\_

SUBJECT: C&O CANAL BOATS - After 1889 Flood  
BOATS AFTER FLOOD

LOCATION: "Wrecked C&O Canal Boats at Lock # 33, opposite Harpers Ferry,  
after 1889 Flood"

From Mary Doren

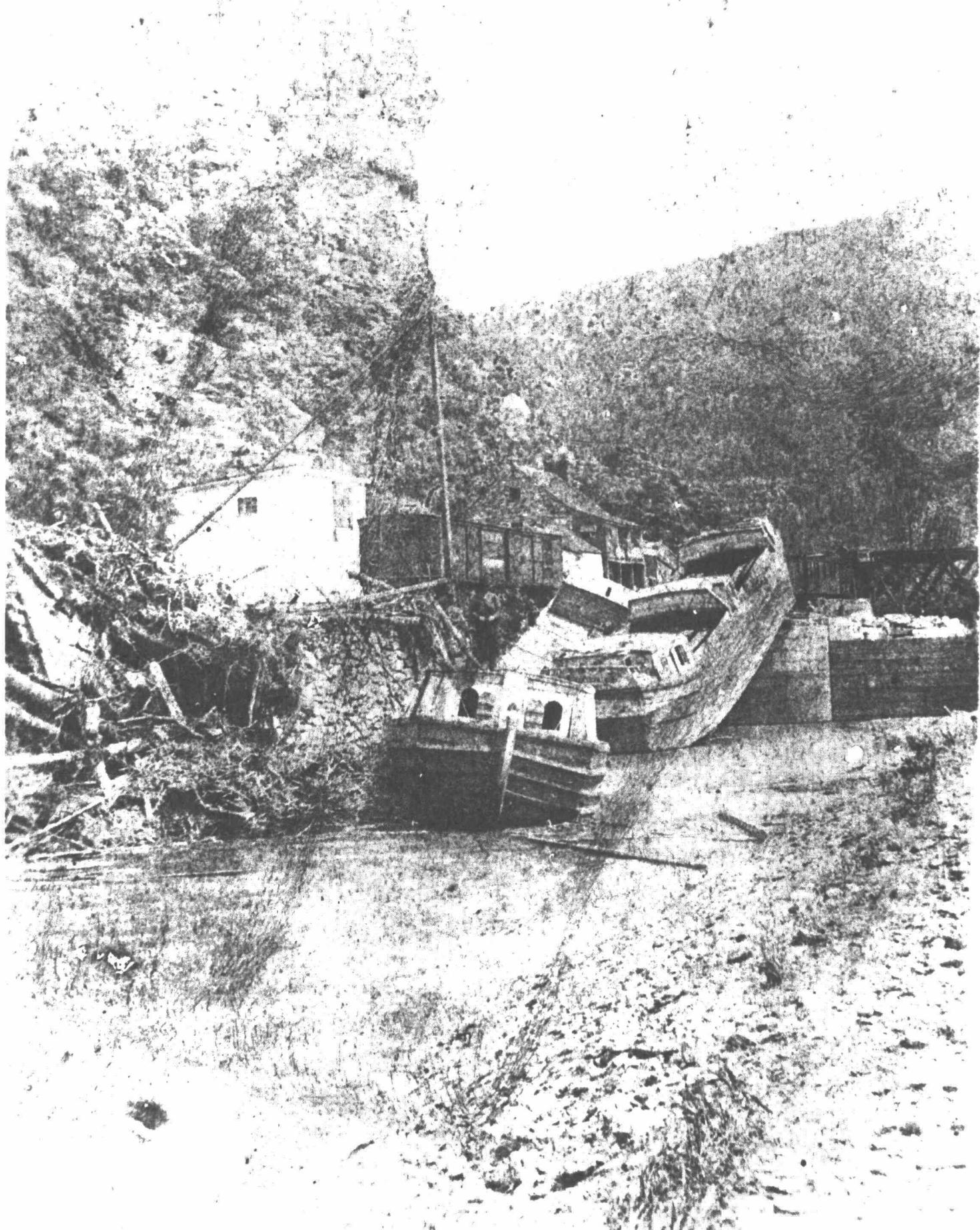
PURPOSE: "Safety Dog" in background

PHOTOGRAPHER  
AND COMPANIONS:

