A HISTORY OF THE CHESAPEAKE AND OHIO CANAL

By

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CHAPTER I

THE EARLY HISTORY OF THE POTOMAC VALLEY

Beginnings of the Potomac Trade Route

The Potomac river was an important channel of trade from the founding of the earliest settlements along its banks. In the colonial period it was the lower part of the river which served as the outlet by which the tobacco plantations on both sides shipped their crop to the English market. The Maryland colony, founded at St. Mary's in 1634, expanded along the northern bank of the river during the seventeenth and eighteenth centuries. On the opposite shore, the peninsula between the Potomac and the Rappahannock rivers, known as the Northern Neck (of Virginia), filled up rapidly following its grant to Lord Hop-ton and his associates in 1649. Soon the boat landings of the plantations dotted the banks of the river. In this first stage of its development as a commercial channel, however, the Potomac was merely one of many tidal estuaries which penetrated the Chesapeake Bay colonies; and it was by no means the most important.

As the hinterland began to fill up in the eighteenth century, the role of the Potomac as a carrier changed. The economy of the lower valley was modified but slowly as the staple crop exhausted the soil.

1. Samuel H. Wilson, The Ohio Company of Virginia, 1748-1798 (Lexington, Kentucky, 1928), p. 5. This is an reprint of two articles appearing in The Kentucky Law Journal, XIV (1925), Nos. 3 and 4.

By the Treaty of Loughlan, in 1766, these claims were
in regard to the fur trade of the region extending as far west as the
magnificent country. To a definite understanding with the Indians
interest. Money and products were sent to the western trade. By this
the eastern commodities. After 1794, it rapidly increased. The treaty
the interest of Zuliana and Paralympus to the west.

date an important route to the west. The river did become an early
near the present city of Hamilton, the region developed by the Great Falls of the river, a few miles above the dam.
where in the trade of the frontier. Despite the various obstacles
may through the forest range and with them therefore must be respected to
the western markets. The location is one of the rivers which has not the
several passes and ridges penetrate the Blue Ridge, providing access
as much as represented a much more formidable barrier to migration.

and northern than the most western ranges, the Allegheny Mountains.
and company on the Blue Ridge Mountains, to prevent any such lower
region is divided into two distinct ridges. The eastern range,
direction through the mountain range, east and west, the Appalachian Mountains.

mountains, however, brought the upper section of the river into
mountains, however, brought the upper section of the river into
thus the lower river contained for some time the river. It is traditional
extended to include the area from the forks of the Ohio to the Mississippi. Meanwhile, the filling up of the coastal lands was forcing the newer colonists to move farther inland to the fringe of the settled area. The gradual removal of the Indian threat facilitated the migration into the western valleys. Thus the routes to the coast, of which the Potomac was one, were called upon to carry goods to and from both the settlers in the valleys and the traders in the mountains beyond.

In the process of these developments the Potomac assumed a new position in colonial trade. The upper stretch of the river emerged as an important channel in its own right, and eventually overshadowed the lower Potomac. The upper river compared favorably with its principal competitor for the western trade, the Pennsylvania route. The Potomac was actually shorter and cheaper than its rival. It required less of an overland haul which was a much more expensive undertaking than water transportation. This factor alone went far to offset any advantage which the Pennsylvania route had acquired by virtue of prior establishment. The river, as the path of the Virginia traders to the valuable and hotly contested region of the Monongahela and Youghiogheny valleys, had the support of a colony fully as powerful as the Quaker commonwealth. Then too, the Potomac and its many branches drained a large fertile area which was rapidly filling up and which promised to provide a commerce large enough to give it a substantial reservoir of business. In this respect, its position was not unlike that of its great rival to the north.

At first the fur trade was the most important goal to be reached. French and Pennsylvania trappers were already active when the early traders from the Chesapeake Bay colonies penetrated the region. Only a comparatively few hardy spirits like Thomas Cresap and Thomas Lee seemed to be fully aware of the advantages of the Potomac route before 1748. The early representatives of Virginia were unorganized, and traded as individuals in the manner of the Pennsylvania trappers. The full force and interest of the Old Dominion's wealth and influence had not yet been turned toward western business.

The Ohio Company of Virginia, 1748-1792.

In 1749, no fewer than three enterprises were licensed by the Board of Trade to engage in western trade and land activities. One of these, the Loyal Company, had received its grant in 1745, but waited

5. Cora Bacon-Foster, "Early Chapters in the Development of the Potomac Route to the West." Proceedings of the Columbia Historical Society, XV (1911), 96-101; Rear Admiral Homer H. Stanford, "The Historic Potomac," p. 1, carbon copy of the manuscript of a speech delivered in 1940, before the Newcomen Society, in U.S. Department of Interior, National Capital Parks, File 1460, Section 1. The speech is also printed.


7. The bibliography on the Ohio Company of Virginia is not very extensive. The three outstanding studies which have been made are: Bailey, op. cit., the latest and most comprehensive, based on Public Records Office Files; Herbert T. Layland, The Ohio Company, a Colonial Corporation (Cincinnati, 1921), reprint of an article in the Quarterly Publication of the Historical and Philosophical Society of Ohio; and Samuel M. Wilson, op. cit. These should be supplemented by the following accounts of the leading persons associated with the Company: Christopher Gist, Journals (of which there are several editions); Albert T. Volwiler, George Croghan and the Westward Movement (Cleveland, 1926); Kenneth P. Bailey, Thomas Cresap, Maryland Frontiersman (Boston, 1944); Louis K. Roents, Robert Dinwiddie, his Career in American Colonial Government and Westward Expansion (Glendale, Calif., 1941); and Nathaniel P. Stephenson and Hilary Sixth, George Washington (2 vols., New York, 1940), especially I, 35-67. Parts of Mrs. Bacon-Foster's study and Rear Admiral Stanford's paper also were the activities of the Ohio Company.

until 1749 for its charter. The second, the Ohio Company, obtained official approval in 1746 and was chartered in 1749. The third, an offshoot of the latter, was a patent granted to John Hanbury, a London capitalist who was also connected with the second. Of the three the most significant and the most active was the Ohio Company.

This company included in its membership "some of the most opulent and respectable inhabitants of the colonies of Virginia and Maryland." To a surprising extent they were holders of the comparatively recent grants in the Northern Neck. Foremost among them were Thomas Cresap, the pioneer trader; George Fairfax; Robert Dinwiddie, Lawrence, Augustine, and George Washington; John, George, James, and John Francis Mercer; Thomas Lee, Richard Lee, and George Mason. It is interesting to note that not only were the Washingtons, the Mercers, and the Masons among the leading families of the Northern Neck; they were also the ancestors or relatives of the founders and directors of the Potomac Company and the Chesapeake and Ohio Canal Company.

The activities of the Ohio Company were spread over a large part of what was then western Virginia, including sections of present-day Kentucky, West Virginia and southwestern Pennsylvania. Its greatest efforts were concentrated in the region of the Monongahela and Youghiogheny valleys, an area then in dispute between Virginia and Pennsylvania.

11. Wilson, op. cit., pp. 30 ff., emphasizes the activities of the company in extreme western Virginia and present-day Kentucky. Bailey, on the other hand, concentrates exclusively upon its experiences in the upper Potomac region and in the lands of southwestern Pennsylvania.
In this region the company secured a large tract of land which it intended to sell to prospective settlers. It also entered into active competition with the Pennsylvania traders. The latter used the fact that their rival was by charter and seemingly by inclination both a land and a trading company to turn the Indians against it.

The Ohio Company, with the greatest resources of an organized enterprise, bought the services of some of the better Pennsylvania trappers, including George Croghan and William Trent. In the contest that followed, both sides were the losers.

The land surveys which the company sponsored, among its many other activities, contributed much to a better knowledge of the Potomac valley and of the land between the Potomac and the branches of the Ohio. George Washington was sent out by the company on a surveying mission in 1749, and may have reached the mouth of Hills Creek. In 1760 and 1761, Christopher Gist went up the river to Hills Creek, overland to the Menongahela, and down that river to the Ohio. He continued down the latter as far as the falls of the river near present-day Louisville and then returned. In 1751 and 1752, he made another trip up the Potomac, concentrating this time, by request, on the more accessible

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13. Report of the Committee on Roads and Canals, April 17, 1834, loc. cit., p. 1. Some of the land purchased was already owned by the members of the company, e.g., Hills' Town by Lord Fairfax. Bailey, The Ohio Company, p. 73.


15. Ibid., pp. 71, 154. See also Volwiler, George Croghan, especially pp. 41-54. Volwiler stresses the independence of Croghan as a trader.

16. Stephenson and Dunn, op. cit., I, 41; Bailey, op. cit., p. 70.
region to the east of the Ohio. George Washington also made other surveys after 1752, although not under the commission of the Ohio Company.

The company undertook other enterprises which were important in the development of the Potomac valley. Early in its history, for example, it attempted to induce immigrants to settle on the company's lands. The greatest efforts were made during the period in which Lawrence Washington dominated its affairs. Christopher Gist and an Indian chief named Half King signed a treaty at Loganstown, in 1762, permitting colonists to settle on lands southeast of the Ohio river. At this time, Washington sought to interest a group of Pennsylvania Germans in settling on the newly acquired tract. The latter insisted that as part of the bargain they be relieved of the onerous duty of contributing to the established church. Washington died, however, before any agreement could be reached. On its part, the Virginia Assembly passed three acts to facilitate the settlement of its western lands. In 1752, it relieved its western inhabitants of the obligation to pay taxes. In 1754, it appropriated $10,000 for the expenses of providing military service for the frontier. In 1766, it appropriated $200 for the improvement of the Braddock road. Despite this encouragement, the Ohio Company apparently made no other sustained attempt, after the

17. Bailey, op. cit., pp. 86-96, 97-100. See also the Journals of Christopher Gist (Pittsburgh, 1893).
19. Stanford, op. cit., p. 3.
failure of Washington's scheme, to fulfill the requirements of its charter to settle colonists in the area.

Because trade was the primary reason for its organization, the Ohio Company concentrated mainly on that part of its business. It established a regular route for the commerce to and from its western posts via the Potomac valley. The eastern terminus of the trail was Belhaven (Alexandria), on the Virginia side of the river just below the upper limits of tidewater. From there the goods were carried overland by wagon to the phantom town of Philae, at the upper end of Great Falls, about eighteen miles up the river. In this way the two most serious obstacles to the navigation of the Potomac, Little Falls and Great Falls, were avoided. From Great Falls, the traders used the river to the mouth of Mills Creek which was at that time, as later, considered the upper limit of satisfactory navigation on the Potomac. At Mills Creek a storehouse and a fort were built in 1749, and the name of the site changed from Mills Town to Charlestown, and later to Fort Cumberland. From there the earliest route led over the mountains to the three forks of the Youghiogheny, a spot known for obvious reasons as Turkey Foot. A second warehouse and town were laid out just below the junction of the Youghiogheny and the Monongahela, at the mouth of

22. Bacon-Poester, op. cit., p. 101. The town of Philae was laid out at Great Falls, but never really developed.


Chartier Creek, near the site of present-day McKeesport. Later, in 1752, an Indian scout named Nemacolin blazed another trail from Wills Creek to the Monongahela at the mouth of Red Stone Creek.

Here, on the banks of the river, near the site of modern Brownsville, the Ohio Company built another storehouse first called the Hangard, later Red Stone Old Fort, and later still Monongahela. It was Nemacolin's trail which Braddock enlarged to a wagon road on his ill-fated campaign against Fort Duquesne. It has since been followed by the National Pike or Cumberland Road, and currently by the National Old Trails Highway.

By 1756, the fortunes of the Ohio Company had reached their zenith. The French and Indian war from 1756 to 1763 brought widespread destruction to the company's property and trade in the west. After the war, the removal of the French threat to the British position in America led to a decline of official support for the company from the English government. As long as England needed aid against the French in America it was inclined to look with favor upon the Ohio Company. Now the relationship between the government and the company was reversed.

The company had lost many of its more aggressive leaders through death.

26. Stanford, op. cit., p. 3.

27. Bailey, op. cit., pp. 153-154; Red Stone Old Fort was destroyed by the French in 1754. The city of Brownsville was established on the site in 1788. Wilson, op. cit., p. 20; Stanford, op. cit., pp. 3-4.

28. Stanford, op. cit., p. 3; see also Report of the Committee on Roads and Canals, April 17, 1834, loc. cit., p. 2.


30. Ibid., p. 11.
and the many reorganizations it had undergone. At the same time other companies rose to challenge its position. The latter years of the company, from 1764 to 1792, were filled with numerous futile petitions to the crown and many legal quarrels with new rivals. The decline of the Ohio Company after the French and Indian war was not accompanied by a general lapse of interest in the west or in the Potomac route. In fact the opposite is nearer the truth. The loss of favor by the company, the growth of a speculative spirit in the colonies, and the focusing of attention on a relatively safer west gave rise to many schemes to exploit the region. A similar increase of interest in the improvement of the Potomac river also occurred in the pre-Revolutionary years. No less than three attempts were made to improve the navigation of that river. In the 1760's, the Johnson Brothers of Frederick, Maryland, proposed to form a company for that object. In 1772, George Washington, who had discouraged the Johnsons' scheme, secured a charter from Virginia for a company to achieve the same goal. Maryland failed to confirm the act, and the second effort failed. Also in 1772, John Ballendine advertised a scheme for opening the river which had the support of powerful interests in the colonies.

31. Ibid., pp. 263-269, 269.

32. The Ohio Company encountered the competition of such Pennsylvania-sponsored land companies as the Vandalia scheme (1796 ff.), the Indiana project (1768 ff.), and the revival of the Vandalia proposals by the Palpole Company in the late sixties. The latter company under Samuel Wharton secured a grant from England and made overtures to the agent of the Ohio Company, George Mercer, Jr., but failed to convert the leaders of that company in America. Bailey, op. cit., pp. 237-238, 260-262, 269; Bacon-Foster, op. cit., p. 118. See also, George A. Lewis, The Indiana Company, 1763-1798. A Study in Eighteenth Century Frontier Land Speculation and Business Venture (Glendale, Calif., 1941).


34. Ibid., pp. 111-116. The letter is reprinted in full.

and in England. His plans for canals and channel improvements were widely publicized in London in 1773. However, the combined efforts of the Ohio Company, Thomas Walpole, Samuel Wharton, Benjamin Franklin and others in behalf of the proposal were of no avail. Thus, on the eve of the Revolution, plans for the improvement of the Potomac were still without success.

The activities of the Ohio Company in the colonial years were significant in the history of the Potomac valley and of the colonies as a whole. It has been pointed out that the company was itself a transitional step between the old proprietary companies interested primarily in trade, and the new speculative companies interested in western land speculation as well. The operations of the company aroused an interest in the west which was not restricted merely to the Potomac region. However, the company did give the Potomac river a good start in its competition with other routes for the western trade in the early national period. The same families which were active in the Ohio Company's affairs subsequently produced the men, George Washington, John Mason, and Charles F. Mercer, who promoted and directed the fortunes of the later companies which sought to establish the Potomac as a major route to the Ohio valley. On the other hand, the experience of

36. (Continued from previous page)


Copies of these estimates and proposals are filed among the Potomac Company records in the National Archives. They are also printed in the Report of the Committee on Roads and Canals on the Chesapeake and Ohio Canal Memorial, January 30, 1827, 19th Congress, 2nd Session, House of Representatives, Report No. 90, Appendix 2, pp. 23-28. See also Bacon-Foster, op. cit., pp. 117-123.

37. Report of the Committee on Roads and Canals, April 17, 1834, loc. cit., p. 2; Bacon-Foster, op. cit., pp. 118-119. Franklin assured the Lords Commissioners of Trade that Alexandria was the best and cheapest seaport for the Ohio trade.

As undertaking gave an early indication of two obstacles to the success of the Potomac Company and the Chesapeake and Ohio Canal Company: the threat of effective competition from the Pennsylvania route and the danger of internal weakness resulting from the conflicting interests and influence of local politics in company affairs. Thus the Ohio Company both provided the basis for the development of the Potomac route and indicated two of the most serious threats to its success.
CHAPTER II
THE POTOMAC COMPANY, 1784-1828

Organisation of the Potomac Company

At the conclusion of the Revolutionary war the eyes of adventurers, merchants, capitalists and a few far-seeing statesmen again turned to the west. The treaty of Paris which ended the successful struggle for independence had allowed the claims of the states to western lands, at least as far as the Mississippi. Indirectly the privileges of individuals in this region under grants from the former colonies were also confirmed. In effect, the peace treaty transferred the whole question of special rights in the west from England to the state legislatures where they would be subject to the pressures of local politics. There was nothing to hinder the operation of these local influences which would affect the future development of the west. This fact was an important key to the history of the improvement of the Potomac river in the early national period.

The Potomac Company was chartered in 1784 by the assemblies of Virginia and Maryland. Its purpose was the opening of the Potomac

1. The bibliography of secondary works on the Potomac Company is as limited as it is for the Ohio Company. Mrs. Cora Bacon-Foster's study, "Early Chapters in the Development of the Potomac Route to the West," loc. cit., is by all odds the best. Pickell's volume, A New Chapter in the Early Life of Washington, is sound as far as it relates the history of the company. Rear Admiral Stanford's paper, "The Historic Potomac" is based largely on Mrs. Bacon-Foster's work. George P. Ward sketches the history of the Potomac Company briefly in "The Early Development of the Chesapeake and Ohio Canal Project," a manuscript dissertation later published in the Johns Hopkins University Studies in Political and Historical Science, Series XVII, Nos. 9, 10, 11.

2. Act of the General Assembly of Virginia, passed October, 1784; Act of the General Assembly of Maryland, passed November Session, 1784. Texts of these acts are available in a pamphlet prepared by the Chesapeake and Ohio Canal Company and in Documents Relating to the Chesapeake and Ohio Canal, July 11, 1840, 26th Congress, 1st Session, Senate, Document No. 610, pp. 78-85, 101-110.
river to the highest point of permanent navigation. The minimum goal was Fort Cumberland, at which point a connection would be made with the improved Braddock road over the mountains to the Monongahela. This route had served the Ohio Company traders before the Revolution, and during the war years it had been one of the three major paths leading into the trans-Allegheny west. The Potomac route then was not a new one, nor was it merely the product of local state pride. On the contrary, the acts incorporating the company had to run the gauntlet of local opposition in both state legislatures.

The successful launching of the Potomac Company was primarily the result of one man's efforts and influence. George Washington had long been interested in the project and was completely convinced of its practicability. Indeed it has been said with considerable justification that the improvement of the Potomac river had become a passion with him, second only perhaps to his interest in the future of the union. Before the war, Augustine and Lawrence Washington had been actively associated with the Ohio Company. George Washington himself had made several inspection trips to the west and was speculating in lands on the Monongahela. After his glorious role in the Revolutionary War, his influence in national affairs and particularly in Virginia and

Maryland reached its zenith. Nothing these two states could do for him seemed too much. When Washington asserted his belief in the great possibilities of the Potomac route, Virginia legislators promptly passed an act incorporating the Potomac Company and subscribing to one hundred and twenty shares of its capital stock, fifty of which were placed in the hero's name. When Maryland, torn by internal dissension, hesitated to pass an act confirming the Virginia law, a visit from George Washington swept the Assembly off its feet. Maryland affirmed the charter and subscribed to fifty shares in the new company.

The company was formally organized in May, 1785, with George Washington as its first president. It immediately embarked on an


7. Act of Virginia, passed October, 1784, Documents Relating to the Chesapeake and Ohio Canal, July 11, 1840, loc. cit., pp. 86-87. Washington declined the gift and requested that the shares subscribed in his name be assigned to some public purpose such as the establishment of a national university. Washington to the Governor of Virginia, Pickell, op. cit., pp. 63-64, Stephenson and Dunn, op. cit., II, 202. Virginia acceded to this request by an act passed in October, 1786, directing the shares to be assigned to such public object as Washington should direct. Documents Relating to the Chesapeake and Ohio Canal, July 11, 1840, loc. cit., pp. 86-87. On the avarice and unanimity with which the Virginia Assembly followed Washington's advice, see Pickell, op. cit., p. 42.


9. Pickell, op. cit., pp. 43-46; Act of the General Assembly of Maryland, November Session, 1784, Documents Relating to the Chesapeake and Ohio Canal, July 11, 1840, loc. cit., pp. 101-110. The meeting between the Virginia and Maryland commissioners began a series of conferences which culminated in the Philadelphia meeting to amend the Articles of Confederation in which the federal constitution was written. Bacon-Foster, op. cit., p. 142.

10. Proceedings of the Stockholders of the Potomac Company (May 17, 1785), Letter Book A. The minutes of the early meetings of the stockholders are recorded in a volume titled "Letter Book." The annual meetings were held in August, and will be cited as Annual Meeting (year); special meetings (Continued on next page)
an energetic though cautious program to complete the improvement of
the river within the five years permitted by its charter. The intention
was to deepen the channel and cut canals around the falls so as to
pass boats capable of carrying fifty barrels of flour in the driest
seasons. That it was still endeavoring to accomplish its purpose in
1820 is evidence of the nature of the region and the imperfect knowledge
of it in 1786, rather than the result of an indifferent attitude on
the part of the directors.

Some General Considerations

From the very beginning the company encountered obstacles which
made the progress of its work much more difficult than had been
anticipated and which closely foreshadowed those later experienced
by the Chesapeake and Ohio Canal Company. For this reason it is
worthwhile to examine briefly the nature of these problems and the
solutions which the Potomac Company sought to apply.

Some of the difficulties, such as local politics, competent
supervision, labor, etc., were always with the company. Local politics
have already been mentioned in connection with the acts incorporating
the company. 11 They continued to influence its affairs throughout the
period of its existence. In Virginia, the proponents of the James
river improvement hindered aid from their state. On the other side,

10. (Continued from previous page)
were sometimes held, and will be cited as Special Meeting (date).
These proceedings, as well as the Annual Reports, Correspondence,
Proceedings of President and Directors, etc., are all in manuscript form
and are deposited in the Department of Interior Archives (National

11. See above, p. 15, notes 7 and 8. See also, Washington to
Jefferson, March 28, 1784, Ford, op. cit., p. 375-380 (quoted in part
in Stephenson and Dunn, op. cit., II, 531-532 p. 200, n. 35).
the city of Baltimore looked askance at Maryland's support of a scheme which would benefit the rival ports of Georgetown and Alexandria.

Another constant problem was the acquisition of the services of a skilled engineer to superintend the construction and operation of the works. An appeal published in Baltimore and Philadelphia newspapers failed to bring a satisfactory response, and local talent of doubtful quality was tried. James Rumsey, an inventor who had fascinated Washington with an experimental steamboat in 1784, was the first incumbent. In 1786, he resigned in a quarrel with his assistant, Richardson Stewart, and the latter was appointed to succeed him. Then followed in rapid order: James Smith in 1788, Captain Christopher Myers in 1796, Leonard Harbaugh in 1797, Thomas Leoffler in 1798, and Harbaugh again in 1802. Fortunately, George Gilpin, one of the directors, had some ability as an engineer.

15. Ibid., pp. 20-27 (October 2 and 3, 1786).
16. Ibid., pp. 35 (June 2, 1788); 68-67 (January 4, 1796); 100-102 (May 2, 1797); 106 (June 6, 1797); 134-136 (June 8, 1798); 239 (May 28, 1802).
The appeal for laborers was equally unsuccessful. There were simply not enough hands in the predominantly agricultural region of the Potomac valley to supply the large requirements of the project. Advertisements published in Philadelphia, Baltimore and Alexandria newspapers produced unsatisfactory results. Whenever the company undertook any large-scale construction the labor problem had to be solved. When the work began to lag for lack of sufficient force, the company became desperate. It experimented in turn with the use of indentured servants from ships in Philadelphia and Baltimore and with Negro slaves from the neighboring countryside. The indentured servants, often called Blue Boys and Red Boys according to their ships, proved as unruly as the free laborers had been. Various ways of controlling them and preventing runaways were tried, usually involving the shaving of heads and eyebrows, but without success. The Irish servants were said to be especially troublesome. Although the use of

18. Proceedings of Directors, A, 2-3 (May 31, 1785). The daily rations included: 1 lb. of salt pork, 1-1/4 lb. of salt beef, or 1-1/2 lb. of fresh beef or mutton, 1-1/2 lb. of flour or bread, and three gills of rum. Ibid., p. 6 (July 14, 1786).

19. Ibid., p. 10 (September 9, 1786), 11-12 (September 26, 1784), 85-86 (October 5, 1786); Bacon-Foster, op. cit., p. 162: the men and boys were taken from arriving ships.

20. Proceedings of Directors, A, 14 (October 18, 1785), 42 (November 5, 1792), 66 (December 22, 1785), 207-208 (December 17, 1800); Thomas Johnson to Washington, September 1785, Bacon-Foster, op. cit., p. 161; also 163, 176; Stanford, op. cit., p. 10.


23. Bacon-Foster, op. cit., p. 162.
Negro slaves also had its drawbacks, it was continued for some time, for lack of any other way to secure labor. As late as 1811, the directors were ordering the superintendent to hire workers, offering them "as high wages as are given by others, or even more." The problem of obtaining food for the hands at a reasonable cost was solved by contracting with enterprising farmers in the valley to supply the meat, flour and spirits at a fixed charge per ration. In the matter of labor supply, wages and the cost of provisions, the Potomac Company's experiences were a valuable lesson for the Chesapeake and Ohio Canal Company. The latter thought the solution lay in contracting with others for the work of construction instead of undertaking it itself, as had its predecessor. It soon learned that the labor problem was not to be solved so simply.

The history of the Potomac Company falls most readily into three major periods. Between 1785 and 1802, construction was pushed most rapidly. It was concentrated mainly on passing the falls of the Potomac. Between 1802 and 1816, financial considerations became more important. The limited amount of work permitted by the company's funds was devoted primarily to clearing out the bed of the main river and improving the larger branches. In the third and last period, from 1816 to 1828, the affairs of the Potomac Company became more or less stagnant, and attention was shifted to other projects for the improvement of the Potomac route.

25. President and Directors to Josias Thompson, July 24, 1811, Director's Journal B, 101.
26. Proceedings of Directors, A, 16-16 (February 1 and 2, 1786), 76 (May 6, 1796), 335 (August 28, 1805).
Construction Begun

In the first period, the company began its work with the enthusiasm of a new enterprise in which high and confident hopes were embodied. It commenced operations on all five of the major falls of the Potomac which were to be passed by canals. Of course this did not lessen the acuteness of the labor shortage. Nevertheless, by 1792, the three canals at the uppermost falls, House's, Payne's (Shenandoah) and Seneca, had been completed. At Great Falls and Little Falls, the only ones which required locks, the work was much more difficult. At Little Falls, construction moved along on the Maryland side of the river about as fast as the supply of labor permitted. The lock pits were dug and wooden locks erected in a hasty and impermanent fashion. The work at Little Falls was finished in 1796. The directors decided to locate the canal and locks on the Virginia side at Great Falls. This proved to be an unfortunate decision, for after the work on the canal was well advanced it was discovered that the lock seats would have to be excavated from solid rock. Besides being an engineering task of no mean proportions, this required a large number of skilled laborers and heavy expenditures. By 1796, the company had exhausted its funds, but the locks were still unfinished.

After the financial resources of the company had been expended, the completion of the works at Great Falls was subordinated to the more

29. Ibid. (1796), A, [36]; Bacon-Foster, op. cit., pp. 156, 185-186. The annual reports after 1795 are entered in proper chronological sequence among the proceedings of the directors.
Immediate problem of securing the $40,000 which it was estimated was needed to finish the locks. Loans could not be obtained in sums sufficient to warrant a renewal of the work. The company resolved not to commence other construction until enough funds were available to insure the completion of the locks at Great Falls. In order to provide the means to meet the ordinary expenses of operation and to begin accumulating the $40,000, the company applied to the Assemblies of Maryland and Virginia for permission to collect tolls on produce using the river, as if the locks at Great Falls were already finished. To justify the adoption of this irregular procedure, the company agreed to transport the goods around the rapids by wagon at its own expense and to deliver them at an inclined plane near the lower end of the falls. Under this arrangement the states granted the permission requested. The tolls collected, however, were far below the amount needed to begin new operations at Great Falls. The money received, therefore, was used to employ work gangs to remove obstacles in the bed of the river above and below the rapids.

By 1798, company affairs seemed to have come to a standstill, and the company itself was on the verge of failure. At this critical point, the State of Maryland stepped in and breathed new life into the enterprise by an additional subscription to one hundred shares of capital stock at $130 per share. Work was thereupon resumed at Great Falls.

31. Annual Meeting (1797), Directors' Journal A, 113; (1798), 143-144.
33. Special Meeting (December 10, 1799), Directors' Journal A, 168. See also Documents Relating to the Chesapeake and Ohio Canal, July 11, 1840, loc. cit., p. 118.
Falls with new vigor. In 1802, the locks were completed, and the immediate objective of the Potomac Company reached. The Potomac River was now navigable for approximately two hundred and twenty miles, from the mouth of Savage river to tidewater.  

The River Bed, the Branches, and Company Finances

During the second period, from the completion of the locks at Great Falls to the close of an ill-fated lottery, the work of improving the navigation of the Potomac was concentrated on the river bed and the major branches.

The Potomac had been rendered navigable for almost its entire length by passing the canals around the major falls, but the problem of clearing a safe channel in the river bed itself, of sufficient depth to permit the passage of boats capable of carrying fifty barrels of flour in the driest seasons, remained unsolved. Therefore, the terms of the charter had not been fully complied with. Under these circumstances the company confidently undertook the deceptive task before it.

Two work gangs, varying in size from twenty to thirty men each, were kept constantly employed in the river when the water was low enough to permit operations. At other times, for the sake of economy, they were used to quarry stone for new locks at Little Falls to replace the wooden ones.

34. Annual Report (1802), Directors' Journal A, 246. The locks were a real engineering feat; they were described in European engineering journals, Brown-Foster, op. cit., p. 156.

35. John Mason to the Secretary of the Treasury, January 20, 1802, Directors' Journal A, 26. The Potomac was navigable for 218 miles, 350 yards, including canals.


The completion of the major work at Great Falls permitted the company to turn some of its attention to the improvement of the principal branches of the Potomac. There had already been several proposals to begin the work on the Shenandoah river during the earlier period. Without funds even to complete the locks and canals on the main river the directors did nothing at that time. After 1802, the heavy part of the projected improvements on the Shenandoah was begun. In September, 1803, the board took the first steps, ordering the necessary surveys and condemnations to be made. In this endeavor, as in the improvement of the other branches of the Potomac, the company was assisted by limited local support. The major obstacles to the navigation of the Shenandoah were the five falls near the junction of that river with the Potomac. These were eventually passed by canals and locks. The work was then reduced to clearing the bed of the river, as it was in the Potomac. By 1808, John Mason, then a director of the company, was able to report that the Shenandoah had been opened for a distance of two hundred miles, via the South Fork. Like the improvement of navigation on the Potomac, that on the Shenandoah left much to be desired.

38. Annual Meeting (1792), Letter Book A, (20); Annual Report (1796), Letter Book A, (33); (1798), A, (37-38); (1797), Directors' Journal A, 111-112.


41. John Mason to the Secretary of the Treasury, January 20, 1808, Directors' Journal B, 26. Farmers on the North Fork later offered to advance labor and capital to improve it, but nothing was done. Proceedings of Directors, B, 161-163 (November 8, 1812).
In the meantime, work was also pushed on other branches of the main river. At one time or another the Casapon and the South Branch on the Virginia side and the Monocacy, the Antietam, and the Conococheague on the Maryland side were all considered. Limited resources and often total absence of local support prevented the development of all these projects. The Monocacy and the Conococheague eventually were opened for forty and fifteen miles respectively, and some work was also done on the Antietam.

On the whole the attempt to improve the branches of the Potomac was not as helpful as it was harmful. It exhausted the company's resources without contributing measurable returns. It also detracted from the primary purpose of the enterprise, the improvement of the Potomac as a route to the west. Indeed, by the end of this period, the company was concentrating almost exclusively on the Shenandoah trade. In line with this changing emphasis the gangs working in the bed of the river were employed in the Potomac up to Harpers Ferry and in the Shenandoah from Harpers Ferry to the forks of the river. Interest in the exploitation of the Potomac valley was so great that it obliterated the original intention of the company.

The company, however, left no stone unturned in its desperate efforts to raise sufficient funds to complete the projected improvement of the Potomac and to exploit the Potomac valley and the western trade.

It borrowed heavily from local banks. It repeatedly petitioned the

42. Mason to the Secretary of the Treasury, January 20, 1808, Directors' Journal B, 26; Mason to Bernard Fayton, Secretary of the Virginia Board of Public Works, December 9, 1817, Directors' Journal B, 342.

43. Proceedings of Directors, B, 116-117; (December 17, 1811), 207 (March 2, 1814); Annual Report (1812), Directors' Journal B, 140; (1813), B,176-7; (1814), B, 220.
Assemblies of Maryland and Virginia for further aid. In the former case, at least, it was successful, for the State of Maryland again came to its rescue with a loan, in 1814. The company also took advantage of an act of the Maryland Assembly which had been passed at its own request, permitting lotteries.

The business of the lottery which occupied much of the attention of the directors between 1810 and 1818, provides an interesting interlude in an otherwise dull middle period. It never did prove very popular, and the tickets sold slowly despite incentives to the agents in the form of commissions and bounties. Many of the sales that were eventually effected were made on credit, payable within thirty days after the drawing. Nevertheless the drawing was begun, and luckily it went favorably to the company's interest in the early stages. The first class drawing netted $315,134.41. The second class lottery proved disastrous, however, and the company lost $14,648.38 on it. The third class lottery was never drawn. Thus the whole lottery raised only $486.03, instead of the $300,000 anticipated. It consumed the greater part of eight years and involved the company in long and costly litigation. The lottery was apparently the final blow to the Potomac Company's hopes. Its failure brought to an end sustained efforts by the company to improve the Potomac navigation.

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44. Proceedings of Directors, B, 200-203 (February 16, 1814).
45. Ibid., 65 (March 6, 1810); Bacon-Foster, op. cit., p. 200.
46. William Hartshorns, Treasurer, to Charles Lewis, July 1, 1811, Letter Book C [32]. A quarter cask of Madeira was given as an award for services in connection with the sale of lottery tickets.
47. Proceedings of Directors, B, 361 (May 16, 1818).
Stagnation and Decline

The second period of the Potomac Company's life had ended with the immediate aims and the future policy of the company in doubt. The third period was ushered in with even more ominous forebodings for the welfare of the enterprise. The creation of a Board of Public Works by the Virginia Assembly in 1816 may be taken as the beginning of this last period. The lottery was just drawing to its dismal close, and the work in progress was limited to the replacement of the old locks at Little Falls, which were completed in 1818. Projects for competing works in the Potomac valley, financial exhaustion, and the failure to complete the improvement of the Potomac river cast a heavy shadow over company affairs in the years from 1816 to 1828. On the whole, the last period was one of stagnation, or more accurately, somnolence, from which the company roused only to resist attacks upon its vested rights in the Potomac valley.

Except for sporadic efforts to keep existing canals and locks in repair, work on the main river came to an end. The efforts to open the navigation of the branches were already at a complete standstill. All rights to the improvement of the Shenandoah had been turned over to a New Shenandoah Company which had been formed by local interests in 1816. Although over $729,000 had been spent on the improvement of the Potomac


49. Proceedings of Directors, 5, 233-236 (June 24, 1815); 243-246 (October 31, 1815).
by 1822, the company still had not fulfilled the charter stipulation
requiring the establishment of permanent navigation for boats capable
of carrying fifty barrels of flour.

The financial condition of the company deteriorated rapidly after
the failure of the lottery. The debts of the company continued to
increase, until the annual profits from the operation of the works
were not sufficient to pay the interest on them. By 1822, these debts
amounted to over $175,000. Thus the company was stripped of all
means to continue the work on the river, and at the same time, its
dismal financial condition discouraged any new investments by public
or private interests. In this way two blows were struck against its
future hopes and prospects. Together, they proved fatal.

The Historical and Economic Significance of the Potomac Company

The significance of the Potomac Company lies in the relationship
between the river improvements it promoted and the development of the
Potomac as a channel for western trade.

In the beginning of the national era, the upper Potomac valley was
just emerging from the frontier fur-trade era into the agricultural
stage of development. A description of the State of Maryland in 1784
gives a good indication of the economy of the valley.

Maryland, then, had no incorporated towns from which
commerce was conducted -- but Annapolis -- quite remote from
the Potomac. Washington, then called Duddington, was not even

50. John Mason to the Virginia Commissioners, December 20, 1822, Directors'
   Journal, C, 4. The amount expended on construction was $729,387.28.
51. Ibid. The debts of the company totaled $175,886.59.
a village; Baltimore, an inconsiderable town, was not incorporated for twelve years afterwards; the settlements of Frederick and Montgomery [counties] were purely agricultural, remote from towns, and in a helpless state of dependency; in Washington and Allegany [counties] the wolf roamed, and the Indian was only kept at bay by the guns of Fort Cumberland. 52

The Potomac Company sought successfully to encourage the agricultural potentialities of the Potomac watershed. 53 It indirectly resisted even limited industrial activity through its control of the use of water from the river. 54 The company considered its primary function to be that of providing a cheap means of transportation to and from a rich and newly settled region. As such it reserved all the water in the river for the purposes of navigation. Existing mill dams and fish pots were swept aside where they interfered with free passage of the river. 55 Technically the directors were correct in this decision, for subsequent experience showed that with all these precautions there was still not enough water to provide permanent navigation in the bed of the river. Economically they were hobbling their own future by restricting the valley to an agricultural economy. In the second period, this same policy was carried to the branches of the Potomac, with the

52. A Letter from J. J. Speed to the Representatives of Maryland in the Congress of the United States on the Subject of the Canal (Baltimore, 1844), p. 8.

53. Trade on the river remained primarily agricultural throughout the entire existence of the Potomac Company. See Appendix, table III. The principal products of trade were those reported by the company in its petition to the Virginia Assembly in the latter year: flour, whiskey, wheat, pork, butter, and iron. Petition to the Virginia Assembly (December, 1815), Appendices A and U, Proceedings of Directors, B, 301-302.

54. Proceedings of Directors, B, 114 (December 3, 1811). The Board rejected an application for a forge on the river below Harpers Ferry.

same retarding results. At the end of the middle period, the economic horizons of the company had become so limited that efforts to improve the river were being concentrated on the lower Potomac and Shenandoah valleys. The upper Potomac was written off as beyond further means to improve.

After 1816, a change was noticeable in the directors' attitude toward the economy of the valley. They were slowly abandoning their opposition to the use of water power for manufacturing purposes. It is only possible to speculate as to the reasons for the change, for the discussions preceding the adoption of the resolution announcing the new policy have not been preserved. Perhaps the need for money influenced the Board. Apparently the hostility of the Georgetown millers and founders was in some way appeased. The decision may have been merely an indication of the economic coming-of-age of the company similar to that which in the national arena saw the passage of the tariff of 1816. Regardless of motive, the company became interested in the industrial development of the valley after the war of 1812 and began to encourage the establishment of mills, etc. It entered into negotiations with John K. Smith for the sale of factory sites at Little Falls. A protracted disagreement concerning the rights and privileges of each party in the projected development prevented the new policy from becoming effective on a large scale.

The second interest of the Potomac Company, the development of trade with the west, also underwent several changes in fortune during

56. Proceedings of Directors, B, 43 (July 2, 1808), 62-63 (October 21, 1809).
59. Annual Report (1816), Directors' Journal B, 257-258; John K. Smith to
(Continued on next page)
the existence of the company. In the earliest days, the west was just beyond the first range of mountains, easily accessible to river traffic. The technological improvements of the boats had not yet reached the point at which the relatively shallow Potomac would be at a disadvantage. By all measures water transportation was still infinitely cheaper than transportation in wagon over rough, unimproved roads. After 1802, the beginning of the middle period, the west was beginning to move beyond the immediate reaches of the Potomac valley. Perhaps this was a factor in the company's concentration on the valley itself, and the neglect of the river as a route to the west. The war of 1812 marked another turning point in the interest in this aspect of the Potomac. At the time that the west was fading beyond the company's horizons, the war demonstrated the need for safe interior communications with the Ohio and Mississippi valleys.

The period following the war saw the rise of the west as an economic factor in the nation, which may partly explain the re-discovery of it by the east. The old company was unable to perform a leading role in this new era, and the Potomac route lost valuable ground in the race for western trade. Capitalists and merchants of Maryland, Virginia, and the District of Columbia became keenly aware of this, and sought unsuccessfully at first, to establish new companies to undertake the

59. (Continued from previous page)

President and Directors, December 3, 1816, Annual Meeting (December 3, 1816), B, 273-276; Annual Meeting (December 3, 1816), B, 276-279. See also the extensive correspondence beginning on November 15, 1819, Ibid., B, pp. 394 ff. The dispute lasted into the early years of the Chesapeake and Ohio Canal Company.
work of re-opening the Potomac route. In 1822, these efforts were beginning to show the first indications of success despite the opposition of the existing company. But by 1827, the Erie canal was almost completed and plans for the Pennsylvania main line of public works were well advanced. Thus a new competitor and an old one were getting the jump on the Potomac route, over terrain that was geographically more favorable. The advantages of the established Potomac channel were rapidly being overcome.

In 1822, the Potomac Company had six more years of life allotted to it. By that time, however, its significance was mostly historical. Its primary influence was that of the retarding dead-hand of an out-moded vested interest. For the story of the continued efforts to develop the Potomac route, we must turn to the activities underway outside the company, to projects for a new enterprise to complete the unfinished work of the old.
CHAPTER III
THE ORIGINS OF THE CHESAPEAKE AND OHIO CANAL COMPANY

Prospects in 1822

Promoters of schemes to replace the Potomac Company were able to draw many valuable lessons from the experiences of that enterprise. In this way they could avoid the pitfalls of the earlier undertaking while striving to attain the fruits of success which eluded it.

Five lessons were to be learned from the activities of the Potomac Company. The first and most obvious was the need of adequate financial support for a renewed undertaking. A second vitally necessary preliminary was the successful integration of the interests of Virginia, Maryland and the federal government (for the District of Columbia) in the new endeavor. The new company might expect to be confronted with engineering problems arising from the rocky, narrow and winding nature of the valley and the question of an adequate supply of water for navigation. There was also every reason to anticipate further trouble in securing cheap, skilled labor of all kinds. Finally, the new company, like the old, would eventually have to provide for technological improvements, i.e., to solve the problem of obsolescence.

1. The subject of this chapter has already been written upon by George Washington Ward in a doctoral dissertation, "The Early Development of the Chesapeake and Ohio Canal Project" (see above, p. 13, n. 1). At the time he wrote, historical interest was so restricted and source material so narrowly used that the thesis is merely a summary of political aspects of the subject, primarily those relating to Congressional interest in internal improvements generally and in this canal particularly. It is now possible, and for the purposes of this study necessary, to expand the scope of the earlier work and to supplement it with previously unused materials of both local and national character.
Inability to meet any one of these problems might easily spell failure for the enterprise. Yet, as clear as the lessons must have been, the Chesapeake and Ohio Canal Company never completely met any of the difficulties.

On the other hand, the experiences of the Potomac Company justified expectations of a fair return if the goal of river improvement could be attained. In the first place, despite the relative senescence of the company in regard to western commerce after 1802, the river remained by virtue of the activities of the Ohio Company and the Potomac Company an established route of trade and communication to and from the west. Thus it had the very real advantage of early favor and reputation. Geographically, the Potomac was the shortest route between east and west. In addition it served the seat of the national government as well as the Chesapeake Bay states. The river also promised to be profitable to investors. At times in its existence the annual profits of the Potomac Company exceeded 6 per cent of its invested capital. At first these sums had been turned back into the work of improvement. Later they were applied to the interest on loans contracted to continue the excavation of the river bed. If the Potomac could be placed in a reasonably permanent state of improvement, it would seemingly produce a fair return on capital invested. If a through route to the Ohio valley could be opened and the trade of the Cumberland coal banks also tapped, it seemed logical to assume that a much larger

revenue could be counted upon. In short, the large sum required to build a canal all the way to Pittsburgh might still be assured of a reasonable return. In one respect the experience of the Potomac Company proved misleading. It had had very little difficulty with nature, except in the normal periods of drought. Only one great freshet, in 1810, gave any reason to anticipate trouble on that score. Even then the company's works had held up well.

Interest of the Federal Government in Internal Improvements

Several factors indicated that the next step in the realization of the projected improvement of the Potomac as a communication with the west would be to secure the support of the federal government. In this way, the large sums of capital needed would be assured (both from public and from private sources) and the submergence of local interests to the national theme would be emphasized. The campaign to convert the general government to a program of internal improvement was therefore intensified.

The interest of the federal government in a national system of internal improvements had survived and indeed increased during the ascendancy of Jeffersonian ideals in the national government. The history of this interest has already been adequately treated in another work; therefore it is only necessary here to give a brief sketch of it and to refer to the earlier study for a more detailed account. The crux of the whole problem during the administrations of Jefferson, Madison and Monroe was the constitutional question involved. Did the

The federal government have the power to use public money for a national system of internal improvements without regard to the states? If this was permissible, did the national government have the power to exercise control over those improvements after they were completed? The struggle raged throughout the period, beginning even before Gallatin’s Report in 1808. This report was itself an outgrowth of many years of discussion which preceded it. In it, the Secretary of the Treasury proposed an integrated system of internal improvements supported by the federal government. Despite the failure of Congress to adopt the Gallatin plan, the fight continued over proposals to aid the construction of tidewater canals and to build a national road across the mountains. The latter was eventually built with federal funds but ultimately was turned over to the states for control.

By 1816, the states began to look to their own resources for the opening of connections with the west. They either despaired of large-scale government aid or they adopted the Jeffersonian program of state-sponsored internal improvements. Thereafter attention was divided between the continuing struggle to convert Congress and the efforts of the two largest states, New York and Pennsylvania, to build their own roads and canals. Simultaneously, interest in the Potomac also revived in Maryland and Virginia.

Toward the end of President Monroe’s term in office, it seemed that progress was finally being made in the campaign to win over the

4. Ibid., pp. 23 ff.
5. Ibid., pp. 20–22, 31–33.
6. Ibid., p. 36.
Congress and the administration. It is impossible to say positively what arguments were decisive in the gradual shift to a more favorable attitude toward internal improvements, but some if not all of the following must receive a large share of the credit. The disposal of surplus revenue was one of the earliest arguments advanced. It appeared even before the Gallatin report, and it was used again in the discussion of the twenties. The military necessity plea was a favorite theme as early as 1803. Of course, after the experiences of the War of 1812, it became a much more popular point. The claim that certain projects were national in scope, beyond either the means or the local interests of the several states, also may have borne weight. The filling up of the west after the War of 1812 made it both a political force in Congress and an economically attractive market for the eastern merchants in the post-war period. The support of these interests, especially in the Clay-Adams wing of the Republican party, should not be discounted. The growing popularity of the American System among the electorate was referred to indirectly by President Monroe as a reason for his shifting ground. Finally, the glittering assembly at the first Chesapeake and Ohio Canal Convention, held in the Capitol itself, apparently made an impression on the President as


10. James D. Richardson, ed., A Compilation of the Messages and Papers of the Presidents (10 vols., Washington, 1895), II, 218. The President again mentioned the military necessity argument and the union plea. See also Report of the Committee on Roads and Canals, January 30, 1827, loc. cit., Appendix J, "Extract from the President's Message to Congress ... (December 3, 1822 [1823])", p. 36.
Regardless of the reasons advanced or assumed, Monroe took a fairly strong stand in favor of national aid to internal improvement companies in his annual message to Congress in 1823. His constitutional scruples were satisfied by the belief that the government could assist improvement projects if the operation of these works was turned over to the states or to private companies after completion. Although real participation by the general government in internal improvement projects had to await the inauguration of John Quincy Adams, Monroe's message was a sort of a go-ahead signal, and much groundwork was done in the later years of his regime. On the last day of his administration, President Monroe signed an act of Congress confirming the charter of the Chesapeake and Ohio Canal Company.

Local Interest in the Potomac Route

While friends of the Potomac river route were trying to conciliate the strict constructionists in Congress and secure the aid of the general government, others were active in the several states. In Virginia, between 1812 and 1823, there were at least three separate efforts to charter companies to construct canals along the banks of the Potomac river. The earliest attempt was made in 1812. This was a


The proposal for a canal from Seneca to Hunting Creek. The second effort, in 1816, was a modification of the first, providing for a canal from Seneca all the way to Alexandria. Both provoked the energetic opposition of the Potomac Company. In the latter conflict, the old company enlisted the services of Charles P. Mercer, later President of the Chesapeake and Ohio, to help defeat the act of incorporation in the Virginia Assembly. The primary interest in these early projects, for this study, lies in the plan to abandon river improvements for an independent canal, and in the rivalry manifested between Georgetown and Alexandria merchants. The early proposals also provided a measure of the intention and ability of the Potomac Company to resist encroachments on its vested interests.

A much more significant event occurred in 1816, i.e., the creation of the Virginia Board of Public Works. This event marked the end of piecemeal attempts to modify the Potomac navigation. The Board immediately set about to bring some order into the state's system of internal improvements. During the course of its analysis of existing projects, it inquired into the works undertaken by the Potomac Company and the current state of that enterprise. The discovery that despite the expenditure of large sums that company had failed to fulfill the requirements of its charter led to a more searching investigation of the whole undertaking.

15. Ibid., B, 267-268 (November 13, 1816).
18. Proceedings of Directors, B, 340 (December 8, 1817); Peyton to President and Directors, November 8, 1817, Mason to Peyton, December 9, 1817, Ibid., 342-350.
All parties to the company’s charter participated in the examination that followed. Seeing the way the wind was blowing and fearful of its vested rights, the Potomac Company formally requested a survey of its works.  

The State of Virginia authorized the Board of Public Works to conduct the inspection and to include a survey of the land between the Potomac and the Southern branches of the Ohio for a possible connection by a canal. Thomas Moore, the engineer of the Board, made two examinations in 1820 and 1822. At the invitation of Virginia, the State of Maryland also sent an engineer, Isaac Briggs, to accompany Moore on his second trip.

After the untimely death of Moore during the second surveying expedition, Briggs completed the survey under special authorization from the State of Virginia. Moore’s report on the findings of the first inspection confirmed the opinion that a connection between the Potomac and the Ohio was entirely practicable, and estimated the cost of the canal along the Potomac to be about $1,100,000. In the second report, Briggs estimated the cost of the canal, thirty feet wide at the surface, three feet deep, and twenty feet wide at the bottom, to be about $1,574,000.

19. Annual Meeting (1819), Directors’ Journal B, 382; Answer of the Chesapeake and Ohio Canal Company, 4 Gill and Johnson 19.

20. Ward, op. cit., pp. 40-41; Annual Meeting (1820); Directors’ Journal B, 440-441; Answer of the Chesapeake and Ohio Canal Company, 4 Gill and Johnson 19.


23. Ibid., pp. 44-45.


The next question that arose was, how should this improvement be put into effect? A choice of two alternatives was indicated: an additional subscription to the Potomac Company or the creation of a new company to take over the rights and privileges of the old one. The officials of the existing company obviously expected the former course to be adopted, and they argued for it throughout. Ultimately, however, it was decided to create a new enterprise, designated as the Potomac Canal Company to indicate its purpose and to distinguish it from the older organization. The Virginia Assembly passed the act of incorporation, February 22, 1823. The act did not require the consent of Congress, but did stipulate that it must be confirmed by the State of Maryland to become operative. In Maryland, it encountered opposition from local interests, especially because of the large pecuniary contribution which the state was expected to make to the capital of the new company. The Baltimore merchants in particular could not see what benefits they would receive from the project which Maryland was asked to sanction and to which she was to subscribe $500,000 - one-third of the capital. The bill failed to pass the Maryland legislature and, lacking the consent required, the Virginia act became inoperative. Thus ended in failure the third and last attempt by Virginia and Maryland to effect a real improvement of the Potomac route without federal support.

27. The Report of the Engineer left the question undecided; see especially p. 16.
30. Ibid., pp. 21-22; Report of the Committee on Roads and Canals (April 17, 1834), loc. cit., p. 4.
Nevertheless real progress had been made by 1823 in the effort to reopen the river as a route for western trade. The interest of the District cities and the states of Maryland and Virginia had been redirected to the Potomac, and attention was concentrated on its possibilities. Meanwhile, the friends of internal improvements were beginning to gain ground in Congress in their campaign for a federally supported program. The general government seemed about ready to swing into line. It was in this atmosphere that the first Chesapeake and Ohio Canal Convention met in Washington, on November 5, 1823.

The Chesapeake and Ohio Canal Conventions

The convention assembled at the call of a meeting of the citizens of Loudon county, Virginia. This earlier gathering had been held to discuss the status of proposals for the improvement of the river after the Potomac Canal Company project proved abortive and to expand the scope of the project to include a canal all the way to the Ohio. It requested similar meetings in other counties to support it in the call for the Washington convention. In response to this plea many counties in Virginia, Maryland and Pennsylvania, including all through which the

31. General excitement was manifested in the states concerned. Annual Report (1823), Directors’ Journal C, 15. The District cities were also active in the agitation for the incorporation of the Potomac Canal Company. They deputed “agents to solicit and advance the plan with the two legislatures.” Answer of the Chesapeake and Ohio Canal Company, 4 Gill and Johnson, 21. See also the proposals of Abner Lacock, Great National Project: Proposed Connection of the Eastern & Western Waters by a Communication through the Potomac Country (Washington, 1822), a series of letters reprinted from the Washington National Intelligencer, and the Report of the Committee of the District of Columbia, May 3, 1822, loc. cit., on the memorials from inhabitants of the District and neighboring States.

32. Report of the Committee on Roads and Canals, April 17, 1834, loc. cit., p. 4. The date of the Loudon meeting was August 25, 1823.

33. Ibid., Appendix A, p. 67; Answer of the Chesapeake and Ohio Canal Company, 4 Gill and Johnson 22.
the proposed canal would pass, chose delegates to the conference. In addition to these delegates there were representative from the District cities and several unofficial members from Ohio. On the whole it must have been an impressive gathering. Governor Joseph Kent, of Maryland, an old and staunch friend of internal improvements was chosen as the presiding officer of the convention; but Charles P. Mercer, United States Representative from the State of Virginia, exercised the guiding hand as chairman of the all-powerful central committee.

The primary function of the convention seems to have been the organization of public opinion behind the proposed connection between the Potomac and the Ohio and the creation of organizations to give effect to this aroused interest. The physical achievements of the convention were simply the adoption of resolutions urging the connection with the west and the naming of committees to formulate the plans for the canal and to petition the several states involved and the Congress for consent and aid in the project.

The success of the convention can best be measured by the course of events in the years immediately following. In his annual message to Congress in December, 1823, President Monroe took note of the convention's activities and urged Congress to give favorable consideration to the project, if its constitutional scruples would permit. Congress

34. Report of the Committee on Roads and Canals, April 17, 1834, Appendix A, "Resolutions of the Meeting of Citizens of Prince William County, Virginia," pp. 67-68. This was the first county in Virginia to follow the example of Loudon county.


37. The course of the petitions and their success and failure is reviewed in the Report of the Committee on Roads and Canals, January 30, 1827, loc. cit., Appendix 1B, "Report of the Central Committee (December, 1826)," pp. 70-72.
eventually responded by providing $30,000 for a detailed survey of the
proposed route by the United States Board of Engineers. The petitions
to the several states met with varying success. The memorial to Virginia
for an act of incorporation was immediately responded to. The assembly
of that state passed the necessary act on January 27, 1824. The appeal
to the State of Maryland, on the other hand, for a confirmatory act
failed in the same year because of the indifference of the counties
and the opposition of Baltimore. By the time the next session of the
legislature convened in December, 1824, the campaign to arouse the
counties had succeeded, and on January 31, 1825, the Maryland Assembly
confirmed the Virginia act of incorporation. The petition to the
Pennsylvania legislature failed completely in 1824 and 1825, owing to
the opposition of eastern, particularly Philadelphia, interests.

The U.S. Board of Engineers made a preliminary report on
February 14, 1826. In it, the Board concurred in the opinion of the
Virginia engineer, Moore, that the connection between the upper Potomac
and the Youghiogheny or Monongahela by an artificial waterway was
practicable. The report seemed to assure the ultimate success of the
project by removing all remaining doubts as to its practicability.

Congress confirmed the act of the Virginia Assembly chartering the canal
company in a measure approved by President Monroe on March 3, 1825.

38. Answer of the Chesapeake and Ohio Canal Company, 4 Gill and Johnson 24-25.
42. Act of Congress, Documents Relating to the Chesapeake and Ohio Canal, July 11, 1840, loc. cit., p. 13.
Pennsylvania confirmed the charter, with reservations, early the next year. The company was now over the legal obstacles to its final organization. Friends of the project promptly plunged into the campaign for public support with renewed vigor and confidence.

On October 23, 1826, however, the Board of Engineers made its full report, which the President transmitted to Congress on December 7, 1826. The report reiterated the belief of the Board that the proposed connection was physically practicable, but estimated the cost of the canal, upon the enlarged dimensions required by the federal government, to be approximately $22,000,000. The revised estimate fell like a thunderbolt on the hopes of the canal supporters. They had been thinking in terms of four or five million dollars for a slightly smaller canal. A call was sent out for the re-assembling of the convention of 1823, to be held in Washington on December 6, 1826.

The second session of the convention met according to call and immediately went to work. Its principal task was to dispel the gloom which paralyzed its friends and to reassure prospective supporters. A twofold course was indicated; to discredit the estimate of the U.S. Engineers and to cause a new survey to be made to ascertain the true cost of the work on the enlarged dimensions. The report of the government engineers was exhaustively examined and criticized. Comparisons were made.

43. Act of Pennsylvania, February 9, 1826, ibid., pp. 31-34.
44. Answer of the Chesapeake and Ohio Canal Company, 4 O'Call and Johnson 26; Report of the Committee on Roads and Canals, January 30, 1827, loc. cit., Appendix 16 "Report of the Central Committee (December, 1826)," p. 78; ibid., Appendix 16 "Report of the U.S. Board of Internal Improvement," p. 69. The full report is printed in the Message of the President of the United States, transmitting a Report from the Secretary of War with that of the Board of Engineers for Internal Improvement, on the Chesapeake and Ohio Canal, December 7, 1826, 19th Congress, 2nd Session, House of Representatives, Executive Document No. 10.
45. $8,177,061.06 for the eastern section, $10,028,122.86 for the middle section, and $4,170,223.78 for the western section, making a total of $22,375,427.69.
with the actual cost of work done on the New York and Pennsylvania canals. The critics discovered that allowances for labor costs were much too high, as were the estimates for masonry, walling and excavation. The criticism in part was valid, both on the basis of the experiences on other canals and on the ground that the allowances made for many types of work were extravagantly generous. In the meantime, friends of the project in Congress prevailed upon the President to submit the conflicting estimates made by the convention and the Board of Engineers to revision by practical civil engineers. President Adams agreed and appointed James Geddes and Nathan Roberts. They completed their surveys in 1827 and reported in the same year. They estimated that the canal could be constructed as far as Cumberland for approximately $4,500,000.

Fortified with this estimate and reassured of the inaccuracy of the U.S. engineers' report, the canal protagonists re-entered the fray. Subscription books were opened on October 1, 1827, but the formal organization of the company was delayed until Congress should act. In May 1828, after a brief but sharp struggle, the friends of the canal project in Congress secured the passage of an act subscribing $1,000,000 of the public funds to the stock of the Chesapeake and Ohio Canal Company. The news of the subscription was received wildly everywhere. The mayor

47. Answer of the Chesapeake and Ohio Canal Company, 4 Gill and Johnson, 26-27.
48. Ibid., p. 27; a copy of the report is filed among the Chesapeake and Ohio Canal Company records in the National Archives.
49. Answer of the Chesapeake and Ohio Canal Company, 4 Gill and Johnson 28-29.
of Washington hoisted a flag atop City Hall, while cannon saluted the event in Washington and Georgetown. There was a great illumination at Cumberland and a festive banquet at which U.S. Representative Andrew Stewart, one of the original proponents of the project, was the guest of honor. Leesburg, the home of Charles F. Mercer and the seat of Loudon county, Virginia, gave its most famous citizen a banquet. Old Town, Maryland, and Martinsburg, Virginia, were also reported to be highly pleased.

The subscription on the part of the United States fulfilled the condition of an earlier Maryland subscription of $600,000 to the stock of the canal company, and that act now became effective. Congress also permitted the three cities of the District of Columbia to subscribe another $1,500,000 to the company. These sums, together with private investments insured the successful launching of the long-awaited national project.

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52. Report of the Committee on Roads and Canals on the Memorial of Washington, Georgetown and Alexandria to enlarge the powers of the corporate authorities to facilitate payment of subscriptions to the Chesapeake and Ohio stock, January 30, 1828, 20th Congress, 1st Session, House of Representatives, Report No. 112, pp. 1-2 and appendices. The debts of the District cities were thereby doubled and tripled. The total indebtedness of the towns had been: Washington $361,826, Georgetown $155,149, and Alexandria $277,776. To this was added $2,000,000, $250,000 and $250,000 respectively. Bryan, A History of the National Capital, II, 110-111.

53. Individual subscriptions amounted to $807,400. Of this, residents of the three District cities contributed: Washington $233,800, Georgetown $228,700, and Alexandria $47,300. Special Report on the Completion of the Canal (February, 1851), Proceedings of Stockholders, D, 403.
The Company Organised and the Ground Broken

The Chesapeake and Ohio Canal Company was formally organised at a meeting of stockholders in Washington, June 20-23, 1826. Upon the nomination of Richard Rush, Secretary of the Treasury and the proxy for the United States, General Charles F. Mercer, U.S. Representative from the State of Virginia, was chosen the first president of the company which he had labored so long to create. The Board of Directors included: Phineas Jamney, an Alexandria banker; Walter Smith, a Georgetown landholder and merchant; Dr. Frederick May and Peter Lenox, a merchant, both of Washington; ex-Governor Joseph Kent, of Maryland; and Representative Andrew Stewart, of Pennsylvania. In this manner the three states which were parties to the charter, the three District cities and the United States were all represented, a practice that continued more or less throughout the canal's history. The first board was truly distinguished in its membership. Only twice in later years did the canal possess a group of officers as united in purpose as this, and only once a board as zealous. The by-laws of the company were drawn

54. Proceedings of a Special Meeting of the Stockholders of the Chesapeake and Ohio Canal Company (June 20, 1826), Journal A, 1-3. Hereafter the regular annual meetings of the stockholders on the first Monday in June will be cited simply as Annual Meeting (year), Proceedings of Stockholders, Journal, pages; special meetings will be similarly designated, with the exception that they will be cited as Special Meeting (date), etc. If the reference is to a report of the president and directors to a special meeting, the citation will read Report to Special Meeting, etc. Thus: 1st Annual Meeting (1829), Proceedings of Stockholders, A, 40; Special Meeting (September 10, 1828), Proceedings of Stockholders, A, 10; Report to Special Meeting (September 10, 1828), Proceedings of Stockholders, A, 12.

55. Special Meeting (June 20, 1826), Proceedings of Stockholders, A, 4-6.

56. Ibid.

57. The other Boards that were outstanding were that under James M. Coale, from 1843 to 1847, and that under Arthur P. Gorman, from 1872 to 1882. The former was probably as united and zealous as the first Board. The latter was certainly as united and perhaps as zealous, although its enthusiasm tended more to political channels.

The annual report (1869), p. 10.

On the other hand, the organization of the company wasemen to supplement the organization of the company.

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The canal company paused long enough in the bustle of getting under way to indulge in gala ceremonies marking the formal inauguration of the canal. Upon the suggestion of the city authorities of Washington, the Fourth of July was chosen as the appropriate day for the commencement of this national project. To add the final touch to the occasion, the President of the United States, John Quincy Adams, an old friend of internal improvements and of this canal project, was invited to attend the ceremonies and to turn the first spadeful of earth.

The day dawned bright and sunny, an auspicious omen for the canal. Activities got under way at the early hour that was customary in those days. Many representatives of official Washington and of the foreign delegations were among the dignitaries present at the ceremonies.

After breakfasting in Georgetown, the directors and their guests proceeded up the river about five miles in boats especially provided for the occasion. They disembarked at the foot of Little Falls and went directly to the Powder Magazine at the head of the falls where the ceremonies were to be held.

A large crowd had already gathered at the site by the time the official party arrived. At first there was the usual number of short speeches emphasizing the national character of the work. Fortunately


63. The following account of the inaugural ceremonies is based on the report in the Washington National Intelligencer, July 7, 1828, and the diary of John Quincy Adams, published in his Memoirs, VIII, 48-50. President Adams gives a faithful account of the episode gaily remarking that he "got through awkwardly, but without gross and palpable failure.... The incident that chiefly relieved me was the obstacle of the stump, which met and resisted the spade, and my casting off my coat to overcome the resistance. It struck the eye and fancy of the spectators more than all the flowers of rhetoric in my speech, and diverted their attention from the stammering and hesitation of a deficient memory."
for the assembled throng, and perhaps for the speakers, most of
those present probably could not hear what was being said. The
President then gave his blessing to the undertaking in a short talk.
As he finished his benediction, he took the spade and with appropriate
words and flourishes went through the motions of breaking the ground.
Much to everyone's consternation, the spade struck a root, and the
President's effort was foiled. Visibly calm and undaunted, the
President tried again, and again the spade failed to bite into the
soil. Here indeed seemed to be a bad omen for the canal; but this
was the nineteenth century, and all knew there was an explanation for
every occurrence and a way where there was a will.

John Quincy Adams laid down the shovel and stripped off his coat.
The crowd howled its delight, for though it could not hear the speeches,
it could see the pantomime and could guess from the President's actions
what had happened. In his un-Presidential but workmanlike attire John
Quincy Adams again took up the spade, and with the cheers of encouragement
from the spectators ringing in his ears drove it home quickly and firmly.
The palisades of the Potomac rocked with the roar of approval from the
onlookers. The canal was officially inaugurated. President Adams donned
his coat and retired, undoubtedly highly gratified with his success and with
his sudden popularity. The members of the official party returned to
Georgetown where they partook of a handsome collation and then dispersed
to resume the business of the day.

The affair was a huge success, notwithstanding the annoying incident
of the spade. It successfully focused public attention on the Chesapeake
and Ohio canal as a national work. In so doing, it overshadowed the inaugural
ceremonies of the Baltimore and Ohio railroad in Baltimore on the same day.
CHAPTER IV
CONSTRUCTION BEGUN

Preparations for Construction

After the delightful interlude of the Fourth of July, the directors turned to the preparations for construction. The Potomac Company's surrender and conveyance of its rights was accepted on August 21, 1828, and that ill-fated organisation came to an end. To avoid any unpleasantness or favoritism in the letting of contracts, the Board forbade canal officials to be connected in any way, directly or indirectly, with contractors for the work on the line. The company also adopted an official seal commemorating the purposes of the undertaking: the union of eastern and western waters and the encouragement of agriculture, industry, and commerce.

For some time after its election, the Board was occupied with the problems associated with laying out the line of the canal. It had adopted almost immediately the route surveyed by the United States Engineers and by Geddes and Roberts in 1827; but aside from this general decision, the definite location of the trunk was left undecided until the last possible moment. In this way the company hoped to prevent speculation and to keep down land costs as much as possible. The canal was divided into three parts—eastern, middle (mountain), and western.

2. Ibid., A, 37 (August 9, 1828), 114 (November 22, 1828).
3. Ibid., A, 63-64 (September 2, 1828).
4. Ibid., A, 8 (June 26, 1830) [1828].
5. 1st Annual Report (1829), Proceedings of Stockholders, A, 41.
The charter required that construction begin in the east. This stretch of the canal was in turn subdivided into three parts of 120 sections each. A section was equal to approximately a half-mile, and twenty sections were grouped together to form a residency. Inasmuch as an injunction which had been obtained by the Baltimore and Ohio railroad prevented work on the canal above the Point of Rocks, operations were restricted to the forty-eight miles of the first division below that spot.

The definite organization of the canal line made possible the assignment of engineers. The engineer corps was divided into five grades: chief engineer, board of engineers, resident engineers, assistant engineers, and rodmen. The board of engineers consisted of three members, each of whom also had charge of one division of the eastern section. The engineer in charge of the first division was automatically chief engineer. For the time being, assignments were made only to the first division. In making these appointments, the Board relied almost exclusively upon the available supply of men experienced on northern or foreign canals. It made every effort to secure the most competent engineers, paying liberal if not extravagant wages. The board of engineers included besides Judge Wright, Dr. John Martineau, a close associate of his whom he had brought down with him from New York.

7. Proceedings of Directors, A, 8 (June 26, 1830 [1829]).
and Nathan S. Roberts, another noted New York engineer, who had
made the survey for the canal convention in 1827. The resident engineers
were: Thomas P. Durcell, of Virginia; Daniel Van Slyke, of New York;
Wilson M.C. Fairfax, of Virginia; Erastus Ward, of Massachusetts; and
Alfred Gruger, of New York. Among the assistant engineers were
Herman Boye, of Denmark; Charles Ellet, Jr., of Pennsylvania; James
Hears, Jr. of New York; Charles Ward and R.G. Bowie of Maryland; and
Charles H. Fisk, of Connecticut. 10 The directors complained of the
difficulty encountered in obtaining the services of able men because
of the advanced season of the year at which the company began its
existence. 11 But they seem to have succeeded very well.

The principal exception to the selection of experienced northern
engineers was in the choice of rodmen. The directors usually chose
them from among the inexperienced applicants. The latter were most
often youths from the neighborhood who were seeking careers in engineer-
ing. Some of the more promising were taken on as apprentices and allowed
their board and clothing. 12 Others were appointed strictly on trial and
had to pay their own expenses. 13 In this way the canal became a school
in practical engineering, a common procedure in those days. The intention
of the Board in adopting such a policy was to promote interest in
internal improvements in the south and to train a group of engineers
from among the southern youths.

10. Proceedings of Directors, A, 114-115; Documents Relating to the
Chesapeake and Ohio Canal, July 11, 1840, loc. cit., pp. 126-127.
14. 1st Annual Report (1829), Proceedings of Stockholders, A, 48; Mercer to
Bryant, August 27, 1829, Letter Book A, 12; Mercer to Roberts, October 4,
1828, ibid., A, 30. It would be interesting to trace the subsequent
careers of these rodmen to see how successful the policy was. It is
known that several of the resident and assistant engineers later found
positions in the southern and western states.
The activities of the Board in this early period gave ample
evidence of its inexperience in the management of canal affairs. Not­
withstanding the careful selection of skilled and tested engineers, the
directors reserved to themselves the final decision on every question no
matter how detailed. President Mercer frequently participated actively
in the discussion of engineering technicalities. With little or no experience
the Board collected scientific instruments and data from every possible
source, here and abroad. Under such conditions, it is not surprising
that the differences of opinion which arose between members of the
engineer department were frequently carried over the head of the chief
engineer by appeals from aggrieved or ambitious underlings to the
president and the directors. Only on the too infrequent occasions
when Judge Wright adopted a firm attitude did the proper degree of order
emerge. In 1829, for example, he vetoed the plan of President Mercer
to abolish the positions of volunteer roadmen by making them all inspectors
of masonry, for which they were utterly unqualified.