DATE: 1889

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NEGATIVE FILE ENVELOPE



Plat 15

Form 10-107  
(April 1957)

NEGATIVE NO. LF- 384

Transferred to Mus. Coll.  
SEE CLASSIFICATION NO.

SUBJECT: JUNCTION OF POTOMAC & SHENANDOAH RIVERS  
RR Bridges over Potomac and passenger bridge over Shen.River.  
Epis.Church - Catholic Church as seen from rear.

LOCATION: Harpers Ferry. Meeting of the States of Md., W.Va. & Va.

Md Heights on left; Loudoun Hgts. on right.  
Tunnel clearly shown at base of Md.Hgts.

PURPOSE:

PHOTOGRAPHER Walter E. Dittmeyer, Harpers Ferry, W.Va.  
AND COMPANIONS:

DATE: 1915

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NEGATIVE FILE ENVELOPE

JUNCTION OF THE POTOMAC AND SHENANDOAH RIVERS. MEETING OF THE STATES OF MARYLAND, WEST VIRGINIA AND VIRGINIA.  
HARPERS FERRY, W. VA.



No. 5.

WALTER E. DITTMAYER  
HARPER'S FERRY, W. VA.

*Plat 16*

NEGATIVE NO.

*HF-425*

Form 10-107  
(April 1957)

SEE CLASSIFICATION NO.

**SUBJECT:** BRIDGE, B&O Potomac, 1936  
Piers of 1865 iron bridge after the 1936 flood. Only one span  
on the Maryland side is left in place, water still only 4 or 5  
feet from top of 1865 piers.