The directors had to determine the size of the canal before the
final location of the line could be made or the estimates drawn up or
the bids called for. The original dimensions of the canal as proposed
by the Virginia Board of Public Works had been thirty feet wide and
three feet deep. The Chesapeake and Ohio canal convention originally

15. "Rules and Regulations for the Engineer Department," Proceedings of
Directors, A, 107, 109-110 (November 22, 1828).
16. See, for example, Rush to President and Directors, London, October 12, 1829.
17. See, for example, Wright to Mercer, February 9, 1830, and Van Slyke
   to Mercer, February 27, 1830.
18. Wright to Mercer, February 24, 1830.
19. Special Report on the Completion of the Canal (February, 1861), Proceed­
ings of Stockholders, D, 318. This report is also printed separately. It
will be cited hereinafter as Special Report on the Completion of the
Canal, loc. cit., etc.
considered a canal thirty-two feet wide and four feet deep, but eventually decided on a width of forty feet and a depth of four feet. This was minimum size permitted by the charter. For the purposes of the federal government, a larger canal was desired. The U.S. Board of Engineers made its survey on the basis of a canal forty-eight feet wide and five feet deep. The size finally determined upon by the Board of Directors was sixty feet wide at the surface of the water, six feet deep and forty-eight feet wide at the bottom. At first, a five foot depth would be accepted, but ultimately the full six feet would be required. When the canal was extended below Little Falls, it was to be generally eighty feet wide. Where the Little Falls road forced a reduction of the waterway to seventy feet, the depth would be increased to seven feet. Above Harpers Ferry it was planned to reduce the width of the canal to fifty feet, but final decision on that was reserved for future deliberation.

The directors determined to adopt the larger dimensions because of the increased advantages which they gave at small additional cost. The greater size would give the canal a cross section of 301 square feet and a prism of 58,862 2/9 cubic yards as compared with 138 square feet and 26,596 5/9 cubic yards on the New York, Pennsylvania and Ohio canals. It was estimated that this increased prism would reduce water resistance to the equivalent of unimpeded sea navigation. Much of the masonry work,

23. 1st Annual Report (1829), Proceedings of Stockholders, A, 45.
24. Ibid., A, 40.
the most expensive part of the construction would be unaffected by
the increase in size. On some sections, the Georgetown level for
example, the larger dimensions would pay for themselves through the
greater quantity of water power which would be available for sale.

To men who were fully convinced of the practicability and certain
success of this national canal project, who were building for the future,
and who were thinking in terms of steamboats on its waters, industries
along its banks and centuries of service ahead, these advantages far
outweighed the increased cost of the moment.

Even before the first contracts had been let, an internal rift
in the company threatened to develop over the question of the eastern
terminus of the canal. The charter stated simply that the waterway should
terminate at tidewater of the Potomac in the District of Columbia.

Each party concerned had its own idea as to the interpretation of this
vague stipulation. The Board understood it to mean the highest point
of the tide, at the foot of Little Falls. Accordingly the inaugural
ceremonies had been held near that spot. The representatives of the
city of Washington insisted on a location more favorable to their city,
as on the Eastern Branch. The Board voted against any extension of the
canal below the Little Falls, at least until the westward progress of
the work had reached Harpers Ferry. The directors agreed, however, to

25. Ibid., A, 42-43.
26. Ibid., A, 44.
27. 2nd Annual Report (1830), p. 7. "If, in its plan, the Board have erred,
it has arisen from their inability to forget, that a work destined to
be the great central thoroughfare of so many States, and the firmest
bond of their happy union, should be commensurate with its great end,
and fulfill the wishes of the Government, Cities, and People, who have
impressed upon it this high character."

28. Act of Virginia, passed January 27, 1824, Documents Relating to the
Chesapeake and Ohio Canal, July 11, 1840, loc. cit., pp. 1-14.
submit the whole question to a special meeting of the stockholders in September, 1828.30

At the general meeting, the differences were fully aired and a compromise agreement reached. In its report, the Board ignored the inter-city rivalry involved and stressed the danger to the health of Georgetown from a canal cut through its streets and the heavy property damages which would be encountered.31 Washington insisted that the canal must terminate where shipping facilities were available, if it was to be of any value, and that nothing less than a site in Washington from which the city could construct a canal to the Eastern Branch would be acceptable. The mouth of Tiber creek was proposed as a suitable spot.32 The city of Washington was able to exert tremendous influence on the company by threatening to withhold payments on its large subscription to the canal stock, an eventuality which the company was not in a position to ignore. It also enlisted the support of the United States representative, Richard Rush.33 President Mercer on behalf of the Board finally adopted and recommended the mouth of the Tiber as a compromise between the Little Falls and Eastern Branch. The stockholders promptly agreed to the proposed solution.34

30. Ibid., A, 30 (July 28, 1828), 32 (July 30, 1828).
32. Proceedings of the Corporation of Washington, September 5 and 6, 1828, printed in the Washington National Intelligencer, September 10, 1828. The threat was ever present that unless Washington received satisfaction it would make no further payments on its one million dollar subscription to the Chesapeake and Ohio Canal Company. This eventuality would have seriously endangered the immediate future of the canal.
34. Special Meeting (September 17, 1828), Proceedings of Stockholders, A, 28-29. The main basin of the canal would be at the mouth of Rock Creek, between Georgetown and Washington, but when the latter provided a basin three feet above tide at the mouth of Tiber creek, the company would extend the canal down to it.
One more question had to be answered before estimates could be made with any degree of certainty and construction begun on a large scale. That was the availability of an adequate supply of hydraulic lime for cement. Stone of a suitable quality had been found near Shepherdstown, on the Virginia side of the river, and a mill and kiln had been erected to grind and burn the lime. Subsequently canal officials discovered a better grade blue stone nearby and adopted it. However, the presence of the stone did not insure the supply of it in sufficient quantities for the contractors. The Potomac Mills were creating a new industry in this region. A period of experimentation was inevitable, as a "whole new science" was being learned the hard way. Unfortunately this experimentation continued during the early years of the construction of the canal, and the lime which the contractors received was not always the high quality that was desired. Furthermore, the capacity of the kilns was limited and often insufficient to supply heavy seasonal demands. As a consequence the masonry work on the canal was frequently delayed.

The directors made every effort to provide an adequate and regular amount of the hydraulic lime at reasonable prices. There were numerous

36. Leekie to President and Directors, May 11, 1829; Proceedings of Directors, A, 186-188 (April 8, 1829).
37. McFarland to Ingle, May 29, 1829. See also, McFarland to Leekie, July 23, 1829.
39. Leekie to President and Directors, July 22, 1829; Ingle to McFarland, January 8, 1830, Letter Book A, 155. The contractors were so desperately in need of cement that they were going to the river and stopping all boats loaded with lime, no matter for whom they were intended. See also, Mercer to Boteler and Reynolds, May 5, 1830, ibid., A, 214-215.
40. Wright to President and Directors, March 23, 1830; Mercer to Boteler and Reynolds, May 5, 1830, Letter Book A, 214-215; Leekie to Cruger and President and Directors, July, 1830.
difficulties to be overcome in transporting the lime from the mill to the sites of construction. The company hired boatmen to ship the cement and purchased huge quantities of bags in which to pack the lime. The boatmen proved slow, indifferent and expensive. The bags were abused, lost and on the whole highly unsatisfactory. Canal officials experimented with transporting the lime, without bags, in specially-constructed boats, but the plan was never widely adopted. To fill the gaps in the local supply, the Board purchased quantities of New York and imported cement. The problem of an adequate supply of high grade lime continued to plague the directors throughout the early years of construction.

In all these efforts, the Board dealt directly with the Potomac Mills. The company undertook to supply the cement to the contractors on the line under a separate contract. Its unfortunate experiences in this practice, together with similar results in its efforts to obtain labor for the contractors, soon persuaded the directors to retire completely from the business of construction.

The canal engineers laid out thirty-four sections immediately above Little Falls in July and August, 1828. Within a three day period

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41. McFarland to Ingle, October 7, October 28, 1829; March 10, March 12, 1830; John Strider to President and Directors, April 21, 1830.
42. Boteler and Reynolds to Ingle, January 1, 1830.
43. Proceedings of Directors, A, 105 (November 15, 1828), 173 (February 28, 1829), 283-284 (June 10, 1829), 287-288 (June 17, 1829), 382 (October 23, 1829); Leekie to President and Directors, July 22, 1829.
44. Proceedings of Directors, A, 171 (February 21, 1829), 181 (March 17, 1829), 195-6 (April 8, 1829).
near the end of August, the board let contracts for all these sections. A hundred contractors were present and made bids; in all 462 proposals were received. New York and Pennsylvania men secured eighteen of the contracts — amounting to $160,000 of a total of $218,000 let. Most of the successful bidders had had experience on canals in New York, Pennsylvania, Connecticut, Ohio and Canada. Late in October the directors let fifty more sections of the line, from Seneca to the Point of Rocks, and all the masonry work, locks, aqueducts, culverts, etc. There were 1308 proposals for these contracts. On December 5, the five miles between Little Falls and Georgetown, and Dams Nos. 1 and 2 (at Little Falls and Seneca Falls respectively) were let. The remaining lockhouses were put under contract on December 11, 1828. The work undertaken in this brief period included, besides approximately forty-eight miles of excavation, walling, etc., two dams, two aqueducts, sixty culverts, twenty-seven locks, seventeen lock-houses, several basins — of which one was a terminal basin of the canal at Rock Creek, and the mole at the mouth of Rock Creek. In all, it was a substantial beginning for the enterprise.

Construction Underway — Contract and Labor Problems

Construction began with the usual enthusiasm. Every possible contingency seemed to have been anticipated and provided for. In the

47. Ibid.
event that something had been overlooked, the inexperienced directors
issued a flood of letters and circulars advising engineers and
contractors alike on all phases of the construction. Detailed ins-
tructions were given to regulate the building of locks, walls,
culverts and aqueducts. The manner of providing for ferries across
the canal was carefully outlined. On the whole, the record provides
a sad example of the interference by amateurs in the details of
engineering. Inevitably there was an equally great deluge of instructions
from the engineers themselves to their subordinates and to the contractors.
This was partly in self-defense and partly the result of a tendency to
interfere in all phases of construction, in the manner of the directors.
There is little wonder that at times the contractors were bewildered
and disgusted.

The conduct of the directors and engineers is all the more amazing
in view of the boast by the Board that so large a proportion of the
contractors were responsible men from New York and Pennsylvania, most
of them experienced in work on northern canals. As it happened, the
watch-dog tendencies of the Board and engineers were not unneeded. As
early as May, 1829, the contractors were in difficulty. Judge Wright
later pointed out, "The truth is that we knew the prices of these Con-
tractors are all very low, and that it yet remains doubtful whether they

50. Mercer to Fairfax, November 12, December 27, 1828; Mercer to Boyes,
November 16, 1828; Circular to the Engineers, May 16, 1829.
51. Report of the Inspector of Masonry [Leckie], November 3, 1828; Wright to
Fairfax, December 8, 1828; Roberts to Fairfax, December 20, 1828; Leckie
to Murrell, July 3, 1829; Leckie to Fairfax, July 30 and 10, 1829;
Leckie to Van Slyke, March 6, 1830; Wright to President and Directors,
October 2, 1830; Murrell to the President, November 9, 1830.
He had made this statement after a general increase had already been allowed. Even if the bids had been high enough for the prevailing level of wages and prices in 1828, some difficulty would have arisen by the general increase which followed. As it was, costs of lumber, stone, provisions and labor all exceeded contract figures.

Contractors resorted to various expedients to avoid disastrous losses. The responsible ones sought redress in petitions for the payment of retained money and for increased allowances. Their pleas often met with the recommendation of the chief engineer and the favorable action of the Board. Others sought to avoid losses by slipshod and fraudulent construction. Still others absconded with the monthly payments on the estimates, leaving both laborers and creditors unpaid. On the whole, the quality of work done on the Chesapeake and Ohio canal was about equivalent to the contract prices. Certainly no one got rich on it.

The greatest single problem which the company had to contend with during the construction of the canal was the supply of labor. The

53. Right to Mercer, February 9, 1830.
54. 1st Annual Report (1829), Proceedings of Stockholders, A, 52; Bracket and Wines to President and Directors, January 20, 1829; Kavanaugh and Co. to President and Directors, March 27, 1829; Fenlon to President and Directors, January 19, 1830; Wright to Mercer, February 21, 1830.
56. Van Slyke to President and Directors, July 21, 1830; Cruger to Mercer, November 18, 1829; McFarland to Ingle, May 25, 1831.
57. Proceedings of Directors, A, 289 (June 24, 1829); Cruger to Ingle, November 8, 1829; Parcell to Ingle, October 23, 1830.
scarcity of workers and the consequently high rate of wages threatened to upset all the calculations of the contractors. There were few laborers to be had in the valley itself and few could be attracted to it because of the unhealthy reputation of the Potomac in certain seasons and because of the competition of other public works. The competition between the contractors for workers and the high wages of the harvest season also affected the rate of wages at certain times. By means of special agencies and extensive correspondence, the board undertook to encourage the migration of workers from all parts of the Union and from various countries of Europe, especially Great Britain, Germany and the Netherlands, in order to forward the work and halt the rise of wages. The company inserted advertisements in English and Irish newspapers offering prospective workers meat three times a day, plenty of bread and vegetables, a reasonable allowance of liquor, and $8, $10, and $12 a month wages. The notices said that 10,000 workers were needed. Friends of the canal in Congress even petitioned for the use of troops in the construction of the proposed tunnel on the mountain section, the most formidable undertaking of the projected connection between the Potomac and the Ohio.

60. 2nd Annual Report (1830), p. 6.
63. 2nd Annual Report (1830), pp. 25-27.
The efforts of the directors to secure a sufficiently large number of workers at low wages led to an interesting but disastrous attempt to revive the system of indentured service which had flourished in the early colonial period. On January 31, 1829, the Board authorised the president to open negotiations with Henry Richards, a Welshman formerly employed on the Erie and the Chesapeake and Delaware canals. Richards was to be the agent of the Chesapeake and Ohio Canal Company in Great Britain and was to secure laborers to work on the line. The Board also continued for a while to negotiate for workers from the British Isles through James Maury, the American consul at Liverpool. In its general instructions to Maury and Richards, the company offered to pay all costs of transportation in return for the indentures of the immigrants for three months. The directors requested that the workers be sent so as to arrive by late September or the first of October. In this way they would arrive after the sickly season and yet have three months of good working weather before winter. Quarrymen and stone-cutters were given the highest priority, for they were most badly needed to stimulate the lagging masonry work. Families were to be discouraged — they must pay their own way, and there were no accommodations for them on the line.

The detailed instructions to Richards included the following additional stipulations. 1. Upon his arrival in England he was to cooperate...
in every way with Maury, the late consul. 2. He was to concentrate his efforts on securing the services of English, Welsh and Scottish labourers accustomed to digging. 3. Common laborers must sign obligations requiring seventy-eight days labor, masons to sign indentures for fifty-four days service. 4. Any advances beyond the cost of transportation were to be repaid at the rate of $8. a month for common laborers and $16. a month for masons. 5. They were to receive the same subsistence as the other workers, but were to be boarded free of charge. 6. If necessary, Richards was empowered to offer wages as high as $10. a month for common laborers and $20. a month for masons. 7. Finally, the men so transported were to engage to work on the canal for one year after the termination of their indentures at the prevailing rate of wages or at a stipulated rate, whichever the laborer desired. No contracts were to be made to extend beyond December 1, 1830.

Richards began sending the men over in August, 1829. The first group of about 320 laborers crossed the ocean in the Pioneer, the Julian, and the Boston. Concerning these immigrants, he wrote:

I have been very careful to select men of good character, steady and industrious. Some few Irishmen are among them but all these have worked some time in England & amongst Englishmen and are good workmen and peaceable. There are a great many Miners and Colliers chiefly in the Boston. The Masons and Quarry Men have been selected from the Quarries Rail Roads and Canals in the different Counties of England and Wales.

Some few of the men are rather small and Young — but most of these if you think it is required will serve for a longer time —

According to your first instructions the men have agreed to work in lieu of their passage — the Stone Cutters and

Masons and some Blacksmiths & Carpenters for three months
the laborers agree to work four months....The instructions
received yesterday...authorize me to make the time shorter
say 2 months for Masons and 3 months for others, but as
I shall be able to engage men on the same terms as before
I shall continue to do so leaving it to you to shorten their
time after they arrive if you think proper. and this will
perhaps be more satisfactory to the men themselves — who
will think it a great favor —

I have sent as few women and Children as possible and
those only the families of good workmen. I will send no more
if I can possibly avoid it.

...I have sent with each vessel a careful and trusty
man... [who will] see the workmen delivered to you. 70

Another shipment of laborers came over on the Nimrod. 71 Richards requested
further instructions beyond his authority to hire 1000 laborers. 72 However,
the group sent over on the Shenandoah, which arrived late in October,
appear to have been the last. 73

The trip over was a harrowing affair for all concerned. The
overseers who were sent out with each boatload of immigrants were charged
with the distribution of rations on board ship. They were also responsible
for the safe delivery of the hands assigned to them. On both counts
they gained the hatred of the laborers. The overseers, John and Peter
Powell, Richard Jones and George Gill, differed widely in character.

Peter Powell, for example, was a wretched, ignorant, terrified person. 74
George Gill, on the other hand, was proud, arrogant and utterly disdainful
of the workers whom he referred to as "clowns," "brutes" and "frauds." 75

70. H.B. Richards to [President and Directors], Liverpool, August 21, 1829.
71. Butler and Reynolds to Ingle, November 5, 1829.
72. Richards to [President and Directors], August 21, 1829.
73. Proceedings of Directors, n., 380 (October 21, 1829); Ingle to Janney,
74. Peter Powell to President and Directors, November 18, 1829.
75. George Gill to President and Directors, November 18, 1829.
The experiences of the bosses were quite similar. The daily weighing-out of the bread and meat always brought tempers to fever pitch. The poor immigrants complained of favoritism, short weight and insubordinate provisions. They appealed to the ship captains, who invariably washed their hands of the quarrel and often suggested that the men take matters into their own hands. Although the overseers were subjected to a constant stream of threats and abuse, all of them survived the trip.

The servants were consigned to either Alexandria or Georgetown, for if shipped elsewhere the Board feared they "might be decoyed from our service." On their arrival they were assigned to directors Walter Smith at Georgetown and Phineas Jamney at Alexandria. The latter paid the marine insurance on them, and completed arrangements for housing, feeding and superintending them in one large building. Those among them who were sick were given medical attention. They were all placed under the supervision of a Superintendent of Imported Laborers, one of the assistant engineers assigned to that duty. Subsequently they were turned over to the contractors and their indentures delivered up to the

76. The following account is based upon the versions given in P. Powell to President and Directors, November 18, 1829, Gill to President and Directors, November 18, 1829, and R. Jones to President and Directors, November 18, 1829.


78. Mercer to Richards, July 8, 1829, Letter Book A, 89; Richards to [President and Directors] August 21, 1829.

79. Proceedings of Directors, A, 347 (September 23, 1829), 380 (October 21, 1829); Jamney to Ingle, October 23, 1829.

80. Ingle to Dr. Joshua Riley, October 21, 1829, Letter Book A, 124.

81. Edward Watts to President and Directors, November 4, 1829; Ingle to Riley, October 21, 1829, Letter Book A, 124.
latter upon proper receipt and the assumption of responsibility for the cost of transportation. 82 The contractors called the roll to have the indentures acknowledged by the laborers. If any of them refused they were promptly sent to jail. 83

The experiences of the contractors with the immigrants varied widely, probably according to the character of the workers received and the treatment given them. Those assigned to the Potomac Mills were entirely satisfactory, although the wages paid were below the ten dollars per month average for the canal. 84 Others along the line were said not to be worth their board. 85 Some of the laborers had real grievances in the treatment they received at the hands of the contractors. Those working for H.S. Mines left him and returned to Washington. They consented to resume work only on certain conditions. They demanded a tight house, a sufficient supply of meat, bread and other customary provisions, the transportation of their baggage to the section without delay and the establishment of an account definitely listing the debts for passage and the credits for work done. The agreed to allow the contractor a reasonable amount of time to fulfill the conditions, and were promised that if he failed to do so the Clerk would transfer them to another section. 86

82. Proceedings of Directors, A, 364 (September 28, 1829); Mercer to Ingle, September 30, 1829. The cost of transportation was fixed at thirty-two dollars per person.

83. Mercer to Ingle, September 30, 1829.

84. Setler and Reynolds to Ingle, November 6, 1829; Ingle to Boiler and Reynolds, November 19, 1829, Letter Book A, 134.

85. Edward Watts to [Ingle], October 23, 1829.

86. Ingle to H.S. Mines, October 3, 1829, Letter Book A, 112-113. These terms were ordered to apply to the entire line of the canal, and the clerk was directed to go up the line and to investigate the complaints so generally made. Proceedings of Directors, A, 367 (October 6, 1829).
Other dissatisfied workers were not so patient or conscientious. Many simply deserted the line of the canal and disappeared into the neighboring countryside. At first the runaways that were captured and imprisoned were released upon a promise that they would return to the canal. The company believed at this time that the grievances could be corrected and the men retained. As they continued to abscond the company began to lose faith in their good intentions. Some of the men fled to the Baltimore and Ohio Railroad and found jobs. Others went to the city of Baltimore where they sought the protection of the law. There the company caught up with them and prosecuted them as runaways and debtors.

The trials proved a costly failure. Baltimore was hostile to the claims of the company, and the laborers received sympathetic assistance from lawyers, merchants and brawlers. The City Court of Baltimore ruled that the agreements between the company and the workers were not of a master-servant character, but were merely contracts for work. The men therefore were freed, though subject to damages and costs. The company could still sue for debts. If so, the men could plead bankruptcy and either get off or be sent to jail at the company's expense. In a jury trial there was always the possibility they might argue that the company had broken the contract by providing "stinking and putrid beef"

88. The Board was able to compromise the differences between the absconding laborers and the contractors in the case of Knapp, Ford and Co. Ibid., A, 376-377 (October 13, 1829). When the laborers continued to run away, the Board ordered more effective steps taken to apprehend them. Ibid., A, 379 (October 21, 1829).
89. Ibid., A, 389 (October 7, 1829), quoting a letter from R. Jones; 377 (October 13, 1829); R. Jones to President and Directors, October 21, 1829.
91. Ingle to Janney, October 26, 1829, Letter Book A, 122-123.
on the voyage over. With this plea, true or false, no jury in Baltimore
would convict them, especially when it might be composed of railroad
men looking for workers themselves. In view of this unpromising
project, the cases were dropped.

The immigrants who remained on the line, servants and freemen
alike, suffered greatly from ill-health due to the rigors of acclimatisa­
tion and the sickly atmosphere of the Potomac valley. The sick and
destitute workers poured into Georgetown in ever-increasing numbers.
As early as October, 1829, they were being picked up off the streets
of the town, sick and starving, and carted to the poor house. By that
time, one hundred and twenty-six had been cared for by the city
authorities. The latter complained that these people were not city
poor and that the company should look out for its own. The influx
increased as winter approached. Others found their way to Washington
and to the city poor house there. Private charity took care of still
others. The miserable condition of the laborers and the even more
dismal tales of their treatment aroused humanitarians to such a pitch
of attacks that the company was obliged to take official notice of the
accusations and defend itself.

92. Wirt to Ingle, November 6, 1829.
93. Ingle to Wirt, November 7, 1829, Letter Book A, 127; Ingle to Glenn,
January 29, 1830, ibid., 162.
94. John Litle, Trustee for the Poor of Georgetown, to President and
Directors, October 13, 1829, enclosing the report of John Brigum,
Overseer of the Poor, October 10, 1829. The Board appropriated $150
for the care of the sick workers by the city. Proceedings of Directors,
A, 380-381 (October 21, 1829). Later it appropriated an additional
$117.48 for Georgetown and $267.46 for Washington for the same purposes.
Ibid., B, 65 (April 28, 1830). See also Mercer to the Justices of the
95. John G. Whitwell, Trustee of the Poor of Washington, to Mercer, March 9,
96. Mercer to Mrs. Susan Decatur, December 13, 1830.
97. Jo. Gales to Ingle, February 8, 1830; Joseph Lenox and R.G. Herring, Stewards
of the Society of the Sons of St. George, Philadelphia, to Ingle, February 17,
The experiment with imported laborers succeeded in momentarily stabilizing and indeed lowering the rate of wages on the canal.\textsuperscript{98} The total working force on the line also rose from a low of sixteen hundred or two thousand in the sickly season to over thirty-one hundred in November, 1829.\textsuperscript{99} In the long run, however, the practice was a failure. The difficulty of enforcing the agreements under existing laws led to its suspension. The entanglements in law suits, in poor-house claims, and in unfavorable notoriety more than offset the immediate advantages. In fact, the stabilization of wages and the increase in the working force might have resulted naturally from the suspension of work on the Pennsylvania canals in September, 1829.\textsuperscript{100}

The lessons of the episode had not yet been learned when the directors, in desperation resolved upon the purchase of one hundred slaves for the use of the company.\textsuperscript{101} In taking this step, as in the case of the indentured servants, the Board was following the example of the Potomac Company, despite the warning of the unfortunate results of the earlier experiments. However, no action was taken, and when a proposal to purchase three hundred and fifty slaves came up before the annual meeting in June, 1830, it was decisively defeated.\textsuperscript{102} By that time, the stockholders had had enough of the schemes to provide cheap labor for the contractors.

\textsuperscript{98} Second Annual Report (1830), pp. 5-6.
\textsuperscript{100} Report of the President, Proceedings of Directors, A, 355-356 (September 25, 1829).
\textsuperscript{101} Proceedings of Directors, A, 310 (July 15, 1829).
\textsuperscript{102} Second Annual Meeting (June 12, 1830), p. 28.
As construction advanced, the Board continued to have trouble with its working force. The annual sickly season took its toll among the laborers and engineers alike.\textsuperscript{103} It indirectly forced wages up to unexpected levels.\textsuperscript{104} Contractors also had trouble with shopkeepers along the line who maintained grog shops or sold liquor to the men on the side.\textsuperscript{105} Many of the workers insisted on taking an extended vacation at Christmas time to return to their families.\textsuperscript{106} In all these instances the first period of construction only gave an indication of the trouble to come.

Construction Continued - Other Problems

While the experiment with indentured servants was being conducted other problems connected with construction came up to demand the attention of the Board. Above Georgetown almost the first excavations made revealed gravel and hardpan, totally unexpected from surface indications.\textsuperscript{107} The weather was responsible for many delays in digging the trunk of the canal. The winter of 1828-1829 was unusually severe and delayed the real commencement of construction.\textsuperscript{108} The freshets which

\textsuperscript{103} Henry Smith to the Board of Directors, August 2, 1828 [1829]; S.L. Lanham to President and Directors, July 22, 1829; Ingle to Cruger, December 9, 1829; Jared Darrow and Co. to President and Directors, July 22, 1830; Dr. Charles Laub to Walter May, July 7, 1830; McFarland to Ingle, August 28, 1831. See also the Report of the President, Proceedings of Directors, A, 352. (September 25, 1829).

\textsuperscript{104} 2nd Annual Report (1830), p. 25; M.F. Harris, contractor, to Mercer, July 26, 1830.

\textsuperscript{105} Watts to President and Directors, December 9, 1829. In 1832, Mercer sought to secure the passage of a law by the Maryland Assembly prohibiting the sale of liquor within two or three miles of the canal in Frederick, Washington and Allegheny counties. Mercer to Ingle, January 23, 1832. His efforts were in vain, however.

\textsuperscript{106} Peter Owens to Board of Directors, December 23, 1829.

\textsuperscript{107} 1st Annual Report (1829), Proceedings of Stockholders, A, 38; 2nd Annual Report (1830), p. 5.

\textsuperscript{108} 1st Annual Report (1829), Proceedings of Stockholders, A, 54.
occurred regularly in the spring and fall, often filled the lock pits and the canal trunk on the low levels. The high banks on the river side of the canal were another source of trouble. To help preserve them from the erosion of the river, trees were left standing wherever possible and others were planted on the new embankments. The blasting which was resorted to above and in Georgetown because of the rocky nature of the ground resulted in many annoying accidents. The concussion of the explosions and the flying rock damaged several buildings. To reduce the damage from this cause, the board ordered the use of smaller charges and required that the blasting be covered with brush. The net result of this policy was more delay and increased costs.

The presence of so many men on the line created many incidental problems in addition to the more serious ones of health and order already mentioned. One of the most interesting of these was the problem of morale and coordination involved in the distribution of mail. A new postal route was established with its own offices scattered along the canal. The offices bore descriptive local names, such as Magazine, Section Eight, Bear Island, Clementon, Seneca Mills, Edward's Ferry, Conrad's Ferry, South of Monocacy, and Catootin. In most cases the contractor on the section was appointed postmaster, on Mercer's recommendation.

109. Holdsworth and Sherwood, contractors, to President and Directors, September 24, 1829. On the other hand, the steady rains of autumn helped to settle the banks. Van Slyke to President and Directors, January 13, 1831.

110. Proceedings of Directors, B, 309 (April 29, 1831); John McF. Brien to President and Directors, February 3, 1835.

111. Proceedings of Directors, B, 87-89 (May 31, 1830), 162 (July 31, 1830), 191 (October 2, 1830), 248 (December 22, 1830), 257 (January 22, 1831); S.B. Belch to President and Directors, August 28, 1830; Purcell to O.H. Dibble, September 4, 1830; W. Wade to Mercer, June 2, 1831.

112. Purcell to O.H. Dibble, September 4, 1830.


Although not very satisfactory, this route remained the only means of regular communication with the canal.

Locks and lock-houses were matters of great concern to the Board. After much discussion it was decided to use single locks on the canal at first, although estimates would be requested for both single and double locks. The company adopted a fifteen foot clearance for the locks to conform with the dimensions of those in use on the New York, Ohio and Western Pennsylvania canals. The locks were constructed of stone throughout and were so placed as to leave ample room on the berm side for another lock. The engineers and directors experimented repeatedly with ways and means of speeding the passage of boats through the locks. The time required to fill and empty a lock was eventually reduced to three minutes. Some hope was held that this might yet be cut still further to two and one-half or possibly two minutes. The lock-gates, the only perishable structures on the entire line, were also the subject of experimentation. Iron gates were tried but proved unsatisfactory and were not adopted. The Board then tried to prolong the life of the wooden gates by having them painted. This too was later abandoned, probably for lack of money and demonstrable success. The

118. Wright to William Archer, September 1, 1829; Supplementary Report, November 26, 1830, 2nd Annual Report (1830), p. 32.
119. Memorandum of Clement Smith, Treasurer, 1829, Letters Received.
120. J.W. McCulloy to Chesapeake and Ohio Canal Company, July 15, 1830; Van Slyke to President and Directors, September 20, [1830].
lockhouses were built on a simple rectangular plan like those used on the Erie canal. 121 They were also built of stone and cost between $900 and $1,000 each or $1,200 for double ones. 122 The masonry work on the houses was not always the best, and soon there were reports of bulging walls.

In the midst of its other activities, the Board found time to anticipate some of the future problems which the canal would face. The directors ordered the canal trunk to be paved with stone wherever it was plentiful and readily available in order to increase the permanence of the work and facilitate the use of steamboats on the canal. 123 The introduction of numerous small streams into the canal as feeders was also planned. This would, it was thought, reduce the strength of the current flowing down the canal from the main feeders. It would also insure an adequate supply of water for all purposes in all seasons. The existence of so many feeders, providing greater access to the waterway from the Maryland side, would be beneficial to the countryside as well as to the trade of the canal. At different times the Monocacy, Little Monocacy, Tuscarora and Broad Run were all considered. 124 Finally, to enforce its regulations and preserve order on the canal, both during construction and after the opening of navigation, the directors sought a definite delegation

121. Martineau to President and Directors, October 1, 1828.
122. Proceedings of Directors, E, 36 (March 30, 1836), 285 (May 10, 1837);
Ingle to Watkins James and Other Baker, March 31, 1836, Letter Book C, 289;
Ingle to John D. Grove, May 21, 1836, Ibid., C, 309.
123. Report to Special Meeting (September 10, 1828), Proceedings of Stockholders, A, 19.
of policy authority from the parties to the charter.

Branch Canals and the Western Section

While work was continuing on the main line of the canal, the Board was already considering the construction of branches and the ultimate extension of the waterway to the Ohio river.

The most important of the branches and the first to be considered was that into the city of Washington. When the extension of the canal from Little Falls to Rock Creek was decided upon, it was agreed that when the city of Washington provided a basin three feet above tide at the mouth of Tyber Creek, the Chesapeake and Ohio would continue its canal to that basin. Because the corporate authorities were slow in availing themselves of this offer, the canal company itself considered an extension to the Navy Yard. Nothing came of the proposal, and in 1831, Washington finally purchased the old city canal, which had been in the process of construction since 1791. It was to be enlarged, renovated and completed, and opened for navigation toll-free. The Chesapeake and Ohio then authorized the extension of its line to the Tyber. Contracts were let early in 1832, and work begun.

125. Proceedings of Directors, B, 206 (October 19, 1830); 3rd Annual Report (1829), Proceedings of Stockholders, A, 173.
126. Special Meeting (September 10, 1828), Proceedings of Stockholders, A, 23; (September 17, 1828), ibid., 28.
127. 1st Annual Meeting (1829), Proceedings of Stockholders, A, 58.
129. 4th Annual Report (1832), Proceedings of Stockholders, A, 224-225; See also, letters of P. Rodier, the engineer in charge of the extension, January to June, 1832.
The proposed construction of a feeder branch up the Monocacy river to Frederick was frequently discussed during the early years of the company. It was even suggested that a connection might be effected between the Monocacy canal and the Susquehanna, thus providing an inland route to New York.\(^\text{130}\) The route of the proposed Monocacy improvement was surveyed by Dr. John Martineau in 1829, and the cost was estimated to be $296,389 for the twenty-four miles.\(^\text{131}\) But the project never materialized. The citizens of Frederick lost interest in the canal and turned again to the railroad. The canal company, which had looked upon the branch primarily as a feeder for the otherwise useless stretch of the canal above the Seneca dam, was greatly disappointed by this lack of cooperation.\(^\text{132}\)

Other projects related to the development of the main line also came in for their share of the Board's attention. The proposed Maryland canal\(^\text{133}\) was taken into consideration in planning the dimensions of the Georgetown level and the location and capacity of the Little Falls feeder. Early enthusiasm for the branch had been dampened by the report of U.S. engineer Howard, in 1827, that the only practicable route to Baltimore was through the District of Columbia.\(^\text{134}\) Thus there was little activity in

130. 1st Annual Report (1829), Proceedings of Stockholders, A, 53.
131. Frederick Examiner, quoted in Miles' Register, XXXVI, No. 19 (July 4, 1829), 302; Miles' Register, XXXVIII, No. 4 (March 20, 1830), 69.
132. R. Potts to -------, November 29, 1828; 3rd Annual Report (1831), Proceedings of Stockholders, A, 132. The Monocacy was again considered as a feeder in 1831, as were Broad Run, Abraham's Branch and other streams below Point of Rocks. Proceedings of Directors, B, 287 (March 23, 1831), 384-385 (June 10, 1831), C, 35 (December 2, 1831). The canal company was seeking ways and means of utilizing its waterway above the Seneca feeder while the railroad injunction was still in effect.
134. Letter from the Secretary of War transmitting... a Report and Plans of the Survey for a Canal from the City of Baltimore to the Contemplated Chesapeake and Ohio Canal, January 14, 1828, 20th Congress, 1st Session, House of Representatives, Executive Document No. 58, pp. 8-10.
connection with the proposed branch in the early period. In a similar fashion, the interest of the Chesapeake and Ohio in the development of the Shenandoah trade was also demonstrated at this time, although nothing was done in the way of construction.\textsuperscript{136}

The Alexandria canal proposal, on the other hand, was more active. Congress had reported favorably on the project as early as 1829.\textsuperscript{138} The Alexandria Canal Company was finally organized, and construction was begun on the Fourth of July, 1831.\textsuperscript{137} The canal was to connect with the Chesapeake and Ohio at a point just above Georgetown. In this way, the Alexandria merchants hoped to divert their share of the latter's trade. The connection was to be effected by a long aqueduct across the Potomac.\textsuperscript{138} This structure would be the company's greatest and most expensive achievement in what would otherwise be a short (seven mile) tide-water canal.

Two other ways of exploiting the canal attracted the Board's interest. A road along the barn side of the canal above Georgetown was necessary for the transportation of supplies to the line. Since the existing public road was unsatisfactory, the directors suggested that in return for their improvement of that highway (improvement was inevitable for the purposes of the company anyway), they be permitted to operate it as a turnpike, charging tolls for its use.\textsuperscript{139} The Board also considered

\begin{itemize}
\item \textsuperscript{138} Charles A. Stewart to President and Directors, February 10, 1832.
\item \textsuperscript{136} 1st Annual Report (1829), Proceedings of Stockholders, A, 51.
\item \textsuperscript{137} Thompson F. Mason to Mercer, June 29, 1831; Miles' Register, XL, No. 19 (July 9, 1831), 328.
\item \textsuperscript{138} Miles' Register, XLVIII, No. 14 (June 6, 1836), 241.
\item \textsuperscript{139} Proceedings of Directors, B, 206 (October 19, 1830); 3rd Annual Report (1831), Proceedings of Stockholders, A, 172. The canal had occupied the site of the original road in 1829. Proceedings of Directors, A, 154 (February 2, 1829).
\end{itemize}
opening the towpath as a toll-road for horseback travel. In this way, the traffic on the path would pay for its maintenance.\textsuperscript{140}

As its own resources neared exhaustion, the improvement of the branches of the Potomac by the Chesapeake and Ohio became obviously an immediate impossibility. In 1831, the company therefore waived its rights to these branches (except those to be used for feeders) in favor of any companies that might be incorporated to improve them.\textsuperscript{141}

The western section of the canal was an object of great concern on the part of the canal company. At this early date, the directors fully expected to carry their project through to completion. Thus the amount of time devoted to affairs relating to the canal beyond Cumberland was proportionately greater. Furthermore, one of the conditions of the Pennsylvania assent to the charter was that work should begin upon the western section within three years.\textsuperscript{142} The charter itself provided, however, that the eastern section must be completed before the western section should be commenced.\textsuperscript{143} Pennsylvania insisted that the work be undertaken as soon as possible, and the company was, of course, anxious to please. Land rights were secured by Andrew Stewart, the director from the Keystone State, as early as September, 1828.\textsuperscript{144} The survey and location of the line was ordered in 1829, and accomplished in the same year.\textsuperscript{145}

\textsuperscript{140} 3rd Annual Report (1831), Proceedings of Stockholders, A, 173.
\textsuperscript{141} 3rd Annual Meeting (December 3, 1831), ibid., A, 190-191.
\textsuperscript{142} Act of the Pennsylvania Legislature, passed February 9, 1828, Documents Relating to the Chesapeake and Ohio Canal, July 11, 1840, loc. cit., pp. 31-34.
\textsuperscript{143} Act of the General Assembly of Virginia, passed January 27, 1824, ibid., pp. 1-14.
\textsuperscript{144} Stewart to President and Directors, September 29, 1828.
\textsuperscript{145} 1st Annual Report (1829), Proceedings of Stockholders, A, 48-49; Stewart to President and Directors, May 7, July 18, 1829; Proceedings of Directors, A, 336 (August 26, 1829).
The surveys indicated the practicability of a tunnel at the summit level and the certainty of a sufficient supply of water. On the basis of these findings, the company petitioned Pennsylvania for an extension of the time permitted for the commencement of the western section, and at the same time memorialized Congress for permission to begin the western part of the canal before finishing the eastern leg. The directors also requested subscriptions of $1,000,000 from Congress and $500,000 from Pennsylvania. The suspension of work in the east due to the railroad injunction contributed to the wish to start the western section ahead of schedule. Unfortunately, the necessary financial assistance was not forthcoming before 1832.

Land Disputes

In spite of the agony of organization, engineering, and initial construction, the work on the main line gradually began to show progress. Contractors were pushing their work as fast as the weather (and other considerations) permitted. The only exceptions were those whose efforts were hindered by the landowners on the spot. In fact, the hopes and demands of these proprietors soon became another major obstacle to the westward advance of the canal. Some of the landholders had voluntarily granted the company the title required, or at least rights to the use of

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146. The prospect of driving a tunnel through a coal region excited proponents of the scheme to speculate on the possibility of being able to shovel the coal directly into waiting canal boats, thus making the work pay for itself. Communication from William Archer, Esq., to the Stockholders of the Chesapeake and Ohio Canal, on the Subject of the Location of the Tunnel Through the Alleghany Mountain (Washington, 1836), pp. 3-4. Much of the speculation was based on Roberts' report of 1829 (in Letters Received). See also Alvin F. Harlow, Old Towpaths (New York, 1926), p. 233.

147. 1st Annual Report (1829), Proceedings of Stockholders, A, 49; Niles' Register, XL, No. 6 (April 9, 1831), 91; Ingle to Mercer, February 11, 12, 1831; Stewart to Mercer, February 22, 1831.


The extension of the canal from Little Falls to Lock Creek brought

...continue to be carried on the canal headwaters of the

...towards the restoration of certain landmarks. Cortes was

...towards the protection with proprietors. Here again several motives were

...for the right of way in the Potoo Valley.

...which were at the time locked in a struggle with the company, and which were later compromised — which he doubted.

...in the canals were over complicated — which he doubted.

...in the process of construction to which the company would be subjected during the actual construction.

...traded and commercial land to secure higher prices by deferring the

...mill, which represented the verdict of the jurors, called for new

...possible price and those who couldn't settle at any price. The former

...those who represented the condemnation efforts of the company.

...of western iron and stone. Rose moved up the river and at the speculative fever of the party far more...
former terminus, favorable to their town as a port, to the city of Washington. They also disliked giving up what was and would be valuable commercial property in Georgetown, which might become a great metropolis. They were never satisfied that what was paid now would be a fair price in terms of the value the property might have if the town experienced the growth they anticipated. The directors had prophesied that damages would run very high, and this expectation was fully borne out by experience. At the same time, the canal became involved in disputes with many of its old friends and supporters in Georgetown, including John Mason, Francis Scott Key, and Walter and Clement Smith.

A final factor which went far to increase the cost of land was the decision to purchase the land between the canal and the river. The directors were obsessed with the idea of dispensing with bridges over the canal. They hoped in this way to facilitate the development of steamboats on the waterway. To relieve the company of the necessity of providing access from one piece of land to another where separated by the canal, they took the course of purchasing the segment lying on the river side of the waterway. This was not strictly within the terms of the charter which allowed the condemnation of private property for

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154. Mercer to Justices of the Circuit Court of the District of Columbia, March, 1829, Letter Book A, 56; Proceedings of Directors, A, 167 (February 17, 1829), 182 (March 18, 1829). See also, Chesapeake and Ohio Canal Company vs. Key, U.S. Reports, 3 Cranch C.C. 599; Chesapeake and Ohio Canal Company vs. Mason, ibid., 4 Cranch C.C. 123; and Chesapeake and Ohio Canal Company vs. Union Bank (of Georgetown), ibid., 4 Cranch C.C. 75, 5 Cranch C.C. 509.
canal purposes only. However, the line was located so close to the river that the amount of land required was negligible.

Financial Considerations

No sooner was construction fully under way than the company was beset by financial difficulties which threatened its future success, if not its very existence.

The company had begun its operations with a subscribed capital of about $3,600,000. Included in this total were subscriptions of the United States for $1,000,000; the city of Washington for $1,000,000; the city of Georgetown for $250,000; the city of Alexandria for $250,000; the State of Maryland for $500,000; and Shepherdstown, Virginia, for $20,000. The remaining $600,000 was invested by private individuals. The total cost of the eastern section had been estimated at $8,000,000 by the United States Board of Engineers and at $4,500,000 by Geddes and Roberts. The canal company chose to rely on the latter estimate. Thus it had begun construction without sufficient funds to insure the completion of the eastern section under even the most optimistic estimate.

Nevertheless, the Board and the stockholders felt secure in beginning work with the available resources. They confidently expected further aid from Congress and from the interested states, especially Virginia which had as yet made no subscription. Supporters of the canal were convinced that the work would prove to be a profitable venture and that further private subscriptions would be encouraged by its success.

In terms of conditions in 1828 they were probably justified, if somewhat
optimistic, in these expectations. As it happened, the anticipated subscriptions were not forthcoming at this time from either public or private sources. Appeals to Congress proved futile, and a measure before the Virginia Assembly to subscribe $400,000 to the enterprise also failed. The company was forced to rely upon its existing revenues for the prosecution of its works.

From the very beginning the Board encountered difficulties in securing the payment of the calls on the subscribed capital. Maryland insisted on paying part of its share in state bonds. The directors were persuaded to accept this procedure because the railroad company had already agreed to it and because it was necessary to placate the canal's enemies in the state legislature. The company had so little success in selling the bonds that it was forced to hypothecate them in order to obtain loans from the local banks. The cities of the District of Columbia also ran into trouble in meeting the calls on their stocks. To obviate this condition, the local authorities appointed Richard Rush, ex-Secretary of the Treasury, to act as the agent of the District cities to negotiate a loan in Europe in order to make it possible for them to pay their subscriptions. After failing in his mission in England, Rush succeeded in obtaining the loan in Holland. The canal company also had the usual trouble with delinquent private stockholders and had to resort to threats and legal suits to obtain satisfaction.

156. 1st Annual Report (1829), Proceedings of Stockholders, A, 51.
158. Proceedings of Directors, A, 373 (October 12, 1829), 377-378 (October 17, 1829); C. Smith to Ingle, January 4, 1831.
159. Rush to Mercer, July 15, October 7, November 13, 1829; Mercer to Ingle, December 29, 1829.
160. See, for example, Letters Received, December, 1829, and Proceedings of Directors, B, 291 (March 26, 1831).
By June, 1832, the Board issued calls for the payment of 60 per cent of the capital stock. 161

Although the canal company was obliged to rely strictly on its own resources in carrying on its work, instead of economizing and resorting to temporary expedients the directors persevered in their determination to plan and push the construction of a large and permanent waterway. They were intent on building a model structure from the beginning. This tendency towards what amounted to a visionary scheme, regardless of cost, handicapped the canal's prospects for ultimate success. In the first year of work, the cost of construction was above the estimates of Geddes and Roberts. 162 Much of the advance was due to the larger dimensions and the insistence upon a model canal. The Board excused its course in regard to the Georgetown level with the observation that the sale of water power would itself pay for the increased size. 163 Even this was not altogether a legitimate argument, for the right to sell water did not belong to the company. There was serious opposition to the grant of the privilege by Maryland citizens, and there was some doubt that the legislature would agree to it. As a matter of fact, the power would still be in doubt after the necessary legislative grants, for there was a legal dispute on that score still pending in the courts. Furthermore, if the Maryland canal were built as planned there would be very little surplus water available for sale.

Other circumstances tended to increase the cost of construction above the estimates and thereby threaten the successful completion of the

161. W. S. Ringgold to Ingle, June 18, 1832.
163. Ibid., p. 44.
work. The higher cost of excavation due to the discovery of hardpan and gravel immediately below the surface of the earth above Georgetown has already been mentioned.\(^\text{164}\) The price of masonry was increased by the expense of hauling stone and lime overland, or by way of the unreliable Potomac. As a result of these factors, the cost of lime, for example, was two and three hundred per cent higher than the allowance in the estimates.\(^\text{165}\) Contracts for locks were abandoned and re-let several times, and one general raise of 25 per cent was granted.\(^\text{166}\) Wages also rose steadily because of the sudden heavy demand for laborers in an agricultural region, the reputed unhealthy character of the Potomac valley in certain seasons, and the competition of other public works, particularly the Baltimore and Ohio Railroad and the Pennsylvania canals. By 1832, the rate of wages was almost double that prevailing in 1828.\(^\text{167}\) On top of all these factors tending to increase expenses, there were the heavy land damages.\(^\text{168}\)

As early as 1829, the company realized that the higher costs would jeopardize the completion of its works. To offset this danger and to increase the subscriptions to the level necessary to finish the canal, the Board constituted Richard Rush the agent of the company to open books in Europe to receive subscriptions up to $6,000,000 for the eastern section and $10,000,000 for the whole canal.\(^\text{169}\) As the railroad injunction continued in effect, the expense of a large and high-salaried clerical and

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\(^{164}\) Ibid., p. 38; see above, p. 72, note 107.
\(^{165}\) Ibid., p. 38.
\(^{166}\) Ibid., pp. 36-39.
\(^{167}\) 4th Annual Report (1832), Proceedings of Stockholders, A, 221-222.
\(^{168}\) 1st Annual Report (1829), Proceedings of Stockholders, A, 41-42. The final location of the line was left indefinite until the last possible minute to permit bargaining for the lowest possible price.
\(^{169}\) Ibid., p. 50. There were no large subscriptions made and few of any description.
engineering staff became a great burden on the company's finances. Strict economy and retrenchment became the order of the day. Engineers were released as soon as they found positions elsewhere; salaries were reduced; and vacancies were left unfilled. While not yet desperate, the financial condition of the company had rapidly deteriorated by the time of the successful termination of the railroad controversy. The Chesapeake and Ohio Canal Company was heading towards a crisis.

The Baltimore and Ohio Controversy

Construction of the canal was limited to the line below the Point of Rocks by an injunction, which had been secured by the Baltimore and Ohio Railroad Company.

The issuance of the injunction was the culmination of a clash that had been brewing since the early twenties. Baltimore had been an active supporter of the canal project in the early days. Later its enthusiasm began to cool as it became more apparent that the canal if built would favor the development of a rival emporium on the banks of the Potomac. Doubts arose as to the practicability of tapping the canal far enough up the river to allow Baltimore to share in its trade. A survey by William Howard, a United States engineer, in 1827, confirmed this fear. Meanwhile, the merchants of Baltimore desperately sought some way whereby their city might compete with the commercial centers of New York and Philadelphia, fed by the Erie and Pennsylvania canals.

respectively. The proposal for a railway originated at a meeting of Baltimore citizens in February, 1827. It was immediately adopted and the Baltimore and Ohio Railroad Company chartered. The canal company had been chartered in 1824-1825, but the report of the U.S. Board of Engineers had delayed the organization of the company until 1826. Both companies formally inaugurated their enterprises on the Fourth of July, 1826.

Both companies chose the valley of the Potomac as the route for their works. The canal company felt secure in its right of prior location which it inherited from its predecessor, the Potomac Company. Consequently, it proceeded in a regular fashion with its operations. The railroad company, on the other hand, sent surveyors ahead to locate their line, secure land waivers, etc., especially in the narrow passes of the valley at which a conflict with the canal might be expected. To stop this usurpation of its rights, canal company stockholders secured an injunction, June 10, 1828, in the Washington county court prohibiting the railroad from proceeding beyond the Point of Rocks, the place at which it entered the Potomac valley. The railroad company countered with three injunctions.

171. Answer of the Chesapeake and Ohio Canal Company, 4 Gill and Johnson 32.
173. Baltimore American and Washington National Intelligencer, quoted in Miles' Register, XIX, No. 20 (July 12, 1828), 318-325, 326-328.
against the canal which it obtained in the court of chancery at Annapolis, June 23, 24, and 25. The canal company protested that the conduct of the Baltimore and Ohio was an infringement on the canal's chartered rights and was an unfriendly act. It pointed out that it had not opposed the railroad's charter and insisted that the railroad officials had given the impression that their work would avoid the circuitous Potomac route for a more direct northwesterly route to Pittsburgh. The legal question involved was whether the Potomac Company's rights inherited by the Chesapeake and Ohio were still valid or whether the Baltimore and Ohio had acquired them by virtue of its charter from the State of Maryland in 1827 and the first exercise of the rights of location. The real issue, however, was the political one between the city of Baltimore through the state of Maryland and the cities of the District of Columbia — with local politics within Maryland adding to the confusion.

In the course of the legal struggle, the Baltimore and Ohio was content to fight a delaying action in the courts, while bringing its influence and that of the city of Baltimore to bear in the General Assembly, and in the Congress. In both instances the petitions of the railroad company met with considerable success. The Maryland legislature

176. 4 Gill and Johnson 14-15; Proceedings of Directors, A, 8 (June 26, 1830 [1829]). See also 2nd Annual Report (1830), p. 9.


178. See, for example, Representative Mitchell's speech, February 28, 1829, quoted in Niles' Register, XXXVI, No. 4 (March 21, 1829), 53.
became distinctly hostile to the canal company's claims, choosing to look upon the railroad as a purely Maryland project which was deserving of the state's protection and patronage. In Congress the influence of the canal company was checked by the railroad's petitions and by the hostility of the Jacksonian Democrats to federally-sponsored internal improvements. The railroad insisted that both works be considered experiments until time tested the relative merits of each. This involved both companies in a long discussion of the historical comparisons of railroads and canals in England and the United States. In the meantime, the Baltimore and Ohio was occupied in constructing its road across Maryland to Frederick and then south to the Point of Rocks. Its resources were limited, but it had the very real advantage that its road began operating as quickly as it was finished. The railroad company could afford to wait.

The canal company found itself in the opposite position during the struggle. At first, it too was content to allow the wheels of justice to grind slowly. Then, as the court showed no signs of reaching an early decision, the directors became restless. The company had ample resources to undertake a large part of the work and it was anxious to take advantage of the satisfactorily low prices for which the first contracts had been let. In addition, the line of the canal

179. A. Lee to Mercer, February 15, 1829; Ingle to Mercer, February 2, 1831. On the other hand, it was hotly denied that the State was in any way responsible for the long delay in the case between the railroad and the canal companies. See A Candid Appeal to the Stockholders of the Chesapeake and Ohio Canal Company (Washington, 1832).

180. Proceedings of Directors, B, 76 ff. (May 22, 1830); Miles' Register, XXXVIII, No. 3 (March 13, 1830), 62-63.

181. The canal company did not file its answer to the bill of complaint until May 16, 1829, 4 Gill and Johnson 16.

above the Seneca feeder was useless until the next feeder was reached at Harpers Ferry, twelve miles above the Point of Rocks. Above all there was a charter requirement that one hundred miles of the canal must be completed in five years. Eventually the delay itself began to be costly. The large staff of engineers and clerks represented a real burden while construction was so greatly restricted.

While the Board was satisfied with the neutrality of Congress in the controversy with the railroad, its position in the Maryland legislature was much more difficult. There was already a considerable amount of hostility to the canal in the assembly. Furthermore, the company was simultaneously involved with many landholders in western Maryland on several points: land prices, the sale of water power, and the substitution of ferries for bridges across the canal. The canal company could not afford to wait, but was scarcely in a position to press its claims.

Nevertheless the Board did make earnest efforts to come to an early understanding with the railroad. In November, 1828, it proposed to draw up jointly with the railroad company, a case to be submitted to the Chancellor for his early decision. In February, 1829, it expressed an interest in the proposal of a Maryland legislator for joint construction of the works, at least as far as Harpers Ferry. The

186. A. to Mercer, February 14, 1829; Mercer to A., February 13,16,1831.
187. 2nd Annual Report (1830), p. 8. The railroad rejected this proposal because it claimed that a case satisfactory to both companies could not be drawn up.
Baltimore and Ohio hastily proclaimed its desire for an early settlement, but preferred joint construction at least as far as Williamsport. A little later, the directors of the canal, fearing for the charter, agreed to this proposal, but the railroad politely refused and insisted on extending the agreement all the way to Cumberland. This the canal rejected. Finally, when a decision from the Chancellor seemed to be as far away as ever, the canal board proposed to accept a pro forma decree against its claims in order to expedite the inevitable appeal. This too, the railroad refused, consistent with its policy of procrastination.

The judgment of the general committee of the canal company stockholders in 1829 that the Chesapeake and Ohio was not to blame for the failure of attempts at conciliation seems to be fully borne out by the course of events. The best that can be said for the railroad's attitude is that apparently both companies ultimately hoped to win and to exclude the other.

In the Chancery Court, the case followed the lackadaisical course preferred by the Baltimore and Ohio. The Chancellor decided early in the proceedings that a joint survey of the points of collision, suggested by the railroad's counsel, was an indispensable preliminary to a decision on the legal rights of the two companies to prior location.

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190. Walter Jones to Ingle, October 10, 1831.


The canal company protested the expense and delay of another survey of the valley (it would be the fourth). The railroad company on its part was quite content to see the commencement of the survey delayed as long as possible. Abandoning hope for a reversal of the order, the canal directors decided to push the survey. By the time the surveying party reached Harpers Ferry, the canal board saw that the whole survey would take many months, perhaps the whole time allowed by the charter for the completion of the hundred miles. It thereupon recalled its engineer, and considered proceeding with construction.

The worst that could happen would be a quick decision against its claims, which would facilitate the inevitable appeal, an excuse for which it was already seeking. The Chancellor eventually decided that enough ground had been covered (or time consumed) for his purposes and in 1831 reversed his order for the survey. In the September term, 1831, he rendered his decision releasing the railroad from the injunction against it and making that against the canal permanent. In making his decision he took the puzzling position that this was not the proper time to consider the question of prior right. The conduct of the case, the final decision and the basis of his opinion would not have been very different had the Chancellor been a representative of the railroad's interests.

194. The Board named Nathan Roberts to make the joint survey with the railroad engineer, but secretly ordered him to make a preliminary survey for the canal company first. Proceedings of Directors, p. 375-374 (October 12, 1829), 378-379 (October 21, 1829). In February, 1830, Mercer repeated the request for an early survey. Mercer to Philip E. Thomas, President of the Baltimore and Ohio Railroad Company, February 16, 1830, Letter Book A, 172.
196. Ingle to Roberts, April 22, 1830, Letter Book A, 204. Two other engineers, Cruger and Fairfax, were permitted to continue the survey.
198. 3rd Annual Report (1831), Proceedings of Stockholders, p. 139.
199. 4 Gill and Johnson 71.
The canal company now appealed the Chancellor's decision to the Court of Appeals of Maryland, in its December session. The case was immediately set for hearing, despite the continued policy of procrastination followed by the railroad company. One argument used by the latter was that the absence of one of its counsel, Roger B. Taney, recently appointed Secretary of the Treasury, deprived it of a lawyer familiar with the case from the beginning. It was later discovered that the absence was purely voluntary. For a while, the canal company feared the delay might be countenanced, but the court took up the case as planned. Despite the absence of one of its own members, it rendered its decision in January, 1832. By a vote of three to two it reversed the decision of the Chancellor and confirmed the Chesapeake and Ohio Canal Company in its claim to the right of prior location.

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200. R. Jones to ———, December 2, 1831; Magruder to Wirt, December 10, 1831; Wirt to Mercer, December 28, 1831.

201. Mercer to Ingle, January, 1833.

202. 4 Gill and Johnson, 71-164, 164-226. The opinion of the majority adopted the argument of the canal company. Miles' Register, XLII, No. 24 (August 11, 1832), 419; Proceedings of Directors, C, 48 (January 7, 1832); Special Meeting (April 26, 1832), Proceedings of Stockholders, A, 136; 4th Annual Report (1832), ibid., A, 200.
Recurring Problems

The successful termination of the Baltimore and Ohio controversy enabled the Chesapeake and Ohio to resume the construction of its waterway. The directors wasted no time in following up their advantage and placing the entire hundred miles under contract. There was now a twofold race on: the five years allowed by the charter for the construction of the first hundred miles would expire in 1833 and the exhaustion of the company's immediate financial resources was in the offing. Immediately after receiving the official copy of the decision, the Board ordered that contracts be made on February 23, 1832, for the twelve miles between Point of Rocks and Harpers Ferry. Later, the directors reconsidered their action and authorized the president to make contracts for the two miles immediately above Point of Rocks without the usual public advertisement. The latter stretch included some of the narrowest of the disputed passes.

This unseemly haste was sharply criticized as betraying an intention to insure the exclusion of the railroad from the Maryland side of the valley above Point of Rocks. It is certainly true that the company acted quickly to occupy the most favorable location for its canal. In

2. Ibid., 52-53 (January 14, 1832); Mercer to Cruger and Purcell, January 23, 1832, Letter Book A, 402.
3. Miles' Register, XLII, No. 24 (August 11, 1832), 419; Maryland Senate Journal, 1832, app., p. 8; Maryland House Journal, 1832, pp. 23-24.
so doing it assumed that the railroad would cross the river at Point of Rocks and proceed up the Virginia shore. It is highly improbable that the railroad company would have behaved at all differently had it won the case. It is, moreover, extremely doubtful that the Baltimore and Ohio, supported in its position by the State, would have acquiesced in the joint construction of the two works. Under the combined pressure of the railroad and the State, the canal company did consent to the accommodation of its rival in 1835.

Contracts were solicited on January 9, 1832, for the canal all the way to Williamsport, but the winter continued so severe that the order was suspended for all work above Harpers Ferry. On March 14 and June 2, enough of the line above Harpers Ferry was let to complete (with slackwater navigation at some points) the hundred miles required by the charter. The company took the opportunity to reassert, although without dissent, that it had sufficient funds to complete the contracts. At the same time, the usual indication of approaching financial difficulties was manifested in the revival of the proposal to substitute slackwater for canal navigation.

The resumption of construction also brought a renewal of the grievances of earlier years. Masonry work fell far behind schedule as the problem of rock and cement supplies re-appeared. There were reports

5. Ibid., pp. 204-207.
9. McFarland to Mercer, November 6, 1832.
of absconding contractors, as in the case of one McIntire, on
section 177. The most serious trouble was the continuing high
cost of land. As the canal entered Washington county, near Harpers
Ferry, the directors looked forward to more favorable settlements,
but their hopes were not realized. The first land condemned was that
of Gerard B. Nager, a bitter opponent of the canal company who carried
on a continuous feud with it for many years. The damages awarded
were very high, and the verdict provided a discouraging precedent
for the Board. The avarice of the local landholders was further
increased by the award in the condemnation of Caspar Wever's land.\textsuperscript{12}
Even some of the canal's friends participated in the onslaught that
followed.\textsuperscript{13} Some of the more greedy proprietors resorted to in-
juctions to enforce prompt payment of their awards.\textsuperscript{14} The counsel of
the company in the county finally advised public advertisement of nego-
tiations with Virginia landholders to shift the canal to that side of
the river.\textsuperscript{15} The Board hoped that this announcement might bring about
a reduction in the prices of the lands it wanted. Unfortunately for the
canal, the notice failed to have any permanent effect.

The Baltimore and Ohio Railroad Company also continued in active
opposition to its arch rival, refusing to give up the fight after its

\textsuperscript{10} Purcell to President and Directors, August 24, 1833.
\textsuperscript{11} Cruger to President and Directors, August 3, 1832; Mercer to Ingle,
August 8, 1832.
\textsuperscript{12} B. Price to Ingle, August 25, 1832; B. Price to Mercer, November 5, 1832.
See also the appeal of the company to set aside the inquisition taken
on Wever's land, November 16, 1832, Letters Received
\textsuperscript{13} Cruger to President and Directors, August 5, 1832.
\textsuperscript{14} B. Price to Ingle, August 25, 1832; Price to Ingle, June 10, 1834.
\textsuperscript{15} W. Price to Ingle, November 6, 1833.
defeat in the courts. It kept up its agitation in the Maryland legis­
lature. At the same time it conducted a nuisance campaign in the
Potomac valley to hinder the progress of the canal. It sponsored and
circulated petitions to compel the canal company to construct docks
at the Point of Rocks to provide transfer facilities for the Baltimore
trade, and to require the canal board to build bridges over its waterway
to give the Maryland farmers greater access to the river. It pro­
moted an injunction, ostensibly in the name of local landholders to
force the canal company to protect access to a river ferry near Catoctin.
Baltimore and Ohio interests were undoubtedly behind the extraordinary
procedure of Caspar Weyer in going all the way to Annapolis to obtain
an injunction from an old friend, the Chancellor, to stop construction
of the canal on his land until he was paid in full. Later still, the
railroad company revived the agitation for an injunction to protect the
public road at the Point of Rocks, guaranteeing to pay all costs if the
suit failed. The hand of the railroad was apparent in the appointment
of Benjamin S. Forrest, an avowed friend of the railroad who was known
to be hostile to the canal, as the representative of the State of Maryland's
interest in the canal company. Forrest immediately demanded an
explanation from the canal officials of their conduct since the court

18. John McNeill to [President and Directors], January 28, 1832.
17. Cruger to President and Directors, March 21, 1832; Proceedings of
Directors, C, 113 (March 24, 1832).
18. B. Price to Ingle, August 26, 1832; Mercer to R.S. Case, September 3, 1832,
19. B. Price to Ingle, August 26, 1832. The local justice, Judge Shriver,
of Frederick, denied the request for an injunction, but it was later issued
by a Baltimore judge on the plea of the counsel of the Baltimore and Ohio,
Gwynn.
20. Ingle to Mercer, February 2, 1831; Littleton D. Teackle to Mercer,
February 5, 1831. Thus Forrest was in a position to exert pressure on
the canal company immediately after the railroad board gave up its
efforts to persuade the canal to permit joint construction.
decision, and promptly rejected their replies as "no answer." The purpose of these widely-scattered assaults on the Chesapeake and Ohio was as clear then as it is now. It was to stir up popular feeling in Maryland against the canal, to enlist support for the measures which were to be taken to force joint construction, and to give time for the political pressure that was being built up to have its effect.

Meanwhile the canal company had its hands full on the line. Trouble was brewing among the laborers. In an effort to forestall the rioting and loss of time which resulted from excessive drinking, the directors ordered the enforcement of the condition contained in all contracts prohibiting the distribution of liquor to the workers. They had considerable difficulty enforcing the regulation in the absence of supporting Maryland laws. Ultimately they reversed themselves and repealed the prohibition upon the report of the engineer that the enforcement of it was having the opposite effect from that intended.

Drunkenness had actually increased during the enforcement of the rule. The engineer reported that the men, deprived of a steady supply of spirits during the day, drank in excessive quantities at neighboring grog shops in the evening. The amount consumed in the course of an evening, if spread over the whole day, could have been worked off without serious effects. Consumed all at once, it intoxicated them and led to

21. B.S. Forrest and James L. Ranson to President and Directors, June 6, 1832; Cruger to President and Directors, June 15, 1832; Forrest to Ingle, June 16, 1832. Cruger insisted that the line had been changed but slightly from the location made by Roberts in 1828, and had been moved closer to the river as often as it had been moved inland. The railroad was certainly no worse off than before, in his opinion.

22. Proceedings of Directors, 0, 186-186 (July 11, 1832).
rioting and disorder which lasted throughout most of the night. Morning found many of the men lying on the ground where they had fallen exhausted, unfit for work that day. The approach of the sickly season was advanced as another reason for restoring controlled use of the customary "jiggers" as a preventive measure.

Other difficulties were experienced with the workers. For one thing there was the continued demand for more men, especially skilled masons and stone-cutters. The President carried the search for hands as far north as Philadelphia on one of his trips to secure funds for the company. In the fall of 1832, he reported that he had hired eight men there. The terms included: the advance of transportation money, the promise of a bonus, and the guarantee of work until December 10, 1832, at fair wages. Violence threatened to break out among the canal workers themselves. Ill-feeling ran high between rival factions of the Irish workers, the Corkonians and the Langfords (sometimes called Far-Downers), but open warfare did not break out until 1834.

The Cholera Epidemic

By far the most serious disturbance on the line in this second period of construction was the outbreak of Asiatic cholera in the summer of 1832.

The canal had been plagued from its inception by the annual "sickly season" in the Potomac valley. This season extended from July until

23. Cruger to President and Directors, July 7, 1832.
24. Ibid.
25. Mercer to Ingle, October 8, 1832.
26. See below, pp. 116-120.
late September and coincided with the drought months in the region. Popular belief soon associated the two annual occurrences and attributed the aches and fevers which developed in these months to the effects of the drought on the river and the consequent unhealthy atmosphere of the valley. The lowness of the water in the Potomac exposed the river grasses and vast areas of the murky, malodored mass of the river bed. With the return of high water during the heavy fall rains, the river lost the unhealthy miasma which had emanated from it during the summer. So firmly had these ideas become established in the minds of the inhabitants that there was usually a noticeable slackening of work on the canal during these months. Often there was a marked exodus of company officials and contractors as well as laborers. At least part of the unexpectedly high level of wages was attributed to the unhealthy climate for which the valley was known.

To offset these manifestations of fear and to keep the work going in the critical year of 1832, the company resorted to unusual precautions. The safeguards provided were the customary ones, but the attempt to prevent or ameliorate the effects of illness among the workers was unprecedented on this canal. The Board resolved to hire a physician to inspect the workers' shanties from time to time during the months from July to October. He was to report upon their condition, to recommend measures for preserving the health of workers and contractors alike, and to care for the sick. The directors also created the office of Superintendent 28.

of Construction, who in addition to the duties indicated by his title
would supervise the removal of the sick and provide the necessary
hospital stores. 29 In July, they removed the prohibition on the use
of spiritous liquors by laborers. 30 In August, the president suggested
renting a building to be used as a hospital in case it was needed. 31
(By that time the cholera was already nearing the line.) By publicizing
these measures for the care and prevention of sickness, the company
sought to encourage workers and contractors to stay on the job, and
perhaps to attract laborers from other works.

As luck would have it, despite all the precautions taken in
this year, the first one in which unrestricted construction was possible,
the summer of 1832 proved the most disastrous in the history of the
canal to the health of the workers. Late in August, Asiatic cholera,
which had gradually been spreading south from Montreal, 32 made its
appearance on the line near Harpers Ferry. 33 The plague was soon general
from the Ferry down to the Point of Rocks. 34 Work was quickly suspended
on many of the sections. 35 The alarm among the workers was stressed by
President Mercer in urging the authorization of a hospital. 36

If the Board but imagine the panic produced by a man
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.

The result of the panic was the flight and dispersal of the terrified laborers.

29. Ibid., C, 175.
30. Ibid., C, 185-186 (July 11, 1832).
31. Mercer to Ingle, August 27, 1832.
32. Thomas J.C. Williams, History of Washington County (2 vols., Hagerstown, 1906),
   I, 221. The progress of the cholera may also be traced in the current
   Miles' Register.
to President and Directors, August 5, 1832 (reviews the epidemic of 1832).
34. Proceedings of Directors, C, 214 (September 8, 1832).
35. Rush to President and Directors, August 5, 1832.
36. Mercer to Ingle, September 3, 1832.
The cholera gradually spread up the river to the west of Harpers Ferry. As it advanced, the same reports of the suspension of the work and the panic and flight of the laborers accompanied it. From Shepherdstown came the following graphic report.