**LOCATION:**

**PURPOSE:**

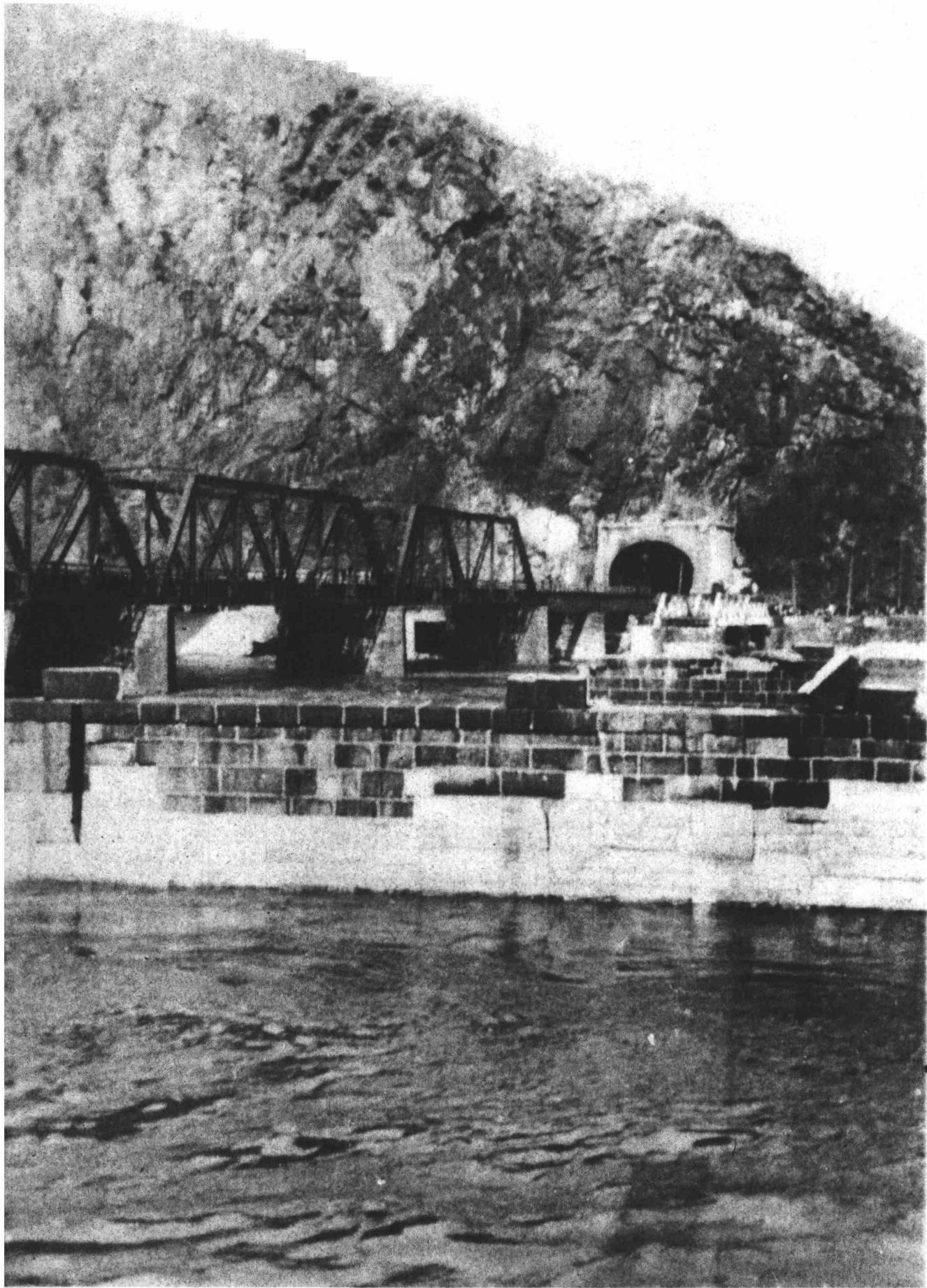
**PHOTOGRAPHER  
AND COMPANIONS:**

**DATE:**

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

**NEGATIVE FILE ENVELOPE**

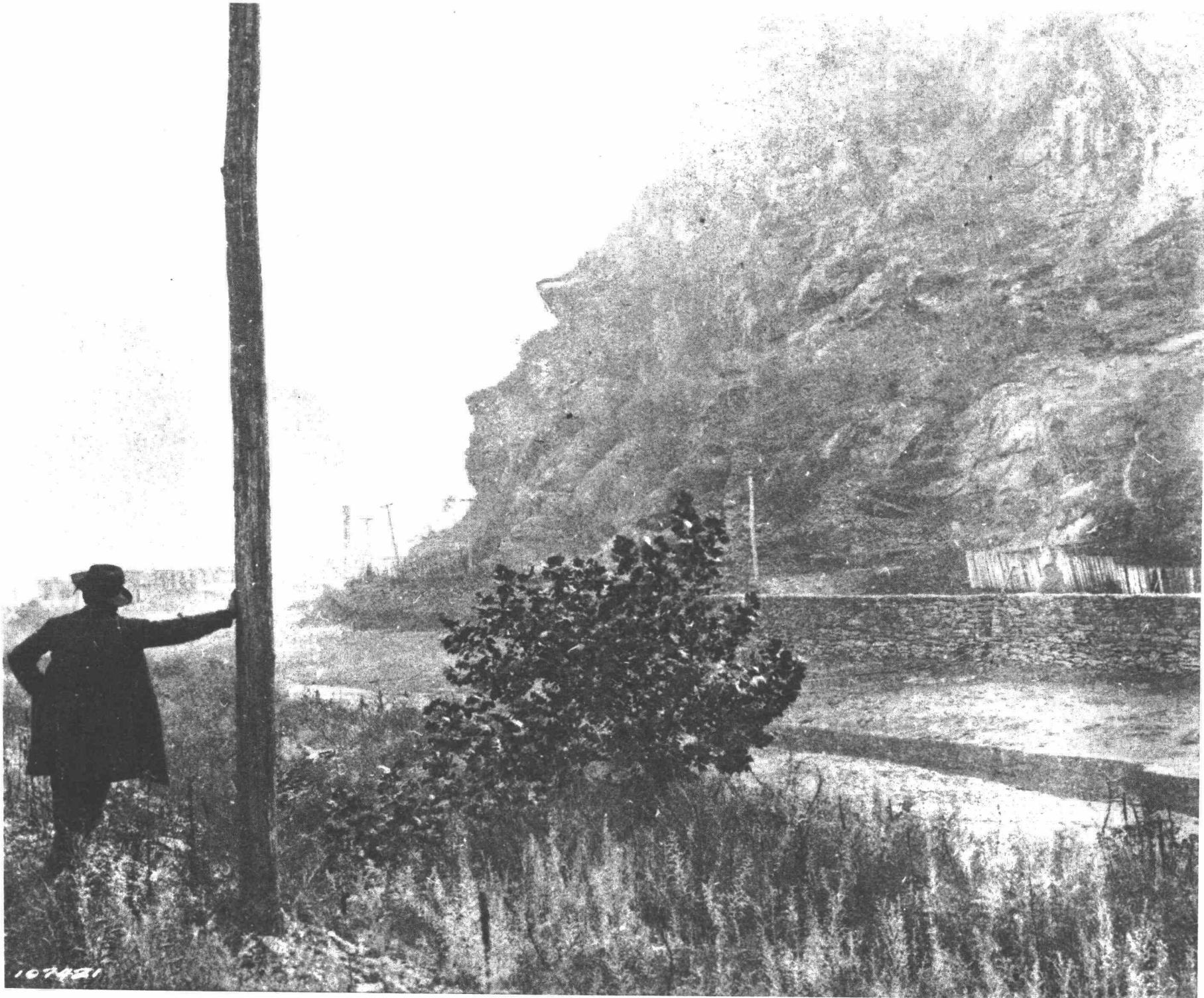
Pine River flood at Marquette March



**Plat 17**

**Harpers Ferry Gap during the Civil War.**

**Photograph found in Record Group 77,  
Department of the Army files, National  
Archives, Washington, D.C.**

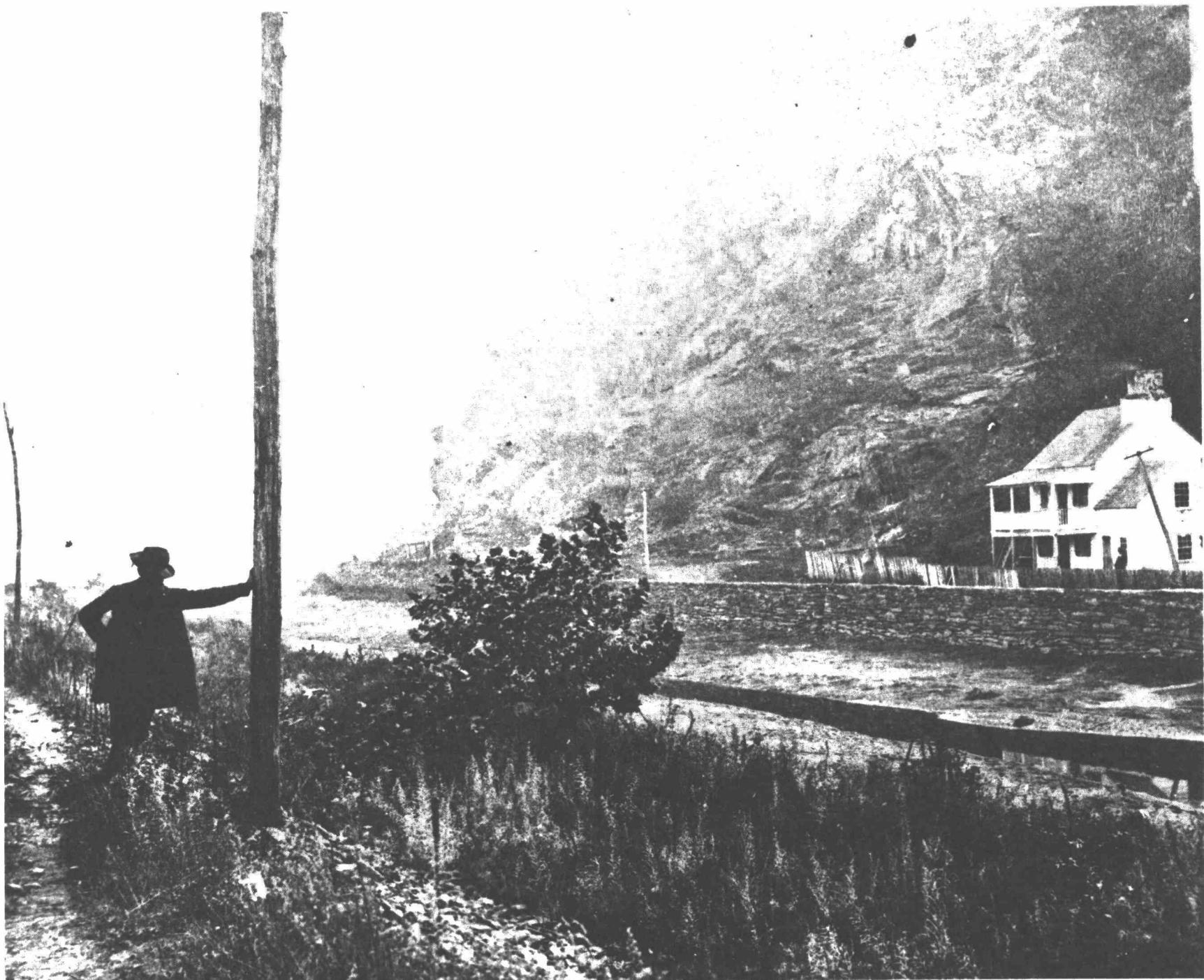


107481