Before this letter reaches Washington, the whole line of canal from the point of rocks to Harpersport [sic.] will be abandoned by the Contractors and Laborers -- The Cholera has appeared amongst them, and has proved fatal in almost every case. There has been upwards of 30 deaths nearly opposite to us since Friday last, and the poor Exiles of Erin are flying in every direction... it is candidly my opinion, that by the last of this week you will not have a working man on the whole line.

The news from across the river described similar effects of the plague.

They have since been suffering great mortality west of Harpers Ferry, & I fear the work is by this time suspended. The poor creatures, after seeing a few sudden & awful deaths amongst their friends, straggled off in all directions through the country; but for very many of them the panic came too late. They are dying in all parts of Washington County at the distance of 5 to 10 miles from the river. I myself saw numbers of them in carts & on foot making their way towards Pennsylvania.

The scenes of suffering and death caused both anguish and alarm to the inhabitants of the neighborhood.

Humanity is outraged by some of the scenes presented; men deserted by their friends or comrades, have been left to die in the fields, the highways, or in the neighboring barns & stables; in some instances, as I have been told; when the disease has attacked them; the invalid has been enticed from the shanty & left to die under the shade of some tree.

Excited by the sufferings of the miserable victims of this disease; the citizens of this place [Sharpsburg] have ministered to their wants, and sought to soothe their dying moments; but unfortunately for the cause of humanity, nearly every person who has been with the dead bodies or has assisted in burying them have paid the forfeit with their lives; and now it is scarcely possible to get the dead buried.

37. Boteler to Ingle, September 4, 1832.
38. B. Price to Ingle, September 5, 1832.
39. Russell to President and Directors, September 11, 1832. See also W. Rice to [Ingle ?], September 18, 1832.
The company immediately adopted measures to care for the sick and to calm the panic. It is doubtful, however, whether the steps taken shortened the duration of the epidemic or softened the force of its blow. Upon the president's recommendation, the directors authorized the establishment of two hospitals costing five hundred dollars each. Meanwhile Mercer made an effort to lease an abandoned mill owned by Caspar Ever, the railroad partisan, to be used as a hospital. The terms offered were so exorbitant and repulsive that they did not receive consideration. The hospitals, if such they may be called, were finally established in some cabins rented near Harpers Ferry and in a large shanty at section 112. Another was contemplated at the Point of Rocks. These temporary quarters left much to be desired, but the permanent hospital at Harpers Ferry was not established until late in September. Even then the accommodations were probably not very elaborate, for as late as August 27, 1832, the president thought that it would only be necessary to purchase some hundred feet of plank for bunks and some blankets and sacks for straw and as few and as cheap articles for the hospital as possible and place it in the charge of a physician of this place. [Harpers Ferry] after engaging one or two nurses to attend the sick...

40. Mercer to Ingle, September 3, 1832; Proceedings of Directors, C, 212 (August 31, 1832), 214-216 (September 8, 1832).
41. Mercer to Ingle, August 27, 1832; Mercer to Ever, September 11, 1832, Letter Book B, 21.
42. Ever to Mercer, September 15, 1832; Mercer to W. Smith, September 24, 1832. Ever's terms were $350 a year (double the rate when the long-vacant mill was last rented), plus all damages awarded by Samuel Claggett and Edward Garrett upon examination after the mill was relinquished.
43. Mercer to W. Smith, September 24, 1832.
44. Rush to President and Directors, August 5, 1833.
45. Mercer to Ingle, August 27, 1832.
The method by which the hospital was supported was a form of group insurance. The workers each contributed twenty-five cents a month for the doctor’s fees and for the upkeep of the hospital. This system had been worked successfully before on the James river canal. On the Chesapeake and Ohio, as might be imagined, it worked as long as the fear of sickness was sufficiently great to cause the men to consent to the deduction from their wages. With the coming of winter and the disappearance of the cholera, the workers refused to countenance further deductions, and the program fell through. The following spring the affairs of the hospital were brought to a close and the equipment sold.

In the summer of 1833, there was another outbreak of the cholera epidemic, on a less serious scale. This time it struck first farther up the river, near Williamsport. Again the symptoms of panic and threatened dispersal of the workers appeared. The panic spread to the neighboring village of Hagerstown because so many of the Irish workers were brought there for burial in the Catholic cemetery. A town meeting was held at which civic leaders expressed fear for the trade and, incidentally, the health of the community. The town, the company and the local priest took steps to provide other cemeteries closer to the line. In this way the time lost from work during the solemnity and

46. Mercer to Ingle, September 3, 1832; Mercer to W. Smith, September 24, 1832; Rush to President and Directors, August 5, 1833.
47. Mercer to Ingle, September 3, 1832.
48. Rush to President and Directors, August 5, 1833.
49. Proceedings of Directors, C, 263 (January 5, 1833); J. Gore to Ingle, April 6, 1833.
50. Purell to Eaton, June 24, 1832 (1833); Andrew Stewart to Ingle, July 10, 1833.
51. "Resolutions of a Public Meeting in Hagerstown, July 27, 1833." Handbill in O.H. Williams, W. Price, E. Beatty to Purell, July 31, 1833, enclosed in Purell to President and Directors, August 1, 1833.
revelry of a funeral was reduced and the threat to the business life of the village removed. The epidemic gradually retraced its previous course down the river to Harpers Ferry and then disappeared.

The Politics of the Compromise of 1833

Financial and legal embarrassments eventually drove the canal company back into the political arena.

Financial troubles continued to hobble the progress of the canal, although the company still had extensive resources on paper. The District cities were having difficulty in meeting the calls on the stock, and the company was becoming hard pressed for funds. In June, 1832, the president had sought unsuccessfully to obtain a loan of $300,000 on the pledge of company property as security. In October, he made strenuous though futile efforts to secure loans in New York and Philadelphia on the pledge of Washington and Georgetown stock. In November, the treasurer of the company went to Philadelphia to renew the attempt to negotiate a loan from the banks there. Other efforts were made to obtain loans for the city of Washington. The Board directed that memorials be prepared and submitted to the Virginia, Maryland and Pennsylvania legislatures asking additional subscriptions from those states. All efforts seemed to be in vain. Late in

52. Ibid.
54. Morier to Ingle, October 8, 28 (two letters), 28 and 31, 1832.
56. Ibid., C, 244 (November 23, 1833).
57. Ibid., C, 243.
November a crisis developed as the result of the impending failure of Washington to meet the calls on the stock. Preparations were made to suspend all work on the canal above Harpers Ferry in that month, if the city did pass the next installment. The outlook for 1833 was far from bright.

The effect of the cholera epidemic, the disputes with the railroad and the local landholders, and the restricted financial resources available was reflected in the slow progress of construction. Not even the twelve miles from the Point of Rocks to Harpers Ferry were completed during 1832, much less the forty miles above the ferry needed to fulfill the charter requirements. Thus the year 1833 commenced with an additional threat to the company's continued existence. The charter stipulation became increasingly pressing, for the five years would expire within a few months. There were serious doubts among the canal officials themselves whether the company had the time and the resources to complete the hundred miles.

If the troubles on the line were not enough, the company also faced assaults on the political side that were growing in tempo. Baltimore business men and railroad interests were active in the Maryland legislature, while in Congress Jacksonian Democrats, hostile to federal support for works of internal improvement, were sniping at the company. From the

58. Ibid., C, 236-237 (November 17, 1832). Notices arrived simultaneously from the Mayor of Washington notifying the company of the city's inability to meet the 29th installment and from the Secretary of the Treasury refusing to make further payments for the United States until the District cities caught up with their payments.

59. Ibid., C, 240 (November 23, 1832).
political point of view this period marks a turning point in company affairs. The era of federal control came to a self-chosen end, and the canal was thrown upon the states for future assistance.

The railroad, still smarting under its defeat in the Court of Appeals, revived the proposal of joint construction which it had rejected while the case was still pending. As early as January 28, 1832, barely a month after the decision, the Baltimore and Ohio had hastily resurrected the plan. Then, properly attired in the sackcloth of penitence, the Company had renewed the proposal, humbly beseeching the canal board to make room for its road at the narrow passes of the Potomac. But after three and one-half years of obstruction and controversy, the canal board confessedly had no intention of permitting joint construction. Instead it suggested that the railroad cross the river at the Point of Rocks and proceed along the Virginia shore. When the Baltimore and Ohio rejected this suggestion and repeated its petition for joint construction on the Maryland side, the canal company adopted the policy of procrastination which it had learned so well from the railroad. It referred the latter's petitions to committees and delayed reports while rushing the construction of the canal through the disputed passes.

When it appeared that they would never receive the consent of the canal board to the accommodation of the railroad, the Baltimore and Ohio directors resumed their policy of obstruction and delay while working up

60. Ibid., C, 58-60 (January 28, 1832); Mercer to Ingle, January 28, 1832.
61. Mercer to Ingle, January 28, 1832.
62. Proceedings of Directors, C, 60 (January 28, 1832), 101-103 (March 10 and 14, 1832), 214 (September 8, 1832).
popular opinion and political pressure in support of joint construction. The shrewd railroad directorate proved remarkably successful in each of its resources to political connivance. The legislature responded with a memorial requesting joint construction as a favor to the state. This petition urged the accommodation of the railroad as far as Harpers Ferry, with the Baltimore and Ohio paying all extra costs that the simultaneous progress of the two works would require. The canal company countered with a proposal that the railroad and canal companies combine their resources and complete the canal to Cumberland, receiving dividends from its trade pro-rata. The railroad then would be free to go on its way and would also have the right to fill in the gap between Cumberland and the Point of Rocks, if it wished.

The state agent, Benjamin S. Forrest, a constant and dutiful friend of the railroad, then made a modified proposal. It was designed to meet the objections of the canal company to the reduced dimensions which the state's plan required of the waterway (while maintaining the railroad at its full width). He offered, on behalf of the Baltimore and Ohio, to construct the canal to its full dimensions, guarantee repairs for five years, pay all extra costs and finish the work by December 1, 1833. The canal company objected to the length of time required for completion of the twelve mile stretch. The railroad agreed to complete the section by the time the canal was ready to introduce water from the feeder next above Harpers Ferry. The Chesapeake and Ohio then had to admit

63. Ibid., C, 106 (March 17, 1832); Special Meeting (April, 1832), Proceedings of Stockholders, A, 196-197.
64. 4th Annual Meeting (1832), Proceedings of Stockholders, A, 244-249; 6th Annual Report of the Baltimore and Ohio Railroad Company (1832), pp.16-17.
66. Ibid.
the real basis of its opposition to joint construction, i.e., the fear of competition. It reasoned that there was not enough trade in the valley to warrant the construction of both works at this time. Nor would the Board be true to its responsibilities to the stockholders if it thus endangered the return on their investment. Instead, the company reiterated its own proposals: the union of the two for the construction of the canal to Cumberland, the crossing of the river by the railroad at the Point of Rocks, or — a new scheme — the construction of the railroad on the river side of the canal. The latter, a form of joint construction, was quickly rejected by the Baltimore and Ohio which, aside from technical difficulties, wished no part of the heavy repair costs the river hazards would involve or the economic disadvantages of the interposition of a rival transportation agency between it and the countryside.

The "obstinate" course of the canal company caused a clamor in the state which had been markedly absent during the three and one-half years of railroad obstructionism. The Governor officially called the attention of the Assembly to the "defiance" of the legislature's request to allow both works to continue. He suggested that the state might force the canal to accommodate the railroad by withholding further aid.

A senate committee responded with a stinging and frankly prejudiced

68. Ibid.
69. Ibid., pp. 258-259.
70. Memorial of the Baltimore and Ohio Railroad Company, February 18, 1833, loc. cit., p. 4.
report recommending the refusal of an extension of the charter. The committee stated that they regarded the railroad "as decidedly and unqualifiedly a Maryland work; while they do not regard the canal in this light." 72

The Baltimore and Ohio carried its campaign for joint construction and against the canal company into the Congress of the United States. In January, 1833, President Mercer wrote of the extreme pressure which was being brought to bear upon him in the House of Representatives on behalf of the railroad's proposals. 73 Henry Clay was among the members of Congress urging a settlement. In February, the railroad company petitioned the Congress to deny the financial relief sought by the District cities. The memorial asserted that such assistance would indirectly help the Chesapeake and Ohio Canal Company and enable it to persist in its obstinate and defiant course. 74 The corporate authorities of Washington replied with an anguish protest against the unwarranted interference in the relations between the general government and the federal district. 75

The early months of 1833 saw an intensification of the railroad's campaign on all fronts. The Baltimore newspapers added their shrill voices to the general hysteria. 76 Thus at the same time that the legal and

72. **Maryland Senate Journal, 1832, Appendix I, p. 4.**
73. Mercer to Ingle (January 22, 1833).
74. **Memorial of the Baltimore and Ohio Railroad Company, February 18, 1833, loc. cit., p. 9.**
76. Mercer to Ingle (January 22, 1833). Mercer cited the "selfish clamor of the Baltimore press" as evidence of the increased tempo of the campaign against the canal.
financial position of the canal was becoming precarious, the state and the railroad and the city of Baltimore were bringing the full weight of popular opinion and political pressure to bear on the canal company.

The Chesapeake and Ohio could afford to ignore all the clamor and resist the pressure as long as its financial and legal position was secure. The assurance of the continued support of the federal government alone, in a manner to insure the completion of the work, might have sufficed. However, at the company's hour of greatest need, when its chartered rights were in danger and its financial situation was made desperate by the bankruptcy of the District cities, the federal government was indifferent, even hostile to the petitions of the Board.

The changed attitude on the part of the general government was the result of the victory of the Jacksonian party and its principles in the election of 1828. The majority in Congress in favor of national aid to internal improvements was never large. Perhaps the only justifiable basis for the canal's continued hope for further support from the general government was the example of the National Pike which for many years was pushed on despite constitutional qualms. The advent of the new administration did not augur well for any optimistic belief in federal aid. The early record of Congress under the new regime seemed to bear out the hostility of the Jacksonians to national support of public works. The new spirit was clearly expressed by resolutions in 1828 against further assistance to the Cumberland Road and opposing federal ownership of
stock in private internal improvement companies, and in 1830 opposing further aid to the Chesapeake and Ohio canal until the relative value of canals and railroads was proved by trial.

If these indications of the general tendency were not sufficient to discourage the canal company, there was ample evidence of hostility to the Chesapeake and Ohio itself. The resolution of 1830 was the result of the conflicting petitions of the canal company and the Baltimore and Ohio. Therefore, although expressed in general terms, it applied specifically to the former. For a while after the inauguration of Jackson, the proxy of the United States, the Secretary of the Treasury, expressed the indifference of the administration by ignoring the general meetings of the stockholders. In 1832, the federal government reversed itself and actively interfered in canal affairs. In that year, it sought in vain to supplant the incumbent president with one of its own choosing. All the time this by-play was going on in the company itself, the repeated petitions of the Board for further aid were being rejected by Congress.

In February, 1833, aid came from an unexpected quarter. The State of Virginia finally subscribed $250,000 to the stock of the canal company.

77. Joint Resolution for the Care and Preservation of the Cumberland Road, and of other Roads made or to be made by the Federal Government within the Boundaries of the different States, December 8, 1828, 20th Congress, 2nd Session, Senate, Document No. 6.

78. Report of the Committee on Internal Improvement, to which were Referred Sundry Petitions, Praying for an Appropriation to the Chesapeake and Ohio Canal Company, to be expended on the Western side of the Mountains, March 6, 1830, 21st Congress, 1st Session, House of Representatives, Report No. 180, p. 1.

79. Ibid.
80. Mercer to Ingle, September 1, 1829.
82. Proceedings of Directors, v, 288 (February 23, 1833).
The directors had all but given up hope of receiving help from the Old Dominion. It came now at a most critical moment in the canal's history. Had there been any reason to expect further large-scale assistance from either the United States or Virginia, the canal board might have prolonged its resistance to Maryland. Instead, even this small subscription was greatly restricted by stipulations requiring the construction of a series of outlet locks from the canal to the river (to accommodate the Virginia trade). On the other hand, the question of the impending expiration of the charter was still unanswered. There seemed good reason to assume that the long legal delay occasioned by the Baltimore and Ohio controversy would not prove sufficient cause to extend the time limit for the first hundred miles. The canal was thus inevitably forced to come to terms with Maryland. Earlier in the month, even before the passage of the Virginia act, the canal directors had formally agreed to submit to the stockholders any compromise proposed by the Maryland Assembly compatible to the company's interest.

In March, 1833, the Maryland Assembly once again took a hand in the dispute between the railroad and the canal companies. By an act passed in that month, it proposed the terms of a compromise in which all three parties would participate, the state, the canal and the railroad.

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83. Ibid., C, 293 (March 1, 1833). The Board agreed to apply $30,000 of the amount subscribed to the construction of the locks. See Report on the Completion of the Canal, loc. cit., p. 336.
84. Proceedings of Directors, B, 84 (May 22, 1830). This was the opinion of the company's own counsel.
85. Ibid., C, 282-283 (February 6, 1833).
86. Ibid., C, 312 (April 2, 1833); Mercer to Ingle, March 31, 1833.
The last-named was to subscribe to 2500 shares of Chesapeake and Ohio stock in return for the joint construction of the railroad and the canal. The sum subscribed covered all costs of extending the railway to Harpers Ferry on the dimensions and location specified in the act. The canal company, showing an understandable lack of faith in the integrity of its rival, undertook the construction of both works through the difficult passes. On its part, the legislature offered to consent to two acts, long the subject of dispute between it and the canal, when the railroad reached Harpers Ferry. These gave the canal board permission to sell surplus water and to begin the western section before completing the eastern part of its work.

The canal board hastened to call a special meeting of the stockholders to make sure that the onus of refusing the compromise would not fall on it.\(^88\) The committee which reported on the act for the general meeting recommended the rejection of the compromise.\(^89\) However, this appears to have been merely a statement for the record; the company was in no position and in no mood to resist further. On May 9, 1833, after the railroad signified its consent to some preliminary conditions designed by the canal company to protect its rights,\(^90\) the Chesapeake and Ohio formally accepted the Maryland act.\(^91\) The acceptance of the compromise

\(^88\) Mercer to Ingle, March 31, 1833; Proceedings of Directors, C, 312 (April 12, 1833)
\(^89\) Special Meeting (May 9, 1833), Proceedings of Stockholders A, 268-269.
\(^90\) Ibid., 270-274.
\(^91\) Ibid., 274. The Baltimore and Ohio agreed to subscribe $266,000 to the stock of the canal company in return for the grading of four and one-tenth miles of roadbed at the narrow passes between Point of Rocks and Harpers Ferry. Proceedings of Directors, C, 341-342 (May 7, 1833). Hungerford gives a completely erroneous interpretation to the event in his Story of the Baltimore and Ohio Railroad, I, 141. "The obligatory subscription of the Baltimore and Ohio to 2500 of its shares -- which in the end virtually amounted to a purchase of the canal --" At the time of this (Continued on next page)
did not mark the end of trouble between the railroad and the canal, but there did ensue a brief period of unusual good feelings. The railroad even revived talk of abandoning their road to the west in favor of a line down the Shenandoah valley.

Politics, Finance and Construction, 1833-1835

The compromise of 1833 cleared up the threat to the legal existence of the canal, but the financial problem still remained. Again the company turned to the United States for help. In an effort to win the favor of the new regime, it consented to the replacement of its president, Charles F. Mercer, by ex-Secretary of War John Eaton, a friend of Andrew Jackson and a principal in the Peggy Eaton affair. After a short struggle in which bitter accusations were exchanged, the stockholders elected Major Eaton by a vote of 5,064 to 3,430. Fortified

Fortified

91. (Continued from previous page)

"purchase" for 2500 shares, there were almost 40,000 shares of canal stock outstanding, of which 25,000 — the controlling interest — were held by the United States and the District cities. In 1838 and 1839 the additional subscription by the State of Maryland of 30,000 and 13,750 shares respectively secured control of the canal for the State. The latter retained control of the stock until after the turn of the century. By that time, the Baltimore and Ohio was in control of the operation of the canal through its ownership of the bonds of 1844. The affairs of the company were being managed by the trustees of 1844 under the direction of the court. In 1906, the State sold its stock in the canal company to the Vice-President of the Western Maryland Railroad, F. S. Landstreet. During the latter's financial difficulties in 1907 and the years following, the stock of the canal company was turned over to the Continental Trust Company. From there it was transferred to the Baltimore and Ohio. See below, chapters VI and XI.


93. Ibid., p. 15. This was not a new idea, for it had been suggested back in 1831 during the legal controversy. L. Lee to Mercer, January 13, 1831. It seemed to be a routine proposal used by the railroad to lull the canal into a sense of security and to demonstrate to the assembly the railroad's selfless efforts to accommodate its adversary. There is no evidence that the railroad seriously considered the project at this time.

94. 5th Annual Meeting (1833), Proceedings of Stockholders, p. 313; Miles' Register, XI. IV, No. 17 (June 22, 1833), 270-271. 1798 votes of Maryland and Georgetown were lost because of a division among the proxies. If cast for Mercer, as had been expected, they would have been sufficient to elect him.
by this important accession, the canal board memorialized Congress for a further subscription.95 Notwithstanding the influence of the new president, Congress continued to refuse further aid to the project.

Once again the company was compelled to turn to other sources for assistance. Major Eaton made the customary efforts to obtain loans from the banks.96 Appeals were also addressed to the legislatures of Maryland and Virginia.97 In the former case the petition was favorably received and the assembly voted an additional subscription of $125,000 in March, 183498 On the other hand, the company had in its possession $218,750 in Washington and Georgetown bonds which were currently unmarketable.99 In June, 1834, there was also $250,000 due from delinquent stockholders. The Board made no effort to force payment in view of the tight financial conditions then existing.¹⁰⁰ Without substantial accretions to its resources the canal was obliged to find other ways to continue construction. In 1834, the directors determined upon a new method, the issuance of canal scrip.¹⁰¹ A trust fund of $150,000


96. See, for example, John R. Eaton to Biddle, August 9, 1833, Letter Book B, 118-119. See also Ingle to George Thomas, Cashier, and to J. Van Ness, President, Bank of Metropolis, November 5 and 8, 1833, ibid., B, 162 and 164.

97. 5th Annual Meeting (December 9, 1833), Proceedings of Stockholders, 1,320-321.

98. Ibid. (March 24, 1834), B, 324-325.

99. 6th Annual Report (1834), p. 3. In June, 1834, the company vainly requested the cities to redeem their stocks at a moderate monthly rate. Washington to W. Bradley, Mayor of Washington, July 8, 1834, Letter Book B, 260-261; Washington to John Cox, Mayor of Georgetown, July 8, 1834, ibid., B, 262.

100. 6th Annual Report (1834), p. 4. Proceedings of Directors, D, 79 (April 18, 1834). On July 16, however, the Board ordered the institution of suits against delinquent stockholders. Ibid., D, 128 (July 16, 1834).

101. Miles’ Register, XLVI, No. 9 (April 26, 1834), 133, No. 10 (May 3, 1834), 149.
in bonds was set aside to redeem the notes as they were presented for payment. Further efforts were made late in the same year to secure loans from banks. This time the attempts met with success. The Bank of the United States advanced $200,000 in September, and other banks lent their assistance in the winter of 1834-1835 when further state aid seemed assured.

With this help construction continued. It seemed, however, that the canal was destined to carry on its work amid recurring difficulties. Trouble in 1834 and 1835 stemmed from the outbreak of open warfare between rival factions of the Irish laborers. Violence occurred first in January, 1834. The first encounter was in the nature of a preliminary skirmish between the Corkonians who were working near Dam No. 5, above Williamsport, and the Langfords, or Fardowners, from the vicinity of Dam No. 4, below the town. Several were killed in the clash before the militia arrived on the scene to restore order. Between the first and second encounter, the countryside took on the appearance of an armed

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102. 6th Annual Report (1834), p. 4; Proceedings of Directors, D, 73-74 (April 12, 1834), 91 (May 16, 1834). The legality of the scrip was challenged, but the company's counsel upheld the issue. Ibid., D, 75 (April 14, 1834), 76 (April 16, 1834).


104. Washington to Ingle, September 14, 15, 16, 1834; Proceedings of Directors, D, 159 (September 18, 1834); Washington to the President of the Bank of the United States, December 17, 1834, Letter Book B, 366-367; Report to Special Meeting (April 22, 1835), Proceedings of Stockholders, A, 368.

105. See, for example, Ingle to Henderson, April 10, 1835, Letter Book B, 438.

106. Filer's Register, XLV, No. 22 (January 25, 1834), 366; Purcell to Ingle, January 23, 1834; Williams, op. cit., I, 223. Purcell attributed the disturbances to an effort on the part of the rival organizations to oust the adherents of the other from the line of the canal. This presumably would have led to an increased rate of wages for those remaining.
camp. The Irish nursed their wounds and accumulated weapons while the local citizenry of Williamsport patrolled the Conococheague aqueduct between the opposing sides to prevent further disorder. Notwithstanding these preventive measures, the Corkonians broke loose again in a few days, committing various acts of violence on the line. On January 24, the Langfords marched up in force, about three hundred strong, armed with guns, clubs and helves. They were permitted to cross the aqueduct when they announced that their intention was merely to make a show of force. Further up the line they were joined by three or four hundred more who had apparently crossed the Conococheague behind the town. They met about three hundred Corkonians on a hill-top near Dam No. 5. Accepting a challenge they charged the latter's positions and overwhelmed them in a short pitched battle. At least five Corkonians were killed in the field and many more in the woods beyond during the flight that followed. The victorious Langfords marched back to Williamsport, disbanded and returned to their shanties. Thereafter the local militia kept order until two companies of Federal troops arrived from Fort McHenry. Leaders of the rival factions were brought together in the course of the next week and a treaty of peace

107. The account of the day's activities is based on the report of the Williamsport Banner, quoted in Miles' Register, XLV, No. 23 (February 1, 1834), 382-383, and on Williams, op. cit., I, 223-224.

108. Miles' Register, XLV, No. 23 (February 1, 1834), 383; Eaton to Janney, Smith, Junton (Directors), January 31, 1834. Eaton suggested that the company take advantage of the presence of Federal troops to discharge the trouble-makers. "The essential service...to us, will be, in staying the further progress of our works, at a time when it is evident...we cannot meet our fiscal engagements." See also Purcell to President and Directors, January 29, 1834.
was signed. Hostilities again occurred briefly the following winter, but at no time did they reach a stage of seriousness comparable to the war of 1834.

Despite these outbreaks of violence among the workers during the idle winter months, the canal began to show progress in its advance up the Potomac. The joint construction of the canal and the railroad was completed to a point opposite Harpers Ferry in 1834. The stretch of the waterway from the Ferry to Dam No. 4 was also opened in the same year. At this point the canal had been completed for eighty-six miles. By using the slackwater backed up by Dam No. 4, boats could now reach Williamsport. As far as it had been constructed it was without equal. The Erie canal was likened to a mill race in comparison. The resources of the company however had been completely exhausted. There were not even enough funds left to finish the first hundred miles.

109. Niles' Register, XLV, No. 24 (February 8, 1834), 399; Williams, op. cit., p. 224.

110. Hagerstown Torchlight quoted in Niles' Register, XLVII, No. 26 (February 21, 1835), 429. See also Proceedings of Directors, D, 234 (February 9, 1835), 256-257 (February 25, 1835). This time the workers turned out for higher wages.

111. Niles' Register, XLVI, No. 8, (April 19, 1834), 119.


113. Fredericksburg Arena, October 8, 1835, quoted in Niles' Register, XLIX, No. 8 (October 24, 1835), 127.

CHAPTER VI
AN INTERLUDE OF FINANCE AND POLITICS, 1835-1842

The Ten Million Dollar Loan

As the resources and hopes of the canal company approached their nadir in 1834, the citizens of western Maryland rallied to its support. Inhabitants of Allegany county who had not yet been able to reap the bountiful harvest of heavy land damages took the lead in calling for succor for the Chesapeake and Ohio. In this endeavor they were warmly assisted by the petty gentry of Washington county whose successful efforts to wring maximum payments from the company were partly responsible for its financial embarrassment.

A convention for the promotion of internal improvements met in Baltimore on December 6, 1834, at the call of an earlier meeting in Allegany county on October 18. Representatives of Maryland, Virginia, Pennsylvania, Ohio, and the District cities were present. The choice of Baltimore as the seat of the convention is significant as an indication of the shifting basis of support for the canal and of the fact that Baltimore had been temporarily mollified by the compromise of 1835. Maryland was about to assume the sole responsi-

2. Ibid., pp. 3-7.
3. Ibid., pp. 7-10.
4. Ingle to R.H. Henderson, July 28, 1834, Letter Book B, 277. The compromise of 1835 provided that the railroad would not build its line west of Harpers Ferry on the Maryland side of the river until the canal was completed to Cumberland, or until 1840, whichever occurred first. Special Report on the Completion of the Canal, loc. cit., p. 534.
bility for completing the work.

The intentions of the convention were clearly manifested in the selection of George C. Washington, third president of the canal company as chairman. They could also be seen in the adoption of resolutions and the appointment of committees. 5 Charles F. Mercer, an ex-president of the canal, reported for the principal committee named to ascertain the probable cost of completing the canal. The report stated that $2,000,000 would be required to finish the eastern section, making the total cost of that part of the canal, $6,500,000. 6 This figure was based on an estimate by Alfred Gruger of the probable cost of the twenty-seven miles between Dam No. 5, above Williamsport and Dam No. 6 at Cacapon, above Hancock. 7 The entire canal, to the Ohio, was expected to cost $14,500,000 under the revised estimates. 8 Subsequently, Representative Mercer brought up the subject of substituting a railroad for the proposed tunnel through the mountains. He pointed out that if the railroad was used at all it would have to extend over the entire middle section, because the water supply for the eastern slopes had to be drawn through the tunnel from the west. 9 Another report to the convention reviewed in glowing terms the probable trade and revenue of the completed canal. 10

6. Ibid., p. 59.
7.
8. Ibid., p. 63.
10. Ibid., pp. 45 ff.
The failure of Congress to assume the role which had been expected of it in the direction and support of the emergency and one phase of the effort in the work in the hands of the discretion and in the preparation of profound and important economic and social legislation, and the depression of the western sections, and the fact that the emergency had created a demand for the readjustment of Federal policy in the matter of Federal investment and national banking and the incorporation of commercial banks and the exercise of the power of the Federal Reserve Board and the control of the currency.

Moreover, the war itself, which was not only a critical economic war but a moral war, created a demand for the readjustment of Federal policy in the matter of Federal investment and national banking and the control of the currency.

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in its own main line of public works. Virginia had also lost
much of its enthusiasm for the canal and was busy developing
its own exclusive route to the west via the James and Kanawha
rivers. Friends of the canal in the Virginia Assembly introduced
a bill to guarantee a loan of $500,000 for the canal company in
return for a mortgage of canal property to the state. This was
the best that they felt they could push through the Assembly.
After a checkered career of debate, rejection, reconsideration and
passage in the lower house, the proposal met final defeat in the
Senate. It lost by only one vote when called up during the absence
of several known friends of the project. The canal was thus
forced to rely solely upon the support of the State of Maryland.
This fact necessarily drove the company back into the arena of
Maryland politics. There its activities tended to offset the
dominance of the railroad interests which had for so long a time
successfully utilized political pressure to the detriment of the
Chesapeake and Ohio.

The company was bringing great weight to bear on the Maryland
legislature to pass a bill to loan the entire $2,000,000 required
to complete the eastern section. The memorial of the politically-
impressive Internal Improvement Convention played its part, assisted
by the president of the canal company, George C. Washington, who was
personally active at Annapolis. The influence of certain members of
the Assembly was also a factor in the ultimate success of the

14. Hiller Register, XLVIII, No. 1 (March 7, 1836), 2, No. 2 (March 14,
1836), 15.
15 President Washington concentrated all his efforts on the Maryland bill, expressing little hope of obtaining any aid from Congress or from Virginia. 16 Even while the Maryland loan was still in doubt he accepted the defeat of the Virginia proposal philosophically. It was just as well that the latter lost, he wrote, for the company could not accept both acts (each of which required a mortgage of canal property). In this way the company was saved the embarrassment of refusing proffered assistance. 17 The Maryland Assembly subsequently passed the act authorizing the loan, with members from Baltimore and the Eastern Shore supporting it as well as the pre-canal delegates from the western counties. 18 One argument which apparently had a great effect in winning support for the measure was that the future revenues of the canal would provide sizable financial returns to the state later on. 19 In line with this attitude, the delegates were said to fear the consequences of mortgaging the canal to Virginia for only $500,000 - a sum clearly inadequate to complete it to Cumberland. 20 The terms of the act provided for the payment of $600,000 on June 20, 1835, $200,000 on October 1, 1835, $200,000 on January 1, 1836, and four quarterly installments of $250,000 each on the first of April, July and October, 1836, and

15. Proceedings of Directors, E, 82-84 (June 29, 1835), 185 (November 9, 1835). Joseph Merrick was paid $3,000 for his services at Annapolis during the winter of 1834-1835.
18. Proceedings of Directors, D, 285 (March 20, 1835); Washington to Ingle, March 1, 1835; A. Stewart to Ingle, March 6, 1835; Alexander Nesbit to Washington, April 8, 1835.
19. Washington to Ingle, March 1, 1835. It was proposed to give to the counties for educational purposes all receipts over the amount necessary to provide a sinking fund to redeem the debt.
20. Ingle to Barnard, March 6, 1835.
January, 1837. 21 The stockholders formally accepted the act and authorized the mortgage at a special meeting in April, 1835. 22

Unlike its disastrous experiences later on, the company obtained the money for the bonds issued to pay the loan relatively easily. Financial conditions here and abroad were favorable to the disposal of the state bonds (the form Maryland aid invariably took) at a premium. They were offered as a block to avoid speculation on future sales 25 and were taken by a Baltimore house at a premium of $16.40 per $100. 24 General satisfaction was expressed that the state loaned the money instead of forcing the company to seek the funds from foreign capitalists. Maryland was interested in the project and could be counted upon to deal fairly with the canal company. In fact, by foregoing dividends as a one-sixth stockholder to permit repayment of the loan, the state would be repaying her own loan to that extent. 25

**Progress of Construction**

The canal company was now in a position to liquidate its entire debt and to push the construction of its waterway. The immediate obligations of the company amounted to over half a million dollars. 26

26. Washington to Treasurer of the Western Shore, June 4, 1835, Letter Book C, 26; Report of the Committee to Investigate the Chesapeake and Ohio Canal Company (Annapolis, 1838), p. 4. Washington says the debt was between $400,000 and $500,000; the report says $559,771.05. The canal scrip was also retired. See, for example, Proceedings of Directors, D 408 (September 30, 1835).
The clerk paid out upwards of $400,000 before sunset of the day
the initial payment of $600,000 was received. The directors
ordered the route from Casapon to Cumberland to be surveyed for
final location preparatory to putting this last stretch of the
eastern section under contract. 27 The Board also appointed one
of its members, George Bender, to fill the new office of commissioner
which was created to provide effective supervision of the con-
struction. 28 The work had moved so far westward that it was no
longer possible for the directors, meeting in Washington, to
maintain adequate control of operations. The commissioner had
authority over the lesser officials, the acquisition of land,
the use of company property and the re-letting of abandoned
contracts. The Board reserved to itself the first letting of
contracts and the right of review of all the commissioner’s acts.