**Plat 18**

**Harpers Ferry Gap during the Civil War.  
"View on Maryland side."**

**Courtesy Library of Congress.  
Negative #B8164-654.**



**Plat 19**

**Harpers Ferry -- "photographed immediately  
after its evacuation by the rebels, 1861-65."**

**Photograph by C.O. Bostwick**

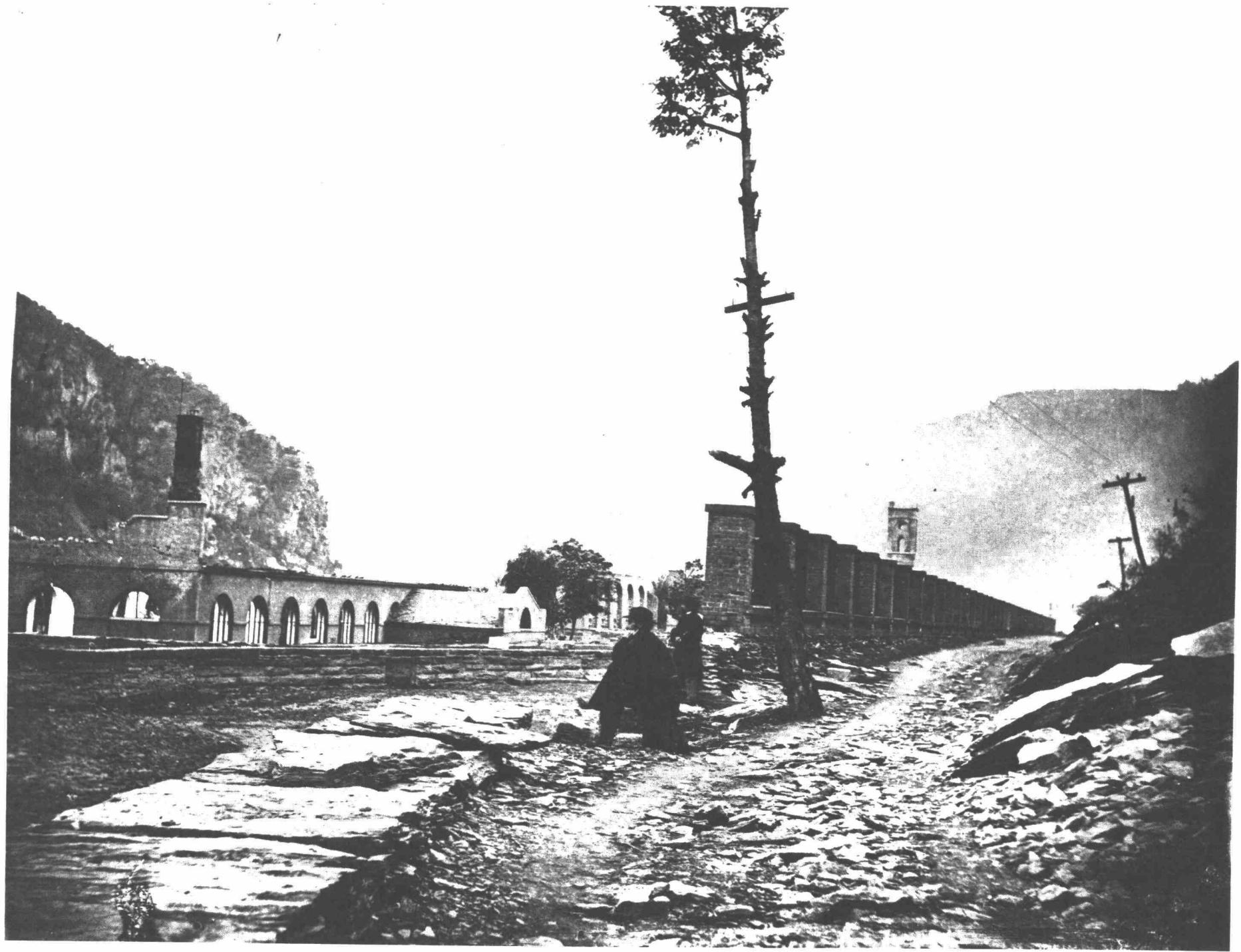
**Courtesy Library of Congress.  
Negative #B8171-7649.**



Plat 20

Harpers Ferry during the Civil War.  
"Ruins of Harpers Ferry Armory."  
Men near ruins looking towards  
Maryland Heights.