The actual construction of the new sections proved more
difficult than had been anticipated. Consequently it was also
more expensive. One reason for this was that assistant engineer
Charles Pink again raised high the banner of perfection which the
late president, C.P. Carter, had first carried so persistently.
Writing more or less as an engineer and with apparently little
knowledge of, or concern for, financial considerations, he proposed
a revision of procedure in extending the canal. He urged greater

27. Letter to Bender, June 22, 1855, Letter Book C, 34.
28. Proceedings of Directors, D, 342 (June 17, 1855).
29. Ibid., D, 294-301 (April 29, 1855).
care and expense in the first cost of the work in order to secure cheaper repair and maintenance costs. Regardless of its economic and technical soundness (and future experience left much room for doubt), it proved to be a politically disastrous course for the company in the 'thirties and 'forties. It also left the future profitableness of the canal clouded by a staggering capitalization. Nevertheless the Board apparently adopted the suggestion, if for no other reason than that it was the only completely-conceived program at hand. The directors advanced Fisk to equal rank with Purcell as resident engineer and placed him in charge of the important new third residency upon which all construction was then concentrated.

The task of surveying the route from Casapon to Cumberland was carried on under great difficulties. The Board chose Purcell for the assignment, and he proceeded at once to Cumberland. Once there he encountered trouble in forming his party. The wages offered by the company for axemen and chainmen were so meagre that the first group engaged refused to serve, and the whole party was broken up. The Board by this time was completely out of touch with the realities of the situation and was clearly confused by this unaccustomed lack of familiarity on its part with the problems on the line. It censured the engineer for what was really the result of its own niggardliness. From then on relations steadily worsened.

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30. Fisk to President and Directors, March 30, 1855.
32. Ibid., D, 311 (May 25, 1855).
33. Ibid., D, 328-329 (June 10, 1855).
between Purcell and the directors and between Purcell and Fisk, who by the simple process of going over the former's head and corresponding directly with the Board had replaced him as the favorite.

There were other causes of friction and delay besides this initial misunderstanding. The company failed to provide tents for the surveying party, through sheer neglect or because of a hope that accommodations could be secured at a reasonable price from the inhabitants of the countryside. If the latter reason is correct, the Board erred sadly in its estimation of the thrifty petty farmers. The most miserable lodgings were furnished by the latter only at "the most extravagant prices, & hardly at any price." The members of the party frequently found it necessary to sleep in make-shift quarters of their own construction which were usually woefully inadequate for their purpose. Poor health also delayed the surveys. The sickly season in the upper valley was reported to be the worst in ten years. Finally, Purcell in desperation protested that a definite location of the line prior to beginning construction, one of Fisk's pet theories, was impossible in practice. He cited particularly the impracticability of the scheme on heavily wooded slopes and in places where the surface

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34. See Letters Received, July–December, 1885. At times the differences between the two engineers were slight and not to frequent. On occasions, however, they became serious. See, for example, their joint report of December 16, 1885. Purcell finally resigned in March, 1886. Purcell to President and Directors, March 4, 1886; Proceedings of Directors, E, 25-26 (March 5, 1886).

35. Bender to Ingle, August 1, 1885.

36. Fisk to Bender, August 17, 1885.
gave indications of a rock sub-stratum, a fact which could be
asserted only by preliminary cuttings.

Above Cacapon two other questions presented themselves for
solution in addition to the ruggedness of the country. One of these
was the location of a dam and feeder near the mouth of the South Branch.
This was the original site chosen for Dam No. 7. Now it appeared that
several alternatives were possible. The dam and feeder might be
dispensed with entirely (as was ultimately done), until experience
proved it was necessary and the funds could be accumulated to erect it.
Another proposal called for the introduction of the South Branch
itself as a feeder. According to this suggestion, a smaller dam would
be built farther up the branch and an aqueduct constructed from there
across the Potomac to the canal. The original plan for a dam in the
main river near the mouth of the branch, however, had advantages in
the accommodation of a larger amount of the Virginia trade that argued
strongly in its favor. Before the directors determined on the location
of the dam, they were called upon to make a decision that would affect
the height of the dam if built in the Potomac. That second question was
the location of the canal at Cumberland.

The issue at Cumberland was between the adoption of a high
level line which would carry the canal behind the village to a connection
with Wils Creek and a low level route along the Potomac into the center

57. Purcell to Washington, January 12, 1836.
58. Morris to Pink, August 1, 1835. A major objection to the construction
of the dam in the main river was the engineering problem involved. The
banks of the river where the dam was to be built sloped gradually up
to the rim of the valley. But the height of the freechets in the valley
below required a very high dam to feed the canal at a level which would
render it secure from floods. To erect a dam to the proper height would
flood many valuable acres of rich bottom land.
of the town. The company and its engineers were inclined to adopt
the high level canal. It was a shorter route to the west; it was
more protected from the ravages of the river; and it would involve
lower land damages. They conceded that the low level would be
advisable if the canal stopped at Cumberland, but the upper one would
favor a connection with the Ohio. The Board held a meeting in
Cumberland in July, 1835, and ordered the survey and estimate of both
routes. The citizens of the town became greatly agitated over the
prospect of being deprived of the full advantages of the lower route.
At a town meeting on September 29, they protested the affront to the
town which would be felt if the high level were adopted, the danger to
the health of the town which would result from the reduction of water
in the Potomac by a dam and feeder above the town, and many other
grievances both real and imaginary which would be felt if the upper
route were selected. Agitation increased when the committee of the
canal board reported in favor of the high level, on October 9. As a
final effort to secure the adoption of the Potomac river route, the
citizens of Cumberland made the greatest sacrifice which any inhabitants
of western Maryland had been forced to make. They abandoned their
dreams of high prices for their lands to secure the large and lucrative
prospective trade of the canal. The town, and many private citizens,

39. Report of the Committee on the location of the Canal from Dam No. 6
to Cumberland, October 9, 1835; filed in Letters Received.
40. Proceedings of Directors, D, 569-570 (July 13, 1835).
41. Notice of a Town Meeting (Cumberland, September 29, 1835), Mayor Gephart
and others to President and Directors, October 1, 1835; Dr. J.M. Lawrence
to President and Directors ?; October 1, 1835.
42. Report of the Committee, October 9, 1835, in Letters Received.
generously waived all claims for property and bridge damages. 45
The Board referred the whole question to the stockholders, in
November, seeking particularly an expression of opinion from the
Maryland representative. 44 After hearing the report of the president
explaining the division among the directors themselves on the question, 45
the stockholders, on the action of the Maryland proxy, gave a vote
of confidence in the decision of the Board and referred the whole matter
back to it. 46 The Board then reconsidered its decision and adopted the
low level route. 47

Costs threatened to exceed greatly the estimates which were
the basis of the $2,000,000 loan. 48 The allowance for masonry work
was endangered by the absence of sufficient rock. As early as May, 1885,
Purcell reported from Cumberland that he had never seen a region so
destitute of good building stone. 49 A.B. McFarland, superintendent of

45. Report to 7th Annual Meeting (November 4, 1885), Proceedings of
Stockholders, A, 411-415.
44. Ibid., 419.
45. Ibid., 419. A majority of the Board were said to favor the low level route.
46. Ibid., 421.
47. Proceedings of Directors, D, 428 (November 5, 1885).
48. The Board had optimistically reported in 1881 that it expected stone
and lime to be more conveniently located, if not more plentiful above
the Blue Ridge. It also anticipated that the banks and walls would
not be so high or the dams so wide. There would be no large aqueducts
and there would be plenty of food for man and beast. 3rd Annual Report
(1881), Proceedings of Stockholders, A, 150. Instead, however, costs
mounted and materials remained scarce. Temporary bridges were thrown
across the river in 1885 to procure material for embankments on Sections
it was necessary to resort to the same procedure to obtain stone for the
masonry.
49. Purcell to President and Directors, May 26, 1885. Fisk, on the other
hand optimistically reported that there was sufficient stone for the
contemplated masonry below Casapon. Report on the location of the Canal
from Dam No. 5 to Casapon, Letters Received, 1885.
masonry, made a more thorough inspection of the area and confirmed the deficiency of high quality rock. A large part of the strata was found to be composed of the normally friable red sandstone, much of it already rotten. Good limestone was discovered at scattered points on both sides of the river, but at some distance from the stream. The best supplies were located near the mouth of the Cacapon on the Virginia side and at Town Hill on the Maryland side. 50
The use of temporary wooden locks was suggested as an expedient until the opening of the canal provided cheap transportation for stone from the lower valley. 51 Other suggestions were made, some old and some new, to reduce expenses. Purcell revived the proposal to adopt slackwater navigation for some distance above the dams. 52 Because the Maryland shore was so rugged, another engineer renewed the suggestion to shift the canal to the Virginia bank. 53 For the first time officials on the line proposed to cut a tunnel through a neck of land called the Devil's Eyebrow to save five miles of tortuous river bed and cliffs at the Paw Paw Bends of the Potomac. 54

Land damages also added to the increasing expense of construction. They continued very high in both Washington and Allegheny counties.

Some proprietors had granted the right of way to the company in 1829, to give the canal preferrence over the railroad. Now when the Chesapeake

50. McFarland to Bender, January 2, 1836. Three years later Fisk adopted substantially the same position regarding the scarcity of good building stone above Cacapon. Fisk to President and Directors, May 27, 1839.
52. Purcell to Bender, June 3, 1835; 7th Annual Report (1835), p. 9.
53. Morris to Fisk, August 1, 1835.
54. Bender to President and Directors, May 23, 1835; Morris to Fisk, August 1, 5, 1835. The tunnel was adopted in December, 1835. Proceedings of Directors, D, 445 (December 21, 1835).
and Ohio agent tried to sound out the landholders as to damages he found them noncommittal, awaiting the decision on the location of the line at Cumberland. 55 Juries were generally out for extreme satisfaction, and prices were very high. 56 Although the company won a victory in one appeal to the courts, the hoped-for relief proved illusory. 57 Sample prices ranged all the way from two and one-half to twenty five times the estimated costs. 58 The commissioner attributed the attitude of the inhabitants to a desire to force the company to abandon its work and surrender control to the State of Maryland. He cited the recent convention in Baltimore and the plea of one of the lawyers for the proprietors in which he referred to the Chesapeake and Ohio as "this great wealthy foreign Company [which] should not be permitted to trespass upon the Farmer without being made to pay amply for it." 59 Despite the passions of oratory, a

55. W. E. Pigman to Bender, June 4, 1855.
56. W. Price and Merrick to President and Directors, July 22, 1855; Bender to President and Directors, August 10, 1855.
57. Merrick to President and Directors, October 11, 1855. The juries were severely censured, but without effect.
58. Bender to President and Directors, May 31, 1856:

<table>
<thead>
<tr>
<th>Heirs of Dan. Smith, estimated $1,000</th>
<th>cost $2,800</th>
</tr>
</thead>
<tbody>
<tr>
<td>J. Charles, Jr.</td>
<td>100</td>
</tr>
<tr>
<td>Sam. Frater</td>
<td>1,000</td>
</tr>
<tr>
<td>Frater heirs</td>
<td>500</td>
</tr>
<tr>
<td>Tobias Johnson</td>
<td>1,150</td>
</tr>
<tr>
<td>Ocoo</td>
<td>225</td>
</tr>
<tr>
<td>Linn</td>
<td>400</td>
</tr>
<tr>
<td>Peter Miller (per agreement)</td>
<td>150</td>
</tr>
<tr>
<td>J. Chambers</td>
<td>625</td>
</tr>
<tr>
<td>Widow Bevans</td>
<td>275</td>
</tr>
</tbody>
</table>

Previous to this series of condemnations some proprietors in Allegheny County had been willing to compromise, if only to avoid paying the lawyer's fees. The prices up to that time approximated the estimates of the engineers. Thereafter the prospects for extreme satisfaction were so promising that most landowners were willing to pay legal costs to gain the larger damages.

59. Bender to Washington, May 7, 1856.
fairer rationalization would probably be that the small landholders of western Maryland were determined to obtain maximum satisfaction from the company for their lands.

The company also encountered obstacles to the full enjoyment of its trade. Several clashes occurred as a result of the joint construction of the railroad and the canal to Harpers Ferry. Shippers complained that the canal was filling up and becoming dangerous for navigation because of the rock which was falling or being thrown into the waterway from the railroad which was building further up the slope. The parallel course of the two works brought up questions of interference. The railroad demanded the right to use steam engines on the line between Point of Rocks and Harpers Ferry without first building the fence required by the compromise of 1855. The canal company had insisted on the fence to protect its trade by shutting off from the view of the canal miles the terrifying sight of the locomotives. The railroad wanted to experiment with the use of steam without erecting the fence. It suggested that a rail fence be built, if necessary, on the river side of the towpath in place of the board fence between the railroad and the canal.

After a long dispute, the canal company finally agreed, in 1856, to

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60. Proceedings of Directors, D, 328 (May 24, 1855).
61. Ibid., D, 272 (April 8, 1855).
63. P.E. Thomas to McCulloch, State Agent, May 31, 1855. By this time the former's demands were becoming more forthright and blunt, more insistent.
accept $3725 from the railroad and build the rail fence on the
towpath as suggested. 64

The accommodation of the railroad bridge at Harpers Ferry
led to another series of controversies. An agreement was formally
entered into early in 1855, 65 the terms of which established the
location and dimensions of the viaduct. The railroad company also
consented to the construction of a tracking path for canal trade
across the river alongside the bridge. The railroad further agreed
to carry part of the canal's business across the river over its own
tracks at prevailing rates. The tracking path was accordingly built
shortly thereafter. 66 Early in 1857, however, the canal company
discovered that the right of access to the path at the Virginia end
of the viaduct was not included in the agreement. The owner of this
property was Gerard B. Nager, an old enemy of the canal. In the
latter year he began the construction of a brick warehouse which was
located so as to take full advantage of the rail traffic and which
incidentally effectively blocked access to the tracking path. 67
The canal board took the matter up with the Baltimore and Ohio,
which politely and sadly protested its innocence and helplessness in
the affair. 68 Then Nager decided to permit trespass upon the payment

64. Proceedings of Directors, E, 185 (November 9, 1855); 172-174 (November
22, 1856).
65. Ibid., D, 214-217 (January 13, 1855), 255 (February 11, 1855).
66. Ibid., D, 456 (December 4, 1855).
67. Elgin to President and Directors, April 13 and 23, 1857.
68. Proceedings of Directors, E, 259 (April 19, 1857); 248 (May 3, 1857);
Ingle to President and Directors of the Baltimore and Ohio Railroad
Company, April 27, 1857, Letter Book D, 115-118; Ingle to J.W.
Patterson, President of the Baltimore and Ohio Railroad Company,
May 5, 1857, ibid., D, 120.
of an appropriate toll. 69 The canal sought to condemn the land needed but was unsuccessful, and the tracking path remained practically unused. 70 Wager eventually secured a virtual monopoly of storage facilities at Harpers Ferry which was the cause of much complaint during the next few years. 71 In an effort to complete the monopoly, Wager sought, in 1859, to lease a site for a warehouse at Lock 85, opposite the town. The canal board consented to make the lease in return for a satisfactory arrangement about the tracking path. 72 Wager protested his inability to negotiate on that basis, 73 but continued correspondence, effectively preventing competition by any other warehouse on the site. Eventually, the directors despaired of coming to terms with him and granted the warehouse site to another applicant. 74 The Harpers Ferry problem remained unsolved well into the 'forties.

The combination of increased land and construction costs proved too much for the canal. Land costs averaged more than double the 1854 estimates, $2,820 a mile rather than $1,000. 75 Construction costs also rose rapidly. In 1854, Gruger had allowed $663,676 for the twenty-seven miles in the estimate which was the basis of the $2,000,000 loan. Fisk revised this figure in June, 1855,

69. Elgin to President and Directors, September 6, 1857.
70. Proceedings of Directors, E, 510 (September 6, 1857), 481-482 (September 5, 1859); Ingle to Wager, April 26, 1859, Letter Book E, 205. The Board ordered installation of a swinging ladder at the Virginia end of the tracking path, communicating with the river.
71. Starbuck to Smith, April 15, 1859.
73. Wager to Ingle, May 6, 1858.
75. Bender to President and Directors, May 31, 1858.
almost doubling it to $1,022,554. In June, 1836, another revision raised the cost to about four times the original estimate, $2,427,497. As a result of these developments, the resources of the company were found to be woefully inadequate for the job. Curtailment of operations began as early as January, 1836. In that month the Board suspended the letting of contracts and the condemnation of land above Casacon (Dam No. 6).  

The Eight Million Dollar Bill

The need for larger resources again drove the Chesapeake and Ohio into local politics to seek further aid. The District cities were in no position to offer assistance. Indeed they were bankrupt, and were only relieved by the assumption of their debts by the federal government. In May, 1836, A petition to the Virginia Assembly produced a bill for an additional subscription from that state. After a promising course in the early stages, the proposal met defeat through a parliamentary trick by its rival, the James river improvement project. Friends of the latter secured a vote of their measure first and with the assistance of Potomac interests were successful. They then left the chamber and the Chesapeake and Ohio bill which came up for a vote next was defeated.  

76. 8th Annual Report (1836), pp. 2-4.  
77. Ingle to Bender, January 9, 1836, Letter Book C, 187.  
78. Ingle to Bender, January 12, 1836, Letter Book C, 198; Bender to Ingle, January 19, 1836.  
In Maryland, the canal had better support and was more successful. The announcement of the curtailment in January, 1816, was received with consternation by the long-suffering but impatient inhabitants of western Maryland. Town meetings like that at Cumberland passed resolutions urging the legislature to grant further aid. The popularity of the canal had grown as it advanced westward and became an increasingly important factor in the local welfare. Furthermore, the Baltimore and Ohio railroad was also in need of further assistance at this time. Finally, Maryland was being swept by an internal improvement fever, with projects for several local railroads and canals.

Opposition in the Assembly to large appropriations for internal improvements was still strong. There was another investigation of canal affairs to ascertain whether the two million dollar loan had been misused. The committee finally decided that the company had erred in judgment but not in design in adopting the estimate of Granger and the report of the Internal Improvement Convention. As for misappropriation of the funds, the report agreed that the company had to discharge the greater part of its $550,771.05 debt before it could comply with the legal conditions of the loan. The committee closed

81. The effect of the work stoppage on business at Cumberland was immediate. It caused a very considerable panic in Cumberland. Two hours after the arrival of the news, the price of produce came down at least 10 per cent. Business still continues to be dull, our principal streets presenting an unusual barrenness; the merchant is idle; the mechanic slow in the transaction of his business; the speculator is cut to the quick... "Niles' Register, XLIX, No. 25 (February 20, 1856), p. 426.

84. Ibid., pp. 540 ff. See also Alvin Harlow, Old Cowpaths, p. 236.
85. Report of the Committee to Investigate the Chesapeake and Ohio Canal Company, p. 5.
86. Ibid., p. 4. 8th Annual Report (1856). The company was accused of

(Continued on next page)
its report by urging an end to all doubts and the completion of the state's public works. The committee on ways and means also urged a large internal improvement program as an aid to state finances in the future.\textsuperscript{87} Notwithstanding these recommendations and the activity of many friends of the railroad and canal companies,\textsuperscript{88} the bill providing eight millions for these projects failed to pass the house of delegates by one vote, 35 to 34, March 31, 1856.\textsuperscript{89} The Assembly then adjourned until May 4, when a special session would take up the proposal after the public had had an opportunity to discuss it.\textsuperscript{90}

The friends of internal improvements stirred up the local populace to a fever pitch. The agitation came to a climax with a monster rally in Baltimore on May 2, which met at the call of an earlier town meeting in the same city. Representatives of the whole state and friends from Pennsylvania and Virginia attended. The meeting adopted resolutions urging the state to complete the public works. To this end, the state should secure control of the

\textsuperscript{86} (Continued from previous page)

misappropriating $379,000 of the $2,000,000 - applying it to past debts and to repairs and improvements, rather than the completion of the eastern section.

\textsuperscript{87} "Report of the Committee on Ways and Means of the House of Delegates, on the Subject of the Finances and Internal Improvements," March 9, 1856. \textit{A Short History of the Public Debt of Maryland} (Baltimore, 1844), Appendix, Document I, pp. 52-53.

\textsuperscript{88} Joseph Merrick was paid $10,000 for his services in 1856, 1857, and 1858. \textit{Proceedings of Directors, 5, 406 (May 9, 1859).} McCulloch was content to accept only his expenses. David Ridgely also received payment for his services. Ridgely to Washington, June 4, 1856.

\textsuperscript{89} \textit{A Short History of the Public Debt of Maryland}, p. 18.

\textsuperscript{90} \textit{Ibid.}, p. 21.

\textsuperscript{91} "Journal of the Internal Improvement Convention (Baltimore, May 2, 1856)," \textit{A Short History of the Public Debt of Maryland}, pp. 23-24. See also the "Address of the City of Baltimore to the People of Maryland, April 12, 1856," \textit{ibid.}, App., pp. 69-72.
Chesapeake and Ohio, bring its trade to Baltimore by means of
the Maryland canal, permit the extension of the Baltimore and Ohio
to the west through Maryland, and encourage the development of
local railroads in other parts of the state. After this tremendous
outburst of enthusiasm, the friends of internal improvements turned
to Annapolis to await the new session with impatience and confidence.

The special session met in May 1836 to consider the present
condition of state finances and the public works. The subjects were
duly referred to the joint committee on internal improvements. The
majority of the committee reported unfavorably on the omnibus bill
in a penetrating review of the whole question. It criticized the
haste and lack of adequate information which characterized the
preparation of the measure. There had been no surveys made for the
Baltimore and Ohio railroad and no accurate data presented upon which
to estimate the probable cost of the work. The members could see
no reason for extending the canal if its terminus was to remain in
the District of Columbia. Yet despite assurances that it would be
brought to Baltimore, there had been no surveys or estimates of the
probable cost of a branch canal upon which to base an appropriation.
It was also difficult to see the reason for extending both canal and
railroad if one were more advantageous than the others making it inevitable

93. "Majority Report of the Joint Committee of Both Branches of the
Legislature, appointed to Investigate the Subject of Internal Improve-
ment," A Short History of the Public Debt of Maryland, p. 54.
94. Ibid., p. 55.
95. Ibid., p. 56.
that one of the works should become a liability. Similar criticisms were applied to the proposed Eastern Shore railroad. Above all, the exhausted condition of the state treasury would not permit large expenditures for public works. The minority rejected the defeatist, do-nothing policy of the majority report and urged the eight million dollar bill as a logical culmination of the state's efforts to secure a share of the western trade and as a measure to provide for the future stability of state finances.

The Assembly, undaunted by the warning of the majority report, adopted the views of the minority. The house of delegates passed the internal improvements bill, June 5, 1856, by a vote of 48 to 39, and the senate passed it shortly thereafter, 11 to 2. The act provided for the subscription of eight million dollars to various internal improvement companies: $5,000,000 each to the Chesapeake and Ohio and the Baltimore and Ohio, $1,000,000 to the Baltimore and Susquehanna railroad, $500,000 to the Maryland Canal Company, and $250,000 each to the Annapolis and Elkridge railroad and the Eastern Shore railroad. The payments to the Chesapeake and Ohio were to be made in three annual installments. Before any payments would

96. Ibid., pp. 55-57.
97. Ibid., p. 36.
98. Ibid., p. 34.
100. Ibid., pp. 40-41.
101. Aids to Resolution Relating to the Chesapeake and Ohio Canal Company (Washington, 1858), pp. 55-68.
be made to either the railroad or the canal, the Maryland Canal Company must be organized with sufficient funds to insure the construction of its work. The Baltimore and Ohio was to be released from the prohibition against extending its line beyond Harpers Ferry before 1840. As usual, the subscriptions took the form of state bonds.

Giving effect to the act was a relatively simple matter. The Chesapeake and Ohio and the Baltimore and Ohio came to an agreement over the settlement of any disputes that might arise between the two companies. The canal stockholders accepted the act July 29, 1836, the same day that the arrangement with the railroad was consummated. The Maryland Canal Company went through the ritual of securing promises of subscriptions and organization by Baltimore citizens. The fact of organization was duly certified by the Treasurer of the Western Shore, although the two earlier surveys had shown the only practicable route to lie through the District, a route specifically forbidden by the omnibus act. The subscriptions to the Baltimore and Ohio and the Chesapeake and Ohio were then released from the legal restrictions of the act.

Rising Costs and Labor Unrest

The payments on the two million dollar loan and the promise of an additional subscription of three million dollars might be expected to usher in an outburst of renewed activity in construction. But before any real progress could be made, serious obstacles to the successful utilization of the new resources appeared. Costs rose sharply in the summer of 1850 and soared thereafter to totally unexpected heights. There were repeated outbursts of labor strife from 1856 to 1858 on a scale heretofore unknown on this canal.

Even the problem of obtaining and marketing the bonds themselves involved years of effort. Instead of the successful realization of justifiable expectations, the company experienced only exasperation and frustration between 1856 and 1842.

Once more the Board was partly responsible for its own troubles. It again rejected proposals to adopt expedients in construction to save time and money.

In the location and construction of the line of canal above dam No. 5, as well as that designed from Casapone to Cumberland, the Board has acted on the principle that temporary works and expedients, to hasten the opening of the navigation to the coal region, cannot accomplish the object for which this magnificent improvement was designed, and would prove a failure alike discreditable to its promoters and managers, as well as to the community concerned; neither would the interest of the stockholders have been consulted by a plan of operation looking only to saving in cost and time. False and imperfect construction and location would necessarily induce frequent costly repairs, amounting eventually to more than the first cost of a perfect work; ... they have endeavored to avoid false notions of economy in the construction of a work which is not designed to subserve the purposes of the present day or century, but is to endure for all time.
As long as this attitude prevailed among the directorate, the canal's future would continue dark.

As early as August, 1856, the contractors were already in dire straits. The Board asked the engineer to recommend revisions of the estimates in view of the "unusual and unexpected increase [which] has taken place in the price of labour and of all provision usually required in the construction of extensive works..."110 Fisk recommended an increase of about 8 per cent on the estimates for eighteen contractors (equal to 5 per cent of the total cost of the twenty-seven miles).111 The Board adopted the recommendations and ordered the advances to be made.112 This, however, was just the beginning of a tendency to raise the prices. In February, 1857, a further increase of $106,606 to the contractors on the twenty-seven miles was recommended by a directors' committee.113 In August, 1857, Fisk made out estimates for the fifty miles above Casapex up at a 50 per cent increase over January, 1856, prices.114 A review of contract prices in 1856 indicated the continuing increase in costs. Five locks which had been let for 15 per cent below estimates in January, 1856, had been abandoned and relit until now the prices were

110. Proceedings of Directors, E, 126-127 (August 20, 1856).
111. Fisk to Bender, August 22, 1856. See also the printed notice of the action of the Board, August 25, 1856, in Letters Received.
114. Fisk to Bender, August 5, 1857.
26 per cent above estimates. The Board passed one order for a flat 10 per cent increase on all prices. Many individual contracts, however, had been re-let for increases of from 25 to 40 per cent.\textsuperscript{115} An indication of the advance in prices since December 1, 1887, was given by a comparison of costs for certain items on Sections No. 205 and 206: excavation was raised from 11¢ and 14¢ to 20¢ a cubic yard; puddling from 10¢ to 30¢ a cubic yard; walling from 45¢ to 75¢ a perch; and embankment from excavation from 18¢ to 30¢ a cubic yard.\textsuperscript{116}

At least part of the rise was due to increased labor and provisions costs. The shortage of workers again became acute,\textsuperscript{117} and McFarland, the inspector of masonry, was sent to New York and Philadelphia to recruit additional hands.\textsuperscript{118} Despite his efforts, the price of labor on the line rose to $1.15 5/4 and $1.20 a day.\textsuperscript{119} Many other public works had already been forced to suspend operations.\textsuperscript{120} Although the suspension of these other lines soon increased the supply of labor, the high cost of provisions prevented a marked decline in wages.


\textsuperscript{116} Proceedings of Directors, E, 589-590 (April 12, 1888).

\textsuperscript{117} \textit{10th Annual Report (1888)}, App. 1, p. 22.

\textsuperscript{118} Bender to Washington, February 22, 1887; Ingle to Bender, March 1, 1887; Letter Book D, 72-75; Bender to Ingle, March 20, 1887; Fisk to Bender, April 19, 1887; Bender to President and Directors, April 19, 1887.

\textsuperscript{119} G.W. and R.W. Watkins (contractors) to President and Directors, February 15, 1887; Fisk to Bender, August 3, 1887.

\textsuperscript{120} Special Report to 8th Annual Meeting (April 21, 1887), Proceedings of Stockholders, B, 31.

\textsuperscript{121} \textit{9th Annual Report (1887)}, p. 5; \textit{10th Annual Report (1888)}, p. 6.
In addition to increased costs of construction, labor and provisions, land costs continued very high. Natives continued to enrich themselves at the expense of the company. The first condemnations in Allegheny county gave no indication of relief from the exorbitant damages paid in Washington county. The election of a new sheriff, a Jacksonian, promised no change in the future.

Construction was very slow in expanding from the low months of 1855, despite the possession of large and fairly certain resources. This characteristic phenomenon continued to haunt canal boards throughout the building of the canal. It was always a slow, expensive and difficult task to accumulate a large working force on the line. For this reason, the directors were always reluctant to suspend work. They resorted to almost every conceivable device to keep the work going and the forces together. By August, 1855, the monthly estimates of work done had fallen to only $8,996. Averages per month for three month periods thereafter rose slowly, almost grudgingly, despite the increasing costs of construction.

<table>
<thead>
<tr>
<th>Month</th>
<th>Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>September, October, November, 1855</td>
<td>$21,066</td>
</tr>
<tr>
<td>December, January, February, 1856</td>
<td>17,388</td>
</tr>
<tr>
<td>March, April, May, 1856</td>
<td>81,201</td>
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<td>June, July, August, 1856</td>
<td>45,911</td>
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<tr>
<td>September, October, November, 1856</td>
<td>45,655</td>
</tr>
<tr>
<td>December, January, February, 1857</td>
<td>40,419</td>
</tr>
<tr>
<td>March, April, May, 1857</td>
<td>65,273</td>
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<tr>
<td>June, July, August, 1857</td>
<td>92,609</td>
</tr>
<tr>
<td>September, October, November, 1857</td>
<td>104,271</td>
</tr>
</tbody>
</table>

122. W. Price to Washington, October 25, 1856.
123. 10th Annual Report (1856), App. 5, p. 51 (February, 1858).
At this rate, the twenty-seven miles were not completed until 1839. 124 The most interesting part of the work in this period of construction was that on the tunnel at the Paw Paw bends of the river. This project was the proudest achievement of the company and was let with great care. A Methodist parson-contractor, Lee Montgomery, was working on the tunnel with a crew of carefully selected men. The tunnel was being driven from both ends at the rate of ten to twelve feet a week. By working simultaneously from two shafts sunk from the hill-top, he estimated that he could increase the rate of progress by 50 per cent. 125 The work was pushed through hard, but loose, slate rock and proved much more difficult and costly than had been anticipated. He too was soon in need of relief. 126 Notwithstanding further assistance, he was still in an impossible financial position in 1839. The engineer reported that costs on the tunnel were about 75 per cent above contract estimates, and the prices were again raised from $1.75 to $5.00 a cubic yard of excavation, depending on the type of work done. 127 Montgomery was more carefully treated by the Board than most other contractors because of his zeal and character and because of the importance of keeping the work moving on the heavy sections to prevent undue delay in the completion of the canal. He proved himself a worthy contractor at all times, but earned the especial plaudits of canal officials when he kept his men on the job during a strike in May, 1838. 128

124. Niles' Register, LVI, No. 9 (April 27, 1839), 151-152.
125. Bender to President and Directors, August 30, 1837.
126. Ibid.
128. Bender to Ingle, May 3, 1838.
Our Methodist parson-contractor (Montgomery) upon being asked how he escaped, replied that his men were generally picked men, and had provided themselves, he believed, with some guns and a few Little Sticks, and as it was supposed they would use them rather than be intruded on, the rioters thought it best not to stop as they were passing by. The truth is that in a good cause few men would probably use a "Little Stick" more effectively than himself, although he would pray at the same time against being obliged to "hold them uneasy".

The construction of the canal above Williamsport (Dam No. 5) was marred by recurring strikes and clashes among the workers. Turn-outs and riots had occurred sporadically before, in each of the earlier periods. From 1836 until 1839, the disturbances among the workers became more frequent and serious. In January, 1836, another clash between the Irish factions occurred near Clear Spring. Several men were wounded and two shanties burned in the encounter. It was said that the rival factions feared each other so much that they posted guards at night like armies.

The pattern of recurring disturbances during the idle winter months was soon broken, probably as a result of the rising cost of living. Violence occurred in the spring of the same year. One contractor had a large enough force at work on his section, "principally of Dutch and country borns, to have finished in April or May . . . This force in April last [1836] was attacked by a body of Irish, beat and dispersed, since which we have been unable to collect a force . . . ." 130

It was reported from other sources that the turn-out was general.

129. *Niles' Register*, XLIX, No. 20 (January 16, 1836).
although some few sections escaped it altogether. 131 Thereafter, the unrest continued until it received the official notice of the company in November. Several of the contractors were threatened as well as non-cooperating workmen. Beatings, destruction of property and other forms of physical violence were the usual methods of punishment to those who defied the "desperadoes." The instigator of the disturbances was reputed to be a secret terrorist from New York, with branches in many states. So great was the fear of those punished that none dared testify against their tormentors. 132

New outbreaks of rioting occurred in each succeeding year until severe measures were finally adopted to curb the violence. In May and June, 1837, the trouble centered around the tunnel. There parson Montgomery had sent to England for laborers to increase his force and to resist the strikers. 133 Notwithstanding this extraordinary step, the latter succeeded in getting control of the work, driving off all but two of the forty new immigrants, and bringing operations to a halt. 134 Again the company was partly to blame for its own misfortunes, for it had refused to press the cases against several of the trouble-makers at the tunnel after they had been arrested for pulling down shanties in broad daylight. The other workers gained the impression that the company was unwilling to bear the expense of the trial and punishment of the terrorists. 135

131. Bender to Ingle, May 8, 1836.
132. Bender to Washington, November 17, 1836. See also the enclosed copy of a placard.
133. Fisk to Bender, May 16, 1838.
134. Fisk to President and Directors, June 23, 1838.
135. Ibid.
Events of the next year gave no hope of early relief.

On New Year's Day, 1838, a number of men [Irish] employed at the tunnel marched up to Oldtown, and made a raid on the place, almost demolishing Nicholas Ryan's tavern. Thomas Dowden, the Sheriff, summoned the Cumberland Guards, and other citizens, as a posse, and went down to quell the riot, but the disturbers had left.  

Several ringleaders were arrested and jailed to see what effect that action would have on the others. Apparently it made little impression in face of the rising cost of living. The workers continued to burn shanties in order to bring pressure to bear on contractors, and to drive away German laborers and newcomers to the line whose presence threatened to reduce the jobs for the Irish and to drive down wages. Another riot was reported at the tunnel, in February. In May, it was the non-payment of wages by hard-pressed contractors that led to violence. The workers "insisted upon destroying the work they had done, since they were to receive no pay for it." The company asked the local militia to protect canal property, but were embarrassed by the reluctance of the citizenry to turn out because both the state and the company had refused to pay their expenses last time and because many of them were convinced the company was partly to blame for withholding large sums from the contractors in critical times like these.  

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137. Fisk to Washington, February 5, 1838, p. 16.
139. Fisk to Washington, February 15, 1838.
140. Williams, op. cit., I, 233.
142. Ibid., O.H. Williams to Washington, May 16, 1838. The Company refused to make further advances on contract prices, insisting that it had already done enough. It did offer to apply $4,000 of the withheld money to the payment of the workers' claims. Ingle to Bender, May 9, 1838, Letter Book D, 324; Ingle to Fisk, May 9 and 11, 1838, ibid., D, 325-326, 329-330; Washington to Williams, May 18, 19, 1838, ibid., D, 339-343.
reported that the men had positively refused to turn out, and that some of them had gone so far as to declare, that if they did they would 'fight for the Irish'. Nevertheless, the militia did march to the line, seize 140 kegs of powder from the relatively quiet workers, and return them to Hagerstown where they were piled on the courthouse lot in the center of town, to the alarm of the townfolk. The workers and their families were described as being "in a suffering and deplorable condition" but determined to prevent further work from being done until they were paid. They rejected an offer of twenty-five cents on the dollar, and held fast to their positions. The local inhabitants assured them that they were in the right and supplied them with provisions on credit.

Stern measures were finally taken in July and August, 1838, to curb the violence and remove the ringleaders. A renewal of trouble at the tunnel provided the opportunity, and the directors finally acted. Upon the recommendation of the engineer, they authorized the suspension of work at the tunnel and the dismissal and black-listing of disorderly persons. On August 1, about one hundred and thirty were fired, mostly from the deep out and the tunnel.

There were no more untoward incidents before August and September, 1839. At that time, violence broke out near Little Orleans, between

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143. Williams to Washington, May 16, 1838.
144. Williams to Washington, May 17, 18, 1838.
145. Ibid.; William H. Fitzhugh to Williams, May 16, 1838 (two letters).
146. Fisk to Ingle, May 19, 1838; Thomas Pillebrown, Jr., Assistant Clerk, to Ingle, May 19, 1838; Williams to Washington, May 24, 1838.
147. Copy of a notice signed by C.B. Fisk, dated Chief Engineer's Office, August 1, 1838, filed in Letters Received.
148. Copy of a notice signed by C.B. Fisk, dated Chief Engineer's Office, August 1, 1838, filed in Letters Received.
Cumberland and Williamsport. Militia from both Allegheny and Washington counties turned out, marched to the scene, seized from 100 to 200 firearms, tore down forty to fifty shanties and shops, arrested about thirty of the rioters and jailed them in Cumberland. This time they were tried and all but two convicted. They were fined and imprisoned for terms ranging from one to eighteen years. A recurrence of the riot at the same place in November brought similarly harsh retaliation. For a while at least, the action seems to have been effective in restoring order.

Financial Difficulties

In the meantime the company was becoming involved in a tangled and increasingly precarious financial situation. It had trouble at the very start in obtaining the bonds or the proceeds from their sale. There was some delay in putting the law into effect, and political distractions in Maryland caused a postponement of the appointment of state commissioners to negotiate the sale of the bonds. By the end of March, 1837, the directors had decided to purchase the bonds on behalf of the company, if the state agents in Europe failed to sell them. A provisional contract was drawn up accordingly. No difficulty

149. Miles, Register, LVII, No. 3 (September 14, 1839) 37-38, quoting Hagerstown Torchlight and Cumberland Civilian; Lowdermilk, op. cit., p. 346.

150. Fisk to President and Directors, October 31, 1839; Lowdermilk, op. cit., p. 346.

151. Williams, op. cit., I, 233.

152. The canal company used an early form of the labor spy in suppressing the outbreaks among the workers in 1839. James Finney received $100 for his "services." Proceedings of Directors, F, 406 (November 6, 1841).

153. 8th Annual Meeting (April 21, 1837), Proceedings of Stockholders, B, 79. The commissioners were not appointed until December, 1836. One left immediately for London, but the other two did not leave until spring. Special Report on the Completion of the Canal, loc. cit., p. 352.

was anticipated, however, in affecting the sale of the bonds by the state agents, as late as June, 1837, for Maryland's credit abroad was still high.

When the bonds failed to sell for the required 20 per cent premium, the Board prepared to undertake the task on the same terms. By this time more trouble was brewing at home, for the Assembly had lost its early enthusiasm for internal improvements and was beginning to regret its generosity in passing the eight million dollar bill. Opponents of the public works program also questioned the validity of the Maryland Canal Company organization, certification and subscriptions. The legislature debated the repeal of the act and the withholding of bonds not already issued. The canal company considered the state as duty-bound to go through with the act, for the Board had already made advances to the Eastern Shore and the Annapolis and Elkridge railroads on behalf of the state, on the pledge of the bonds to be issued. The company had also made a very important concession in allowing the Baltimore and Ohio to construct its line west of Harpers Ferry. The Assembly finally confirmed the bond issue in March, 1838, and placed the certificates in the company's hands.

155. After the failure of the Commissioners in December, 1837, the Chesapeake and Ohio Canal Company agreed to sell the bonds at a 20 per cent premium. Special Report on the Completion of the Canal, loc. cit., p. 352.

156. Washington to Ingle, February 8, 1838; the partial report of the Committee on Ways and Means was favorable to the company. Left Maryland canal to future study.


divided the bonds into equal sums for sale here and abroad. There soon proved to be no market here because of the tightness in financial circles after the panic of 1837. All hope was turned to negotiations in England. There was no market in England for 6 per cent dollar bonds, and on the advice of their agents in London the railroad and the canal companies prevailed upon the Maryland Assembly to convert the bonds to 5 per cent sterling. After another debate on the propriety of refusing all aid, the Assembly consented, and released the canal and railroad companies from the requirement for 20 per cent premium. At the same time subscribed an additional $1,375,000 to the canal stock. The latter act was the result of an admission as early as 1838 that because of the difficulty of construction and the high prices of the work, $1.600,000 more would be needed over all resources available to complete the waterway.

During these negotiations the Board resorted to several temporary arrangements to keep the work going. It instituted suits against delinquent stockholders to force full payment. In 1837, the banking crisis threatened the company's deposits of its proceeds from the

163. "Report of the Committee on Ways and Means in reference to the Chesapeake and Ohio Canal Company, March 14, 1839," A Short History of the Public Debt of Maryland, Appendix Document P, pp. 75-76. There had been three separate investigations of the canal by successive legislatures, to the detriment of the canal's interests, although it was vindicated in each case. See Washington to Peabody, May 18, 1839, Letter Book, 226.
165. Washington to Ingle, February 5, 1838.
two million dollar loan. The directors shifted their deposits to specie paying banks and demanded security for their safety.\footnote[167]{Proceedings of Directors, E, 223-224 (March 20, 1837); Ingle to Bender, May 12, 1837, Letter Book D, 130.} later in the year, while still awaiting the sale of bonds for the $3,000,000 subscription, the Board resorted to loans from local banks on the pledge of Washington and Georgetown bonds. At first the efforts were successful only in Baltimore and Washington,\footnote[168]{Proceedings of Directors, 2, 301 (August 9, 1837), 312 (September 6, 1837), 316 (September 22, 1837), 322 (October 4, 1837), 334 (November 8, 1837); Washington to Ingle, September 16, 1837; Biddle to Washington, September 19, 1837; Biddle to Gunton, November 24, 1837.} but in November, the Bank of the United States in Philadelphia granted a loan of $50,000 on the pledge of Washington stocks.\footnote[169]{Proceedings of Directors, 2, 337 (November 26, 1837).} From then on, large loans were floated periodically in the District and in Baltimore until over $300,000 had been borrowed by June, 1838.\footnote[170]{Proceedings of Directors, 2, 298-299 (August 3, 1837); 317 (September 22, 1837).}

Another temporary expedient was the renewed issuance of canal scrip. At first, the issue was limited to notes of value below five dollars.\footnote[171]{Proceedings of Directors, E, 228 (April 1, 1837); Ingle to Bender, May 12, 1837, Letter Book D, 130.} There was a great scarcity of small coins and currency in 1837 due to the disappearance of specie and the restriction on the issue of small notes by banks. Thus this early step taken by the Board in August, 1837, proved popular.\footnote[172]{Proceedings of Directors, 2, 301 (August 9, 1837), 312 (September 6, 1837), 316 (September 22, 1837), 322 (October 4, 1837), 334 (November 8, 1837); Washington to Ingle, September 16, 1837; Biddle to Washington, September 19, 1837; Biddle to Gunton, November 24, 1837.} In September, however, larger notes of $6, $10, and $20 were issued,\footnote[173]{Proceedings of Directors, E, 288 (June 7, 1837).} and what started as a
temporary convenience became a semi-permanent policy with dangerous potentialities. The directors expanded the printing of scrip from time to time during the following year. By the end of May, 1838, $376,513.50 of scrip had been issued under various authorizations and $80,000 more authorized but not yet issued.174 Most of the latter was subsequently issued.175 No more was authorized thereafter for about a year.

The law suits, the loans, and the scrip were all stop-gap measures pending the successful negotiation of the state bonds in England. Shortly after the Assembly confirmed the bond issue, the canal company appointed George Peabody its agent in England to effect the sale.176 An offer by Auguste Belmont, New York agent for Rothschild and Son of London to purchase $1,500,000 of the 6 per cent bonds was rejected by the Board.177 When no other offers were forthcoming, the directors decided to seek loans from banks on the pledge of the bonds, while awaiting an improvement in the money markets. There followed one of the most disastrous episodes in the canal's history. It is not necessary to describe in detail the unpleasant course of affairs which followed. In a frenzy of hypothecation without effective safeguards the Board floated loans both here and

174. Ibid., E, 426 (May 30, 1838).
175. Ibid., E, 459 (July 16, 1838). Issuance of $60,000 of the $80,000 directed.
176. Ibid., E, 391-392 (April 16, 1838).
177. Ibid., E, 410 (May 16, 1838). Although the Board gave no reason for its action, the offer probably was for a sum below the 20 per cent premium required by the company's contract with the state.
abroad on the pledge of Maryland bonds at 85. With the funds thus obtained, the directors rushed the completion of the canal in the face of mounting construction costs. By January 1, 1839, banks in the United States had loaned $490,000 and those in England, $1,258,925.08, including exchange differences. After the substitution of 5 per cent sterling for 6 per cent dollar bonds had been effected and an additional subscription of $1,375,000 obtained, the company floated further loans in this country, bringing the totals to $1,110,000 here, $1,258,925.08 in England, and $2,366,925.08 in all. The Board had pledged the larger part of $3,200,000 in bonds from the subscription of 1836 and $1,375,000 from the subscription of 1839.

Needless to say, such wholesale hypothecation of Maryland bonds at 85 endangered the value of the other bonds issued by the state and undermined its credit both here and abroad. The same policy of pledging the bonds at 35 per cent below the price contracted for by the company threatened disaster to the canal as well. The actions of the Board were severely criticized on all sides, and the assembly made a detailed investigation of the conduct of canal affairs. Eventually, the general condemnation of the canal board's practices led to its ouster in a widespread political upheaval in 1839.


180. Ibid.


Liquidation

The principal problem facing the new directorate in June, 1839, was the liquidation of the staggering debt. At the same time the Board would have to find some means of pushing the construction of the canal to a successful conclusion or suspend all operations. In neither case were the prospects for success very bright.

The process of liquidation proved most disastrous and painful. For two months the new president, Francis Thomas, negotiated alone unhindered by a quorum of directors. 183 He made an agreement with the Baltimore and Ohio to cooperate in the sale of the bonds to maintain the state's credit and prevent sacrifices. 184 Unfortunately the canal company could not afford to await an improvement in the market. Its creditors were pressing for payment and threatening to effect a forced sale of the bonds hypothecated to them. 185 In the debacle that followed the bonds were sold for an average of 56 and 67 in New York, and 71 in England. Only in Baltimore and Washington did the company salvage even the 85 per cent hypothecation value.

The total loss for the company on the $4,064,444.42 of bonds sold was $1,048,022.09, or 25.79 per cent of the par value. 186 Nevertheless, the president was able to report to the next annual meeting, in

183. Proceedings of Directors, F, 95-96 (August 28, 1839); Thomas to David Stewart, Chairman, Committee of Internal Improvement, February 8, 1840, Letter Book F, 49-50.
184. McLane to Thomas, July 4, 1839.
185. Thomas to Peabody, July 18, 1839, Letter Book E, 296-299. Thomas pointed out that the railroad was out of debt and could afford to wait. The canal's creditors, on the other hand, were pressing for payment. He then suggested that, despite the agreement he had just made with McLane, Peabody should not cooperate with the Baltimore and Ohio but should try to anticipate its moves and benefit thereby.
186. 13th Annual Report (1841), Appendix, p. 27.
June, 1840, that the entire debt of the company arising from the hypothecation of the 5 per cent bonds had been liquidated. 187

Again faced with the alternative of suspending work or resorting to extraordinary measures, the Board decided on the latter course. On September 15, 1839, it authorized the issuance of $300,000 more in canal scrip. 188 President Thomas insisted that he did not wish to issue the post notes except in case of utter necessity. 189 Rather than abandon construction, however, the directors employed the paper money regularly. They established a trust fund of 5 per cent Maryland bonds to redeem the scrip as it was received for tolls, etc. 190 In April, 1840 they suspended the issuance of the notes, 191 but resumed it again in June under the general authority to print it as needed to pay the estimates of work done. 192 Again the experiment with paper money involved the company in legal and financial entanglements. A disagreement with the trustees over the conduct of their affairs and the misappropriation of the trust fund brought about an legal controversy which lasted into the next decade. 193 Over 80 per cent of this latter issue was never redeemed. 194

188. Proceedings of Directors, F, 108 (September 15, 1839).
190. Proceedings of Directors, F, 160-161 (January 15, 1840). Three bankers, James Swan and John S. Gittings of Baltimore and William Gunton of Washington, were made trustees, but Swan, President of the Western Bank, did most of the work and caused most of the trouble.
191. Ingle to Chambers, April 8, 1840, Letter Book F, 98.
193. See the Letter of John Gittings to the Stockholders of the Chesapeake and Ohio Canal Company (Baltimore, 1843).
Meanwhile the greatest efforts were made to continue the work on the unfinished portion of the canal. Apparently on the strength of the decision to issue scrip, sections upon which contractors had ceased work were declared abandoned and were re-let in December, 1839. Although the hoped-for aid from the Maryland Assembly was not forthcoming by the next spring, the board continued to push the work rather than suspend operations, disperse the two thousand laborers on the line and sacrifice $150,000 worth of tools, buildings, etc., at about half their value. By continuing construction, the directors could also take full advantage of the low price of labor and put an end to the outbreak of violence which had revived with the coming of hard times and the suspension of contracts.

Accompanying the determination to continue construction was the first large turnover of canal employees. This was partly the result of a disagreement with the new policies and partly the effect of the application of the spoils system in the operation of the canal. Many old and reliable officials were dismissed or voluntarily retired, including the clerk, the treasurer, the chief engineer, several divisional superintendents and many lesser officials. The wholesale

198. Proceedings of Directors, P., 246 (July 9, 1840), 256-257 (September 26, 1840); 259 (November 14, 1840); Ingle to President and Directors, June 10, 1840; Fisk to President and Directors, October 1, 1840; Fillebrown to President and Directors, November 21, 1840; Morris to Thomas, December 4, 1840. See also notices of dismissal in Letter Book E., 128, 130, 161, 170, 185-186, 195 and 210.
changes did not go without public notice, for the ousted officials
carried their opposition to the directorate into the newspapers and
other observers expressed their opinions on the separations also.
A new legislature, elected during the same year, demanded explana-
tions of the Board's conduct and of company affairs, in January, 1841. 199
When the Assembly adjourned in March without providing further aid
and the trust fund neared exhaustion, the directors reversed their
policy, forbade the issuance of more scrip until means were pro-
vided to repay it, and prepared to suspend operations. 200

A change in the directorate had been made inevitable by the elections
of the preceding year. Instead of waiting until the regular annual
meeting in June, 1841, however, the State of Maryland, as controlling
stockholder, ousted the old Board and installed a new one in April. 201
The latter proceeded to reinstate as many of the old officials as were
still available and to reform canal affairs. 202 Company officials
were forbidden to interfere in politics, 203 the edict against scrip
was continued, and proceedings against the trustees instituted. The
directors ordered tolls to be received one third in current money
after August 1. 204 Final suspensions were authorized in the same
month, although the company agreed to accept drafts on it by the

200. Ibid., 297 (March 16, 1841).
201. Ibid., 301 (April 13, 1841).
202. Ibid., 302 (April 13, 1841), 308 (April 14, 1841); Morris to
Sprigg, April 7, 1841; Fisk to President and Directors, April 15, 1841;
Fisk to President and Directors, April 29, 1841, Letter Book F, 262-264.
204. Ibid., 359 (July 15, 1841).
contractors in order to encourage them to continue the work on their own until the company was able to resume itself.\textsuperscript{205} An order requiring the payment of tolls in cash, effective April 1, 1842,\textsuperscript{206} brought to a close a period of disastrous financial experiments. The work of construction continued sporadically a little longer, and then it too came to an end.\textsuperscript{207}

\textsuperscript{205} Ibid., 377-378 (August 7, 1841), 381 (September 16, 1841).
\textsuperscript{206} Ibid., 433 (March 16, 1842).
\textsuperscript{207} Fisk to President and Directors, December 1, 1842.
CHAPTER VII
THE COMPLETION OF THE CANAL, 1842-1850

The Canal in 1842

In 1842 the canal was completed as far as Dam No. 6, above Hancock. This represented a distance of approximately 135 miles up the Potomac from Washington. The work had been done under the most trying circumstances. A succession of obstacles had marred the construction, delayed the completion and increased the cost of the canal beyond all expectations. The dispute with the Baltimore and Ohio, the cholera epidemic, continual financial, labor and engineering problems, and political diversions all played their part. In 1840, the time limit of twelve years allowed by the charter for the completion of the eastern section had expired. Fortunately none of the parties to the charter had raised the question of forfeiture. 1 By this time, the frontier had moved far to the west and other established routes were carrying the trade of the Ohio valley. Almost all hope for the construction of the western section had been abandoned. By 1841, over $10,000,000 had been applied to the construction of the canal and to incidental expenses. 2 And by this time, the control and direction of the company's affairs

2. 12th Annual Report (1841), Appendix, p. 25. Almost $2,000,000 more had gone into interest and losses.
The financial condition of the Company in 1966 was satisfactory.

Workforce force began...
of the latter were unavailable) were publicly acknowledged.\footnote{Hills' Register, LXI, No. 22 (January 29, 1842), 352, quoting Report of President.}

Much of the company's resources was tied up in the few remaining Maryland 5 per cent bonds it still owned. These had been deposited with the Barings, in London, after Peabody had given up the agency;\footnote{Proceedings of Directors, 7, 143-144 (January 6, 1840). It had been pending for several months. See ibid., 7, 112 (October 14, 1839).} and there they remained, for there was no market for them. This was especially true after Maryland failed to meet the semi-annual interest payment on them beginning July 1, 1841.\footnote{Turner to Barings, January 10, 1843. Letter Book G, 6; Turner to T. N. Ward, April 17, 1843, ibid., G, 62.}

The Barings had agreed in 1839 to accept the drafts of the company for amounts up to $200,000 at a rate of £65 for every £100 of bonds, if not more than £30,000 were drawn in a month.\footnote{Barings to Peabody, November 27, December 8, 1839, quoted in Turner to Barings, January 10, 1843, ibid., G, 2-3.}

By the end of 1842, £80, 151 8s., had been so advanced. The Barings, apparently hard pressed by the continuing stringency in the English money market, then demanded some payment on the advances. Lacking that they announced that they would have to sell the bonds at market prices or buy them in themselves at 50 per cent.\footnote{Turner to Barings, January 10, 1843, ibid., G, 4.}

The canal directors flatly refused these terms.

The Chesapeake and Ohio in turn proposed an alternate course to be followed in regard to the bonds. The Board suggested that the coupons for 1841 and 1842 be detached and sold to pay the interest due on the advances made by the Barings. The Maryland legislature had just authorized the receipt of the coupons in payment of state taxes, thus restoring a large part of their value.\footnote{Turner to Ward, April 17, 1843, ibid., G, 55.}
to the sale of the coupons for July, 1842. The canal directors then offered to settle the whole affair. They proposed to sell to the Barings at 85 all bonds necessary to repay the advances made. The Barings would also take at 85 all coupons necessary to pay the interest due on the drafts paid. This offer was promptly accepted by the Barings in November, 1843. The transfer of the remaining bonds from the Barings to the canal company, in the following March, formally completed the transaction.

The State of Maryland had already taken steps ostensibly to compel the canal company to improve its financial conditions. In the spring of 1842, the General Assembly ordered the sale of all property owned by the Chesapeake and Ohio not strictly used for canal purposes. The directors were to receive canal scrip and other evidences of company debts in payment of the land. In pursuance of this requirement surveys were made along the entire line. The chief engineer submitted the report on the surveys in July of the same year. Sales were effected on the order of the

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16. Coale to Ward, March 25, 1844, Letter Book G, 145; *16th Annual Report* (1844), pp. 19-20. In 15,600 5 per cent Maryland bonds with coupons from July 1, 1844 and 57710 additional coupons of July 1, 1844 from the other bonds were returned to the canal company.
18. Fisk to Isong, Elgin, Rodgera and Stone, April 8, 1842.
19. Fisk to President and Directors, July 20, 1842.
Board during the rest of that year and 1845. The forced disposal of the property was about completed by June, 1844. As might be expected the proceeds from the sales were very small, even when reckoned in depreciated canal scrip. The total amount received was $25,935. 20

During the suspension of work on the canal it experienced a more or less general deterioration. This probably applied equally to the unfinished and the completed sections. Although the latter received the especial attention of the Board, it is safe to assume that the unfinished banks on the fifty miles suffered from erosion and that shrubs and weeds grew in the trunk of the canal. Freshets in the Potomac valley also wreaked their usual havoc on the more exposed portions of the line. The flood of April, 1843, which was described as the worst in the canal's history, was particularly destructive. 21 Besides these instances of unavoidable natural destruction, there were cases of deterioration which were just as clearly the result of neglect. Reports from a director and from the shippers themselves, in 1844, noted instances of delinquency of canal officials, lock gates out of repair, and the existence of sand and mud bars in the canal and the feeders. 22 The same bars, or others, were still there in 1844. 23

20. Ingle to Coale, June 11, 1844. The proceeds were probably nowhere near the cost of the lands to the canal company; but no accurate comparison of the prices paid and received by the company is possible because of the variance in size of the lands.

21. Young to Turner, April 19, 1843; Fisk to Ingle, April 29, 1843.

22. F. Tilghman to H.C. Sprigg, June 25, 1843; Thomas G. Harris and others to H.C. Sprigg, July 6, 1842.

23. Fisk to Coale, September 19, 1844.
The canal was also having trouble with the Baltimore and Ohio railroad. The honeymoon between the two companies lasted only as long as it served the purposes of the railroad. Thereafter the latter renewed its opposition to the canal and resumed its policy of harassing its rival. The struggle for the Shenandoah trade at Harpers Ferry is an example of the relations between the two works. At least three points of friction developed in the early 'forties: the tracking path, the railroad charges on traffic over the bridge, and the flour trade. In May, 1841, the railroad company tore down the tracking path and refused to rebuild it. The company's engineer insisted that the railroad and not the canal had originally paid for it, contrary to the terms of the agreement. After the delay of over a year, during which the canal was deprived of the path and consequently at a convenient disadvantage in its rivalry with the railroad, the latter finally rebuilt the tracking, said profuse apologies. During the interlude in which there was no tracking path, the railroad fixed the rates for carrying goods across its bridge by rail at fifty cents a ton, which was equivalent to twenty cents a ton per mile, again contrary to the agreement which made possible the construction of the viaduct. It also refused to furnish Baltimore and Ohio cars for the trade and at the same time

24. Elgin to President and Directors, May 10, 1841, July 14, 1842.
25. Fisk to H.C. Sprigg, July 21, 1842.
27. Elgin to President and Directors, May 10, 1841.
exacted a fee for permitting the Winchester and Potomac railroad cars to use it. Even after the tracking path had been restored, shippers protested that the rates charged by the Baltimore and Ohio made their trade unprofitable, if not impossible. 28

The same sort of trickery was used in connection with the struggle for the flour trade. Until May 1, 1841, the charges by rail from Harpers Ferry to Baltimore were thirty-four cents plus three cents for handling. On May 1, the railroad raised the rates to fifty cents, including handling. It then petitioned the legislature to compel the canal company to raise its toll to a "profitable rate." The latter raised its tolls at the request of the railroad without waiting for the action of the Assembly. Within a month, on June 3, 1841, the railroad reduced its rates to thirty-four cents, including handling. The charges from Frederick to Baltimore via rail were said to be thirty cents. Thus the additional charge for the twenty-one miles from Frederick to Harpers Ferry was only four cents. Between June and December, 1841, the flour trade on the canal from the Ferry fell off 4,411 barrels as compared to its 1840 figures. A large amount of this decrease was attributed to the actions of the railroad company. 29 Again, in 1844, Alexandria citizens complained of the loss of the flour trade to the Baltimore millers. 30

28 U.S. Clarke, President of the Winchester and Potomac Railroad, to Coale, September 5, 1843.

29 Elgin to Ingle, December 23, 1841; as am at all times provoked when on such a subject.

30 Resolutions of Citizens of Alexandria, October 14, 1844; Thomas N. Macaubbin to Turner, November 6, 1844.
Early Plans for Completing the Canal

Plans for the completion of the canal went on apace in the early 'forties. There was, in fact, no break in the efforts of the canal company to obtain the means to finish its work. The suspension of construction on the line at this time merely indicated a shift of activity back to the political arena.

The earliest form which these proposals to complete the canal took was the attempt to secure the transfer of Chesapeake and Ohio stock held by the United States to the State of Maryland. At this time the federal government possessed $2,500,000 of the stock, including its own subscription for $1,000,000 and the subscriptions of the bankrupt District cities for $1,500,000. In return for the transfer of the stock, the State of Maryland offered to guarantee to complete the eastern section of the canal. A committee of the Maryland Assembly first suggested the transfer in a report on canal affairs in 1839. A petition to that effect was presented to Congress annually in the early 'forties. It was of course supported


The President's Pd. was in the conference room and
spoke. The President said, "It is now time to pass the
resolution on the floor." The President also said, "This
resolution, if passed, will be sent to the Governor and
the Secretary of State." The President continued,
"We must act quickly to ensure the passage of this
resolution."
surrendering the stock. In 1842 the Senate did pass a joint resolution providing for the transfer of the stock to the State of Maryland and the District cities, with the condition that Maryland would agree not to foreclose its mortgage. The District cities promptly agreed to accept this solution, but Maryland refused it. The State insisted that it must receive the stock before it would borrow further to complete the work. On its part, the canal company remained relatively indifferent to the outcome of the struggle, merely expressing the hope that the State, if successful, would pass a law for the completion of the eastern section. All efforts to effect the transfer ultimately failed, and the question was dropped.

Another scheme advanced to provide for the completion of the canal was the proposal to sell the state's interest in the canal to parties that would undertake the task of finishing the work.

36. Miles' Register, LVIII, No. 21 (July 25, 1840), 350.
37. Ibid., LIII, No. 21 (July 23, 1842), 334.
38. Ibid., LXIII, No. 21 (January 26, 1843), 336; Memorial of Georgetown approving the transfer of United States Stock in the Chesapeake and Ohio Canal Company to Maryland and the District of Columbia cities, June 29, 1842, 27th Congress, 2nd Session, Senate, Document No. 343; Resolution of Alexandria approving the transfer of the Stock of the United States in the Chesapeake and Ohio Canal Company to Maryland and the District of Columbia cities, June 29, 1842, 27th Congress, 2nd Session, Senate Document No. 344.
39. Miles' Register, LXVI, No. 1 (March 2, 1844), 12. The position of the State was that the United States was responsible for the increased size and cost of the canal, and therefore should either assume the expense of its completion or assist the State to do it by direct relief or by the transfer of the stock held by the United States. See the Speech of John H.S. Causey, Esq., in the House of Delegates of Maryland, on the Preamble and Resolution, Introduced by him, on the Subject of Relief to the States, by the Issue of Two Hundred Millions of Government Stock, Based upon a Pledge of the Proceeds of Public Lands, [January 31 and February 1, 1843] (Annapolis, 1843).
41. Proceedings of Directors, 9, 11 (April 12, 1843).
This plan was proposed even before the collapse of negotiations in Congress for the transfer of stock. It cleverly connected the settlement of canal affairs with the solution of Maryland's financial problems. The price finally decided upon was $5,000,000 in state bonds. There were no bidders. In the absence of any offers the canal company undertook to sell itself to likely purchasers. It pointed out that five million dollars in Maryland bonds at the current depreciated values (62-1/2) would be a bargain. The company even contemplated buying itself from the state by offering canal bonds to Maryland for $5,000,000 (presumably to be exchanged by the state for its own bonds). The price set was far too high, and all efforts to bring about a sale failed. The comic opera aspects of the whole episode were emphasized in a summary of the proposed sale by a contemporary observer.

But no sooner was this tack resolved upon, than up came a violent dispute about the price. And it was amusing enough to observe, almost the whole of those members who had invariably opposed the construction of the work, and insisted that it would never be worth anything to the state, suddenly became violent sticklers for demanding a price even beyond what the work had cost the state. Seldom has there been a more exciting scene in the legislature of any of the states in this union, than this question of price gave rise to in the Maryland state house last winter [1842-1843]. The executive was denounced for undue interference on the occasion; the majority in the house became completely divided, and the party split, and more bitterly denounced each other than the political parties before that, had done. The senate became for the first time in our state history, an arena of unparliamentary proceeding, which nothing but the prompt and energetic course of a most admirable presiding officer, averted from affecting absolute disorganization...

44. Miles' Register, LXIV, No. 24 (August 12, 1843), 372.
All this excitement proved to be of no other avail, than to save so far, the credit of the state. The canal, it appears, cannot be sold at present for even the lowest price which was in dispute. There has been in fact, no bidding for it. The reason assigned, if we understand aright, is not that the work would not be worth the money if finished, but the uncertainty of its being finished. The foreign capitalists say, "your canal would no doubt pay very well, if it were in operation, but you have such endless difficulties and delays; disputes with rival works, -- law suits; injunctions taking you into chancery and keeping you tied up for years. -- endless disputes in the legislature, session after session, about the right applications of the funds they grant, -- disputes with the district cities -- disputes with the authorities of the emporium of your own state -- or rather, with the officers and contractors of the rival work which they are constructing alongside of you."

The scheme which gave the greatest promise of acceptance and success was the proposal to waive the state's prior liens on canal revenues and permit the canal company to issue its own bonds to pay for the completion of its work. Like all other projects to provide for finishing the canal as far as Cumberland, this proposal was bitterly opposed by the railroad and by the city of Baltimore. It was unpopular with others because it did not provide relief for the financial condition of the state. Thus it was looked upon as a last resort measure; and as such it failed to pass while other schemes were being tried.

The first attempt was made during the December session, 1841. Disagreement between the senate and house of delegates prevented the passage of the bill before the Assembly rose in March, 1842, although

45. See, for example, the exchange of letters between "Delta" and "Maryland" in the Baltimore Sun and the Baltimore American, January - March, 1841, for and against the completion of the canal respectively. The letters of "Delta" are printed in Delta: or That ought the State to do with the Chesapeake and Ohio Canal [Baltimore, 1841].
the proposal itself at least required no further drain on the
state treasury. As a result, another year passed without action,
during which delapidation set in on the canal and the interest on
the state bonds went unpaid. So disastrous were the consequences
of the legislature's inaction that large meetings were held in
western Maryland which sent appeals to the Governor to call a
special session of the Assembly.46

The attempt was renewed in the December session, 1842. Proponents
of the measure again advanced the argument so often repeated in
the 'thirties that "the completion of the public works was forever
to exonerate them [the citizens of Maryland] from taxation on their
or any other account."47 Notwithstanding the pressure brought to
bear for the bill, the enemies of the canal succeeded in defeating
it again.

The proposition to waive the lien of the state in
favor of contractors who would undertake to finish the canal,
was very earnestly debated in the legislature, both last
session and the session before, but did not prevail. The
canal has been at a stand still and it is probable will
stand still, until the state either determines with its own
resources or credit, to finish the work, or otherwise consent
to forego its liens in favor of whoever will, with their own
resources, finish it. The actual opponents of the canal, of
which there is a party in the state, sorry we are to say,
throw their weight first in one and then in the other scale,
and thereby prevent either expedient from being adopted.48

The failure of the legislature to provide aid for the canal
or to waive its prior lien caused general consternation among the
 neutrals in the fight between the internal improvement companies.

46. Miles' Register, LXI: No. 4 (March 26, 1842), 52.
47. A Short History of the Public Debt of Maryland, p. 48.
There was nothing to look forward to, but, as in the past,
to listen week after week to long labored speeches, and
to watch, session after session, the under currents,
over currents, and counter currents, of innumerable little
interests, each tugging as if for life, to accomplish its
own design, without hardly for a moment regarding the
public interest. — 49

The summer failed to bring any substantial changes in canal
affairs. The efforts to effect a sale and to secure the transfer
of U.S. stock in the Chesapeake and Ohio failed again. A contract
with Letson and Rutter for the completion of the canal was annulled
by the directors because of some undesirable conditions included in
its terms. 50 Agitation for a solution had increased somewhat in
the state at large. A Whig county convention in Frederick county,
for example, had passed a resolution in September urging the waiver
of the state's lien. On reconsideration, the convention withdrew
the endorsement in order to keep the canal out of politics as much
as possible. At that time, both parties in Frederick County favored
the completion of the canal. 51 Governor Thomas referred to the
urgency of providing for ways and means of finishing the eastern
section in his annual message to the legislature in December, 1843. 52

The proposal to waive the state lien was re-introduced in this
session of the Assembly. All kinds of pretexts were used to defeat
the canal bill. Some members held out for a canal all the way to
Savage river. 53 There was a distinct element of obstructionism in

48. *Niles' Register*, LXIV, No. 24 (August 12, 1843), 373.
49. Ibid., p. 372.
50. See below, pp. 180-183.
51. *Niles' Register*, LXV, No. 2 (September 9, 1843), 19.
52. Ibid., No. 18 (December 30, 1843), 276.
53. Ingle to Coale, January 29, 1844.
this position, for there were many legislators favorably disposed to the canal who would be opposed to such a proposal. The Baltimore and Ohio interests argued that the railroad, already completed as far as Cumberland and having made an arrangement on the coal trade with the canal, should be used as a feeder for the latter, and the extension of the canal dispensed with entirely. Of the city of Baltimore itself, it was said, "all [is] in a ferment about the Canal Bill & every kind of element is in motion to defeat it." Feelings ran high at Cumberland also, where it was said "the railroad people" intended to erect

a pole, as high as the gallows of Haman ... at the railroad depot, with a banner floating from its top, on which is to be inscribed something signifying defiance to the canal company.

The bill was defeated in the house of delegates, early in March, 1844, by a vote of 42 to 36. Among the victorious opponents of the bill were all the few, but vociferous, Baltimore representatives. A modified bill for the same purpose was then considered. Agitation in favor of the canal broke out anew; friends of the project in Cumberland held a mass meeting. The second bill also lost out, shortly after the first one. Ironically, the canal company had enough influence in the Assembly to bring about the defeat of all bills

54. Coale to Ward, March 14, 1844, Letter Book G, 139. The pressure of the railroad company was strongly resisted by the canal's friends, who stressed the inconsistency and selfishness of the former's position. See, for example, the Speech of John Johnson, Esq., ... on the Bill to Provide for Completing the Chesapeake and Ohio Canal from the Revenues of the Work, [February 27 and 28, 1844] (Annapolis, 1844).