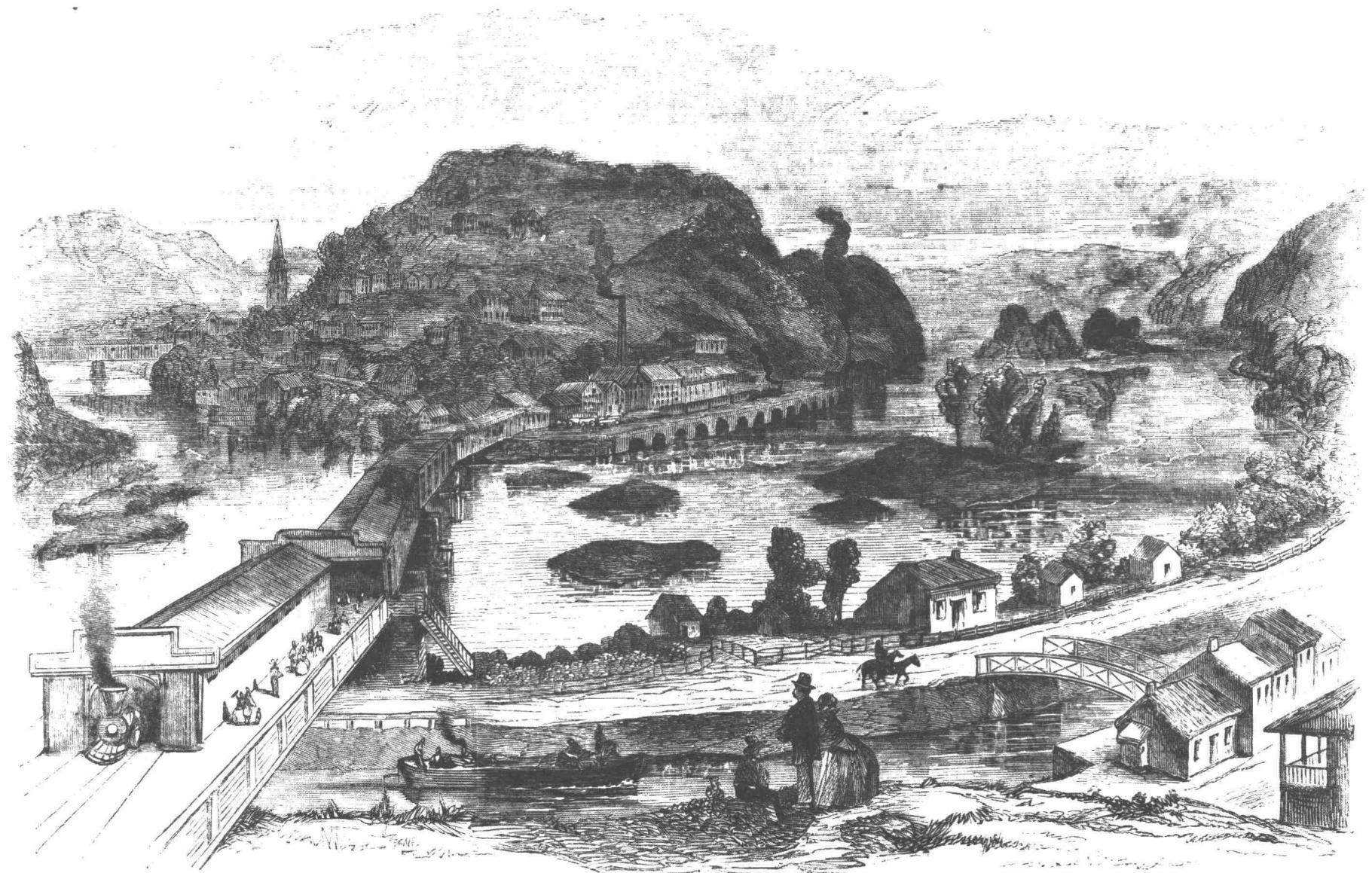
Courtesy Library of Congress.  
Negative #B815-655.



**Plat 21**

"Harper's Ferry -- The Scene of the Late  
Insurrection." Drawing appeared in  
Harpers Weekly volume 3 (1859).

Courtesy Library of Congress.  
Negative #5858.



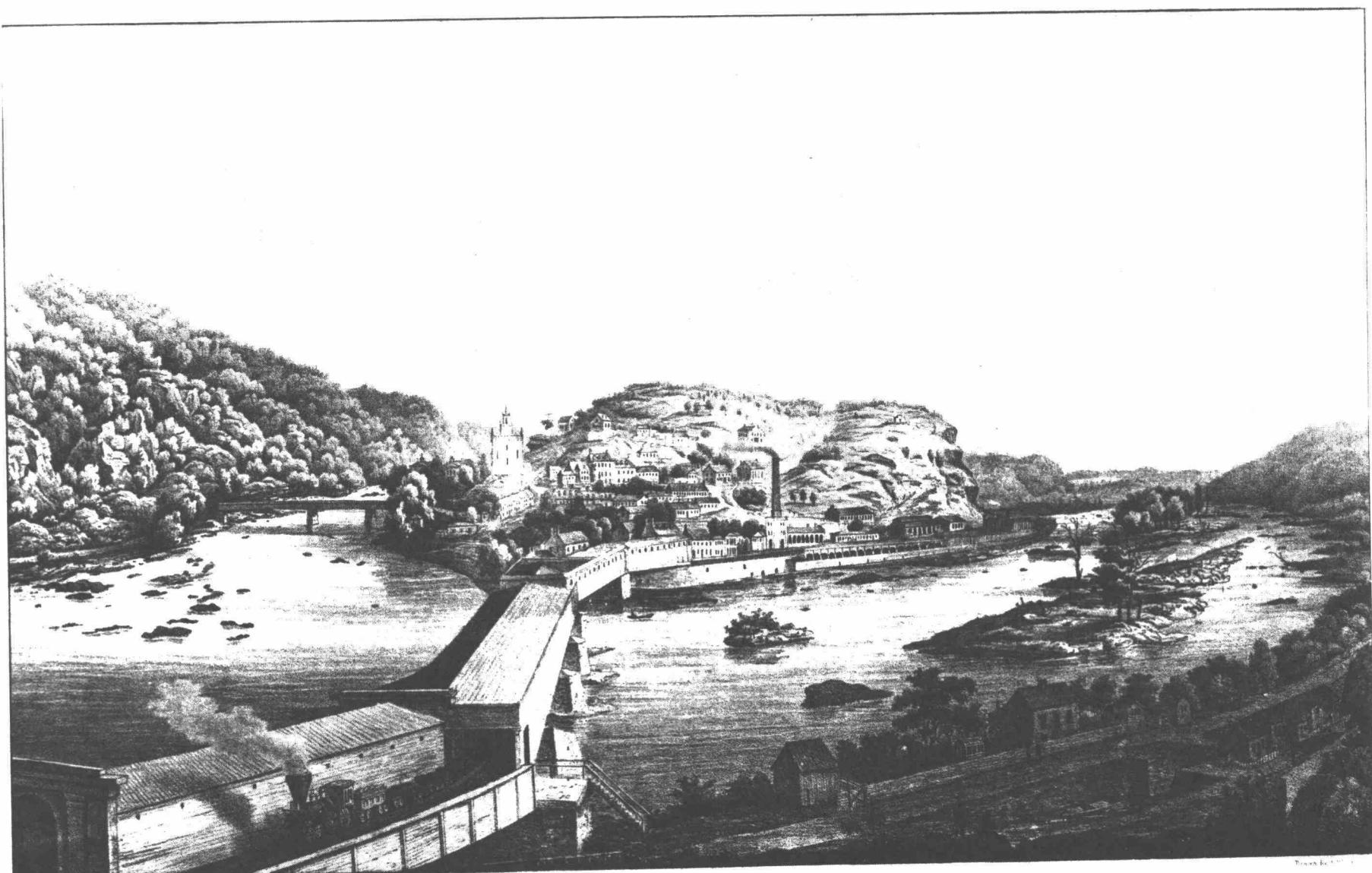
HARPER'S FERRY—THE SCENE OF THE LATE INSURRECTION.

H.D. Pg 2692 - 1534

**Plat 22**

**"Harper's Ferry, Va." Pre-Civil War  
drawing by A. Weidentosh.**

**Courtesy Library of Congress.  
Negative #262-11672.**



L. by E. JACKSON & CO. 104 S. Charles St., Baltimore, Md.

HARPER'S FERRY, VA.

**Plat 23**

**Lockhouse 33 probably during the  
1924 flood.**

**Courtesy Edgar Marion Weaver,  
Pleasantville, Maryland.**