55. Coale to Turner, February 3, 1844.

56. W. Price to Coale, March 4, 1844.

57. Miles' Register, LXVI, No. 2 (March 9, 1844), 17.

58. Cumberland Civilian, March 14, 1844, quoted in Miles' Register, LXVI, No. 3 (March 16, 1844), 48.

59. Coale to Ward, March 14, 1844, Letter Book G, 139; Miles Register, LXVI, No. 3 (March 16, 1844), 38.
60. Article 8, Section 17, p. 2, Act of October 16, 1861.

60. Article 8, Section 17, p. 2, Act of October 16, 1861.

60. Article 8, Section 17, p. 2, Act of October 16, 1861.

60. Article 8, Section 17, p. 2, Act of October 16, 1861.
subscribe $2,500,000 thus bringing its investment to the same figure as Maryland's ($5,000,000), or that the federal government set aside 2,000,000 acres of public land for the canal, as in the pending measure providing aid for the Illinois and Indiana canals. Both proposals were rejected.

The directors definitely established the terms under which the contract for the completion of the canal would be negotiated, early in May, 1843. The contractor was to receive canal company bonds maturing in twenty years, bearing 6 per cent interest payable semi-annually. Work was to begin in sixty days and the canal should be completed in two years. The maximum price at which the instrument would be negotiated was the chief engineer's estimate in 1842. As security for the repayment of the bonds, the canal company offered a pledge of all revenues, subject to existing mortgages. The latter phrase was the stumbling block, for the State had consistently refused to waive its sizable prior liens.

Thus the Board had done everything within its power to prepare the way for the completion of the canal, short of obtaining the state waiver.

The incident which led to the definition of contract terms was the Letson-Rutter contract episode. Late in 1842, it was suggested to the Chesapeake and Ohio that if William G. McNeill were chosen

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65. McNeill, an ex-Captain in the U.S. Topographical Engineer Corps, had first hand knowledge of the canal from a survey which he had made for the company in 1833. See Report on the Chesapeake and Ohio Canal by Lewis Cass, Secretary of War, transmitting the Information Required by a Resolution of the House of Representatives of the 24th Ultimo, In Relation to the Chesapeake and Ohio Canal, January 14, 1834, 23rd Congress, 1st Session, House of Representatives, Executive Document No. 38.
president, out-of-state capital might be secured to complete the

66 canal. M.C. Sprigg, the incumbent, promptly resigned. The state,
always anxious to try any scheme to finish the canal and put it on
a paying basis without making any further outlays itself, then

67 elected McKeil president. He failed to take office until April 12,
1843. On the next day the first proposal from Letson and Rutter
was received. The directors were dissatisfied with some of the terms,
and tabled it. On May 4th, McKeil proposed a second contract on
behalf of Letson and Rutter. The Board rejected this offer too, for
it was substantially the same as the first. It was at this meeting
that the directors formally defined the terms they would accept in

68 a contract. Several other proposals were received, but none could
be accepted, for all required the state's waiver as a prior condition.

Early in July, 1843, the president entered the company office in

69 Frederick during the absence of the Board and the clerk, forcibly
seized the official seal, and executed a contract with Letson and
Rutter. At the regular meeting of the Board, July 20, 1843, he was
able to announce that construction had already been resumed. The
directors refused to be stampeded into approval of the arrangement.

70 Instead they demanded an explanation of his conduct and the authority

66 M.C. Sprigg to Stockholders, December 3, 1842.
67 Report of Directors, 15th Annual Meeting (August 16, 1843), Proceedings
of Stockholders, C, 158.
68 Proceedings of Directors, G, 18 (April 13, 1843).
69 Ibid., G, 37-39 (May 4, 1843); Report of Directors, 15th Annual Meeting
(August 16, 1843), Proceedings of Stockholders, C, 154.
70 Report of Directors, 16th Annual Meeting (August 16, 1843), Proceedings
of Stockholders, C, 156.
71 Report of Directors, 15th Annual Meeting (August 16, 1843), Proceedings
of Stockholders, C, 158-161; McKeil to Ingle, July 10, 1843.
72 Proceedings of Directors, G, 72 (July 20, 1843).
upon which he made the agreement. They rejected the answer of
the president and annulled the contract. The Board insisted
that the purported contract did not meet the requirements previously
established as acceptable and pointed out that other offers, some
of them lower than this one, had been received. Neither side was
entirely right or free of prejudice in the affair, as a contemporary
summary of the episode pointed out.

The Frederick Examiner states, that offers were before
the board at their prior meeting, to do the work for $200,000
less than the president subsequently contracted for, upon
condition that the state's prior lien were waived. The Torch
Light says that said offers were twenty-five per cent. less
than the contract. — The Frederick Herald says for fifteen
per cent. less. It is asserted on the other side that all
the other offers before the board were only to contract for a
contract, but that those contractors bind themselves to begin
the work westward, at any time within sixty days after being
required so to do by the company. And it is urged as a motive
for preferring this contract, that all the others postpone
operations until the state's lien is waved, whereas this
proposes to progress instantly, thereby saving, they say,
nine months' interest upon the $10,200,000 at present invested
in the canal, amounting to $459,000, so that even if the
contract be fifteen per cent. higher than other offers, that
per cent. upon the two millions [the contract price for the
canal to Savage river above Cumberland] would be only $300,000,
thus saving, in fact, $159,000 by progressing forthwith. This
calculation however, predicates upon the nine months' delay
being totally obviated by operating under the contract. — Again,
it is urged, that the evidence of an actual bona fide contract to
finish the work, and for a given sum, is the only expedient by
which capitalists could be induced to adventure their money in
purchasing the canal, and that without that assurance, no hopes
can be entertained of finding purchasers.

73. Ibid., G, 73 (July 20, 1843); W. Price to Coale, July 13, 1843; Ingle
to McNeill, July 13, 1843.
74. Proceedings of Directors, G, 75-57 (July 20, 1843), especially
pp. 75 and 57. The reasons advanced by the Board for its action were
about as weak as the excuse of the president. See pp. 84-86.
75. Miles' Register, LXIV, No. 24 (August 12, 1843), 372. See also the
defense of President McNeill in Letter to the Stockholders of the
Chesapeake and Ohio Canal Company by One of their Number (Baltimore, 1843).
The majority of the stockholders, i.e., the State of Maryland, agreed with the position taken by the directors. At a general meeting in August, 1843, they upheld the action of the latter in annuling the Letson-Ketter contract. They then removed McNeill from the presidency of the canal company and chose James H. Coale, one of the directors, as his successor. 76

The reorganized board promptly took steps to improve the position of the canal as a transportation agency pending the successful culmination of continuing efforts to provide for its completion. It opened negotiations with the Baltimore and Ohio for a temporary arrangement to give the canal access to the Cumberland iron and coal trade. The railroad agreed to transport coal from Cumberland to the canal at Dam No. 6, at two cents a ton a mile, as long as the amount of coal so carried did not interfere with its own business or require a material increase in facilities. 77 The final arrangements were made on September 21, 1843. 78 The railroad promptly began construction of the necessary sidings, etc., at Dam No. 6. 79

The agreement proved to be more harmful to the canal's interest than it was beneficial. The amount of coal shipped under the arrangement was inconsequential. 80 On the other hand, the railroad company made

76. 15th Annual Meeting (August 17, 1843), Proceedings of Stockholders, C, 175-178.
77. Molane to Coale, September 17, 1843; Proceedings of Directors, C, 97-100 (Septembrer 14, 1843); Special Report to 15th Annual Meeting (November 16, 1843), Proceedings of Stockholders, C, 192-193.
80. Molane to Coale, May 7, 1845. Statistics of the Cumberland Coal Trade, a broadsheet printed by the canal company in 1870 reviewing the division of trade among common carriers from 1862 to 1870, lists no tonnage for the canal until 1850, so small was its share of the trade before. See also, appendix , p. , below.
political capital out of it. The Baltimore and Ohio interests in
the state assembly urged that the arrangement be made permanent, that
the railroad act as a feeder for the canal. The argument was
persuasive and apparently won a large amount of acceptance both in
the legislature and in the state at large. To offset the effect of
the Baltimore and Ohio's proposal, President Coale made a thorough
analysis of the whole question in a special report in November, 1843. He cited the experiences of railroads and canals in England, the
comparative costs of transportation on the Baltimore and Ohio and the
Chesapeake and Ohio as now constructed, the size of the Maryland
investment in the canal and the amount of trade required to pay the
interest on the bonds issued for the canal. This latter factor was
the decisive point of the report, as has already been pointed out.
It would require 289 cars daily (or rather 578 cars, since the distance
was 46 miles and allowance would therefore have to be made for empties
making the return trip) in twenty-two trains of thirteen cars each
to supply enough coal to the canal for it to be able to pay anything
to the state on its investment.

The Board also devoted a large proportion of its attention to the
task of securing legislative approval of the state waiver. There was
considerable excitement during 1844, which was both a national and
a state election year. Two big issues in the local campaign were the

82. Special Report to 15th Annual Meeting (November 18, 1843), Proceedings of Stockholders, C, 195-228.
83. Ibid., p. 208; Williams, op. cit., I, 214.
related subjects of the state credit and the condition of the canal. In some instances friends of the canal went down in defeat. On the whole, however, the result was favorable to both issues. The governor-elect and many members of the new assembly proved to be friendly to the canal.

Following the usual procedure, proponents of the canal introduced a bill in the new legislature to provide for the waiver of the state lien. This time after a long and bitter fight it met with success. Both the canal bill and a stamp act to provide effective means of meeting the interest on the state debt, after being defeated, were reconsidered and passed in the crucial house of delegates by one vote, 38 to 37. The canal bill provided that the Chesapeake and Ohio could issue $1,700,000 of preferred construction bonds on the mortgage of its revenues, when it received guarantees from interested parties for 195,000 tons of trade annually for five years.

The passage of the act was met with mixed reactions. Baltimore was furious, demanding a redistribution of seats in the house of delegates to give the city greater representation and calling for the repeal of both acts. The report of a committee of the city council stated in part:

Thus we see on all sides, the palpable evidence, that Baltimore is to be made to bear the burden, and that unless

84. Price to Cole, October 4, 1844.
85. Manville to Price, October 5, 1844; A Short History of the Public Debt of Maryland, p. 49.
86. Miles Register, LVIII, No. 1 (March 8, 1845), 16, No. 2 (March 15, 1845), 23; "Report of the Joint Committee of Both Branches, Proceedings of the Baltimore City Council, May, 1845," A Short History of the Public Debt of Maryland, p. 84.
87. Miles' Register, LVIII, No. 2 (March 15, 1845), 24.
she rises up in her whole united strength, she will be crushed by that mountain of imposition which is constantly accumulating around her. Baltimore in point of fact is subject to taxation without representation. If she had been fairly represented in the Legislature of the State, the obnoxious laws complained of, never could have been passed!

How was it with the Canal Bill and Stamp Act of the last session—Both rejected, — then reconsidered, and passed by one vote — and that one vote given under such circumstances as to fix upon it the suspicion of foul corruption.

An observer less congenial to the city's point of view, took it severely to task for its conduct during and after the passage of the acts. 89

Not contented, however, with heaping their malodictions on the majority of the Legislature, they must also make an attack on an honest, able and virtuous Chief Magistrate, whose fault in their eyes, is, that after having while a member of the Legislature, sagaciously but vainly endeavored to protect the State from what he conscientiously deemed measures ruinous to her interests and imprudent in their concoction had the courage and wisdom to recommend and carry others, which are calculated to protect her honor and character... Some have even had the audacity to accuse him of having affected the passage of the Canal and Stamp Bills by sheer bribery... Western Maryland, on the other hand, was wildly jubilant over the long-awaited success. The District cities joined in the celebration also. 90

The intelligence of the passage of the bill occasioned in the western parts of Maryland unbounded rejoicings. Judging by the papers from thence, they must be in ecstasies. A week ago they were at the depth of despondence, at the defeat of the former bill. The authorities of Georgetown have directed a general illumination in celebration of the event. One hundred guns were fired at Alexandria on the news reaching that city.

The canal company and its friends hastened to secure the guaranties required and to insure the full benefits of the act. The present went

89. A Short History, etc., p. 49.
90. Miles' Register, LXVII, No. 2 (March 15, 1845), 23.
to Boston and New York to confer with officials of the Cumberland coal companies. An extensive correspondence was also conducted by the Chesapeake and Ohio in March and April, 1845, securing the guaranties. Friends of the canal were active all along the Potomac river.

Public meetings are held in the upper counties, and spirited addresses are made to enlist confidence in the completion of the work...... An ordinance has passed the corporation of Alexandria, to indemnify any of their citizens that may sign the bonds [of guarantee].

Twenty eight instruments including both personal and corporate ones were eventually signed and delivered, for a total of 225,000 tons. The effective total was still the 195,000 required, because many of the guaranties were simply bonds to insure a certain quantity of trade if it were necessary to fill out the 195,000 requirement. The Governor formally accepted the guaranties and certified his approval in August, 1845.

The passage of the canal bill brought to an abrupt and all pretense on the part of the Baltimore and Ohio of interest in the canal's future welfare. The railroad and its ally, the city of Baltimore, began a large scale assault on the trade of its arch competitor which threatened to deprive the latter of all possible chance of success, even before it was completed. The railroad struck its blows wherever it could reach its enemy. The president of the

91. Proceedings of Directors, O, 228 (March 19, 1845). Miles' Register, LXVIII, No. 6 (April 12, 1845), 85.
92. See Letters Received, March and April, 1845.
93. Miles' Register, LXVIII, No. 6 (April 12, 1845), 85.
95. Proceedings of Directors, 0, 288 (August 12, 1845).
canal company found evidence of railroad interference in the acquisition of the guaranties: "I am induced to believe," he wrote to the president of the Maryland Mining Company, "that the Balt. & Ohio R. Road interest, as their last throw of the die are endeavouring to prevent the fulfilment of the guaranties."

An article reputedly inspired from Baltimore was published in the New York Herald casting great doubt on the value of the canal. It exaggerated the duration of enforced suspension during the winter months. It emphasized the more frequent handling and transshipment of coal via the canal route and the greater damage to the coal. The canal president refuted these assertions, but the effect of their publication among financial interests in New York was undoubtedly harmful.

The city of Baltimore was paving the way for more effective competition by the railroad.

Meantime the corporation of Baltimore are actively engaged in measures which have a tendency to frustrate the objects of the canal company. An ordinance has passed both branches of the city council allowing the Baltimore and Ohio railroad company to run their locomotives into the city with coal, iron ore &c, and also to lay tracks to a new depot on the south of the basin, where vessels may lay free of port charges, and other expenses which they have heretofore been subjected to. The report of the committee of the councils to whom the subject was referred, suggested, that if it became expedient so to do, the railroad company might put the price of bringing down coal and iron to a more nominal sum and defy competition. This we should suppose would encourage the coal and iron companies and the western county people to keep up the spirit of competition, which however ruinous to canals and railroads, would enable them to get their material wealth and products to market, for a mere song; the very thing for them.

98. Ibid., p. 264.
99. Niles' Register, LXVIII, No. 6 (April 12, 1845), 85.
The railroad also struck at the two main sources of canal revenue, present and prospective, the flour trade and the coal trade. It abruptly terminated its arrangement for the transportation of coal from Cumberland to Dam No. 6 at two cents a mile. The rates were raised to four cents for coal and six cents for iron per ton per mile. The excuse for the action, curiously enough, was not the increased facilities required by the size of the trade, but that the amount of business was "so inconsiderable as scarcely to authorize a longer continuance of our preparations for its accommodation at present rates." Besides, the Baltimore and Ohio was making arrangements for a more extensive trade to the city of Baltimore, which was more important to the railroad. The canal company refused to recognize the abrogation as an act in good faith, but made no serious protest. President Coale poignantly observed to the president of the railroad company,

Whether the reasons given in your letter are sufficient to authorize a departure from the arrangement entered into between the two Companies in Sept, 1843, & whether the interests of "the public generally" will be subserved by the imposition of a prohibitory Tariff between Cumberland & Dam No. 6, are questions upon which I think impartial men will differ with you.

At the same time the Baltimore and Ohio intensified its efforts to win the flour trade from the canal. The competition for the

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100. McLane to Coale, May 7, 1846; Proceedings of Directors, G, 252-253 (May 21, 1846).
101. McLane to Coale, May 7, 1846.
Harpers Ferry business continued, with the railroad throwing every possible obstacle in the transfer of the canal trade across the river. It continued to charge at the rate of twenty cents a ton per mile for goods shipped one quarter mile over the viaduct, although the charter permitted a maximum rate of only eight cents a mile. It refused to allow the use of its own cars in the trade, and those of the Winchester and Potomac railroad were compelled to pay a high fee to participate in the trade. There was always great delay in handling what little business was offered on these terms. After the guarantees were approved, the canal board proceeded to the letting of the contract for the completion of the eastern section. It rejected the first offers of prospective contractors, on August 12, 1846. The directors granted a ten-day delay for the submission of new offers, and public notice thereof was given in due form. On September 23, 1846, the directors accepted the offer of Walter Gwynn, William Thompson, James Hester and Walter Cunningham. The state agents promptly gave their approval, and the contract was drawn up and executed. The additional mortgage to the state of Maryland, required by the legislature, was also drawn up and executed on January 5, 1846.

By the terms of the contract, Messrs. Gwynn and Company agreed to

104. J.W. Elgin to Gooch, November 22, 1846.
105. 18th Annual Report (1846), pp. 6-7.
106. Proceedings of Directors, 6, 317-318 (September 23, 1846), 320-321 (September 24, 1846), 322-323 (September 25, 1846).
107. Ibid., 323 (September 25, 1846), 353-354 (January 5, 1846).
provide materials of the required quality in workmanlike manner according to the specifications of the chief engineer, December, 1842; to begin work within thirty days and complete the canal by November 1, 1847; to raise $100,000 for the use of the company (to pay its contingent expenses); and to cash the bonds of the canal company at par, paying the interest on them until January 1, 1848. The price to be paid for the work was fixed at $1,625,000 in canal bonds.

The Canal Completed

The making of the contract proved a much more simple task than carrying its terms into effect. All the sections were sublet in October, 1846, and the contractors placed a token force on the job on November 1, pending successful negotiations for the necessary funds to finance large scale construction. By May 1, 1848, the work done amounted to only $55,384, and "the force employed on the work . . . [had] actually diminished, and at the middle of last month it was merely nominal." The contractors seemed earnest enough, but were unable to improve their efforts due to war conditions and the collapse of financial arrangements. The Board threatened to declare the contract abandoned, but it was obvious that unless the means could be obtained no real work could be undertaken. The number of laborers

109. There is an accurate account, as far as it goes, of the negotiations to give effect to the contract in Application of Hunter, Harris & Company to the Chesapeake and Ohio Canal Company for Relief, August, 1853 (Baltimore, 1853).
110. Hilles' Register, LXIX, No. 8 (October 25, 1845), 128.
111. 18th Annual Report (1846), p. 10.
112. Ibid., p. 11.
113. Ibid.
114. Ibid.
at work on the canal dwindled from a total of fifty at the end of May to only ten by the end of June, 1846. **after negotiations for the sale of the bonds collapsed in July, work on the canal ceased entirely.** All construction on the line of the canal was suspended during the rest of 1846 and most of 1847. In February, 1847, the directors considered cancelling the contract and offering the bonds to the State of Maryland, but took no action on the plan. **Negotiations for the sale of the bonds had been under way since before the formal signing of the contract. Efforts of Daniel Webster and of the company itself to effect a loan in England failed when the Barings declined to take any part in it.** Subsequent efforts to make the necessary arrangements seemed to be making progress in May and June of the following year, 1846. **However, the hopes proved to be overly optimistic, for all efforts to interest London merchants failed.** The contractors turned to local capitalists for assistance. Here conversations reached the point of assigning definite quotas to be subscribed by interested bankers, (New York, $400,000; District of Columbia, $200,000 or $300,000; contractors, $200,000; Richmond, $100,000; leaving $100,000 or $200,000 of the estimated $1,100,000 needed still to be accounted for) but these arrangements also failed. **Another year passed before negotiations again reached an advanced stage which gave some promise of success. By this time, several events**

115. Fisk to President and Directors, June 26, 1846.
117. Ibid., II, 8-11 (February 10, 1847).
118. Ibid., G, 311 (September 22, 1845).
119. 18th Annual Report (1845), 11.
120. G. Cox to Coale, July 10, 1846.
had measurably improved the prospects affecting the sale of the bonds. The State of Maryland had finally provided for the payment of the arrears on its debt and for the prompt payment of the semi-annual interest in the future. This measure helped the credit of both the state and the canal company. The Virginia Assembly had authorized the state treasurer to guarantee $300,000 of the canal bonds. The corporations of Georgetown and Washington had authorized the loan of $25,000 and $50,000 respectively to the contractors in exchange for the canal bonds, while the citizens of Alexandria took up a private subscription for $25,000 for the same purpose. The net effect of these activities by the District cities in April, 1847, was to guarantee to take $100,000 of the bonds. Thus when the time came to make another attempt to negotiate for the sale of the preferred construction bonds, some of the quotas had already been guaranteed. Tentative arrangements provided for the distribution of the entire sum of $1,100,000 cash needed to finish the work among Virginia ($300,000), District cities ($100,000), Boston interests ($200,000), the Barings ($300,000) and the contractors ($200,000). The arrangements were temporarily threatened by the withdrawal of the Barings because of the tightness of the international money market. It was fully expected that this time local capitalists could be persuaded to step into the breach. The negotiations were

121. 18th Annual Report (1847), p. 4.
122. Ibid.
123. Ibid., pp. 4-5.
124. Miles' Register, LXXII, No. 12 (May 22, 1847), 179.
125. Ibid., No. 19 (July 10, 1847), 293; 20th Annual Report (1848), pp. 5-4.
finally carried to a successful conclusion by Messrs Davis, Hale and Allen, acting as agents for the contractors.\textsuperscript{126} The mortgage on the canal's revenue was drawn up and executed in the fall of the same year, to Phineas Janney of Alexandria, \textsuperscript{127} Corcoran of Washington, David Henshaw and George Morey of Boston, and Horatio Allen of New York, representing twenty-nine capitalists in New York, Boston and Washington who had undertaken the sale of the bonds. By the terms of the final agreement, the twenty-nine capitalists agreed to take \$500,000 of the bonds and the subcontractors \$200,000 in addition to the \$400,000 already pledged by the State of Virginia and the District cities.\textsuperscript{128}

Work was resumed on November 18, 1847, under a slightly modified contract. The old company was reorganized and a new one succeeded to its contract with the canal board. Messrs. Gwynn and Cunningham retired, and the remaining partners, Hunter and Thompson, continued with the addition of a third partner, Thomas Harris.\textsuperscript{129} The directors adopted various economy measures to facilitate the completion of the canal. They decided to substitute kyanized wood for stone in the locks, and they postponed the construction of lock-keepers houses and the arching of the tunnel until after the canal was formally opened to Cumberland.\textsuperscript{130} At last all efforts were concentrated on the one

\textsuperscript{126} Proceedings of Directors, ii, 92 (October 26, 1847), 96 (October 27, 1847).
\textsuperscript{127} Ibid., ii, 94-96 (October 27, 1847); 20th Annual Report (1848), p. 5.
\textsuperscript{128} 20th Annual Report (1848), pp. 5-6.
\textsuperscript{129} Ibid., pp. 7-8.
\textsuperscript{130} Proceedings of Directors, ii, 286 (July 24, 1848). The kyanizing process consisted in dipping the timbers in "a corrosive sublimae" to prevent early decay. William Basby to Ingle, January 8, 1840.
object of completing the canal in some manner at the earliest possible moment.

Of course, some of the old problems returned. Two of these, for example, were sickness and the scarcity of hands. "It is true, that, for a great part of the time, severe sickness prevailed among the laborers, and it was difficult to procure additional hands or even to retain those employed. . . ." The force employed on the line in May, 1849, included some 1447 men and 594 horses, mules and oxen. Several railroads were constructed to facilitate the transportation of supplies, amounting in all to about nine miles. And there were the ever-present financial troubles which were the consequence of the slow sale of the bonds and the excess of costs over estimates.

In April, 1850, the troubles came to a head when the financial difficulties of the contractors brought about a suspension of the work for several days and the threat of violence. The workers had gone unpaid for some time and were demanding satisfaction. The trustees, Davis, Hale and Allen, took over the contract on assignment from Hunter, Harris and Company, and resumed work. The time for the completion of the canal was twice extended to July 1 and August 1. It was all in vain, however, for in July the trustees' resources were exhausted and work again stopped. The Board promptly declared the contract abandoned.

131. 21st Annual Report (1849), Proceedings of Stockholders, D, 180.
132. Ibid., 163.
134. 22nd Annual Report (1850), Proceedings of Stockholders, D, 280.
135. Ibid.
137. Ibid., H, 369 (July 17, 1850). Fisk notified the Board that work had ceased July 16.
138. Ibid., H, 369-370 (July 17, 1850).
and negotiated a new one with Michael Byrne to provide for the
completion of the canal for $3,000 cash and $21,000 in bonds.\textsuperscript{139}
Under this contract the work was finally completed in the fall
of the same year.

Meanwhile the company had also turned its attention to that
portion of the canal below Dam No. 6. This, the old part of the
line, was badly in need of repair.\textsuperscript{140} Once again the State of
Virginia came to the rescue of the Chesapeake and Ohio. This time
it authorized the guarantee of $200,000 of repair bonds to be issued
by the canal company.\textsuperscript{141} The money was to be applied to the renovation
of the canal from Dam No. 6 to the Alexandria Aqueduct.\textsuperscript{142} Maryland
questioned the authority of the canal board to accept the Virginia
act and issue the repair bonds, but the decision of the attorney
general of Maryland removed all doubts on that score.\textsuperscript{143} The work
of renovation was then pushed so as to have the entire line in
readiness for the formal opening, October 10, 1850.\textsuperscript{144}

The Opening of the Canal

The eastern section of the Chesapeake and Ohio canal, the only
part ever to be completed, was formally opened to trade for its entire
length (185 miles from Cumberland to Georgetown) at Cumberland,
Thursday October 10, 1850.\textsuperscript{145}

\textsuperscript{139} Ibid., H, 370-371 (July 17, 1860), 372 (July 18, 1860).
\textsuperscript{140} Ibid., H, 127 (January 12, 1848).
\textsuperscript{141} Ibid., H, 282-257 (April 18, 1849).
\textsuperscript{142} Ibid., H, 261-252 (April 18, 1849).
\textsuperscript{143} 22nd Annual Report (1860), Proceedings of Stockholders, D, 262-263.
\textsuperscript{144} Ibid., 284-265.
\textsuperscript{145} The following account is based on the report in the Cumberland
Civilian (n.d.) as reprinted in Proceedings of Stockholders, D,
390-396.
Preparation for the ceremonies commemorating the occasion had been underway for some time. On the day before the opening invited guests and curious visitors began arriving from all parts of Maryland, Virginia and the District of Columbia. Colonel Pickell, a director, brought along a band of the Independent Blues of Baltimore which was especially welcome. They responded to the reception given them by the local populace and "electrified an immense multitude of our citizens with their unsurpassed instrumental performances."

Thursday "dawned upon the mountains in all the richness of the early autumn..." Ceremonies got under way at the usual early hour. There was already a large crowd assembled in front of the United States and Barnum's hotels at 8:30 in the morning. The Eckhart Artillery, a local unit, entertained the throng for a while with "various military evolutions in a manner that would have done credit to a veteran corps." The procession to the canal was formed at nine o'clock and included the visiting state and canal officials, local dignitaries, the military units and the citizenry. At the outlet locks of the canal the ceremonies were opened by passing "five canal boats, laden with the rich product of the mines of Allegany, and destined for Eastern Markets... through the locks, amid the salvos of artillery from the Eckhart company, accompanied by the brilliant performances of the bands."

After two long speeches of welcome and eulogy, the official visitors and some of the local burghers boarded the packet boat Jenny Lind and the newly-refitted canal boat C.B. Fisk for a short trip down...
the canal. Another procession was formed, this time composed of canal boats. Following these two boats was another carrying the artillery unit and bringing up the rear were the five coal boats, Southampton, Elizabethtown, Ohio, Delaware, and Freeman Rawdon. The bands provided music for the trip, and occasional salutes from the cannon punctuated the festivities. About ten miles down the line, the party stopped for a banquet and the coal boats continued on their way to the east. After partaking "of an abundant collation . . . to which seat was imparted by a copious supply of the finest and choicest wines," the visitors returned to Cumberland where another banquet was given by the townfolk. On this gratifying note the ceremonies officially came to an end.

After twenty-two years of intermittent enthusiasm and despair, the Chesapeake and Ohio canal was completed to Cumberland.

146. Of the five boats, one went only to Williamsport, two reached Alexandria, and two got stuck above Dam No. 8, because of the low level of water in the canal. They drew four feet with their load, instead of three and one-half, which would have passed. Fisk to Coale, October 20, 1850. The Freeman Rawdon won the race with the Southampton, reaching Washington about 6 p.m., October 17, 1850. Horses and mules were requisitioned along the way to maintain the speed, and the boats arrived within a short time of each other. Elgin to Coale, October 18, 1850.

147. The Board ordered that a marble slab or block be placed "in a conspicuous position in the masonry of, or on the line of the Canal" with the names of the president, directors, officers, state agents, and the date of completion. Proceedings of Directors, II, 384 (November 27, 1850).
CHAPTER VIII

THE CANAL IN OPERATION BEFORE 1850

Description of the Canal

The Chesapeake and Ohio Canal, as completed in 1850, extended for one hundred and eighty-four and one-half miles along the northern bank of the Potomac river from Hook creek in the District of Columbia to Mills creek at Cumberland. Included in its works were seven rubble or masonry dams in the bed of the river, eleven stone aqueducts over the northern tributaries of the Potomac, seventy-five stone or composition locks with a lift averaging eight feet, many score culverts to carry the smaller streams under the trunk, a quarter-mile long tunnel, a towpath twelve feet wide along the river side of the canal, and a waterway six to eight feet deep, ranging in width from fifty to eighty feet. 1

The eastern terminus of the canal, for all practical purposes, was a basin three feet above tide at the mouth of Hook creek, between Georgetown and Washington. The pool was formed by damming the waters

1. For a detailed description of the canal and its works in 1831 and 1833, see the reports of Abert and Kearney and of W. G. McNeill in the Memorial of the Chesapeake and Ohio Canal Company, December 3, 1831, 22nd Congress, 1st Session, House of Representatives, Executive Document No. 18 and 23rd Congress, 1st Session, House of Representatives, Executive Document No. 38. Many of the original structures can still be seen in substantially the same form in which they were first built.
of the creek behind a broad mole which was built across its mouth. On the mole and along the sides of the creek were many docks and warehouses. Here goods were taken from the boats and stored or transferred directly to coasting vessels lying on the river side of the mole. There was also a tidal or outlet lock to the river, permitting canal boats to enter and leave the canal. The basin was a source of repeated problems for the board of directors. Matters of traffic, unloading facilities, berth privileges, etc. required its constant attention. In addition, the creek brought down large quantities of silt, making it necessary to dredge the basin and outlet lock repeatedly, to keep them in navigable condition.

From Rock creek the canal extended westward through Georgetown. It rose abruptly by means of four locks to a level thirty-five feet above tide, though below the town itself. The high route which it followed required heavy embankments on the river side to sustain the weight of the water in the trunk. The Georgetown level extended all the way to Little Falls, about five miles up the river. On this stretch, the trunk was excavated to a width of eighty feet (except where confined to seventy feet by Little Falls road) and a depth of from seven to eight feet. The larger dimensions of the work on this level provided ample water for navigation, for branches to Alexandria and Baltimore, and for sale to mills and manufactories along the canal bank.

2. A level is the distance between two lift locks.
From Little Falls to Harpers Ferry the canal was generally sixty feet wide and six feet deep. It should be noted in passing, however, that on the entire line the maximum effective width was fifteen feet, the dimensions of the locks and aqueducts. The sixty miles from Georgetown to Harpers Ferry encompassed the greatest ascent in the whole distance. In this, the first third of the canal, almost half of the locks (32 out of 75) and the dams (3 out of 7) were located. It was on this most difficult part of the work that the most serious obstacles were encountered and the early mistakes were made.

Above the Ferry, the canal was only fifty feet wide. Instead of becoming easier, however, the construction had proved fully as difficult over much of the remaining distance. At places the river became very narrow; it generally followed a more winding course; and at some points its banks became precipitous cliffs. The canal company had to resort to expensive modifications of its plans. It frequently chose to carry its works over the obstacles by high level construction. At other times the embankments were built in the river bed itself. Despite its consistent and determined opposition to slackwater navigation, the Board finally turned to it as a temporary solution in a few places. When the rugged nature of the country made even these measures undesirable on inadequate, the directors authorized expensive deep cuts and a tunnel. Scarcity of stone and money affected the work

on the western end of the canal, and necessitated the adoption of composition wood locks, the construction of frame houses for the lock-keepers and the use of houseboats.

Such as it was — and in its own time it was the largest in the United States — the Chesapeake and Ohio canal was slowly extended and opened for trade. The first stretch completed was that from Seneca to Little Falls. By 1831, the whole line from Seneca to Georgetown was in use. In 1834, the canal reached Harpers Ferry, sixty miles from Washington. As it advanced it brought trade and prosperity along with it. With only the section from Little Falls to Seneca completed, the cost of transporting flour down the river was reduced from $1.00 to from thirty to fifty cents a barrel.

When the canal was opened all the way to Rock creek, the cost was further reduced to seven cents a barrel, including tolls. Some thirty thousand barrels of flour were shipped in the first ten days, as well as many other goods.

Seneca, the first western terminus of the canal, held the spotlight for a while. The Board anticipated that a small community would develop there on the strength of the canal trade, the large pool formed by the Seneca dam, and the possibility of water-powered

5. Proceedings of Directors, B, 194 (October 4, 1830).
6. Miles' Register, XL, No. 6 (April 9, 1831), 91.
7. Ibid., XLVI, No. 6 (April 19, 1834), 119.
9. Miles' Register, XL, No. 6 (April 9, 1831), 91 and 95.
manufactories. The site of the prospective development was re-named Rushville, in honor of Richard Rush, ex-Secretary of the Treasury, who had negotiated a loan from Dutch capitalists, as agent for the District cities, enabling the latter to pay their subscriptions to the canal stock. A similar future was planned for Great Falls, which was re-christened Crommelin, after the Dutch banking family which had been instrumental in effecting the loan. Neither of these projects, however, reached an advanced stage of development.

Later, at Catoctin (Point of Rocks), an exchange point with the Baltimore and Ohio Railroad, a flourishing commercial entrepot sprang up. A contemporary description of the community noted that:

The Point of Rocks is now the point of attraction, and really presents, as we are told, an animating scene. Railroad cars and canal boats, constantly arriving, interchanging passengers and cargoes and then departing — the bustle and confusion of a little village sudden arisen, as it were out of the earth and actually doing the business of a commercial emporium — its inhabitants hardly yet acquainted with each other, and very often outnumbered by the transient strangers who throng thither in pursuit of business and pleasure — the very novelty itself, of two great public enterprises so long at war with each other, just going into harmonious operation upon the spot which may be called the battleground; . . .

Again, the prosperity proved to be but fleeting as the "end of track" and of navigation moved westward towards Harpers Ferry.

Farther up the river, another rural community, Newerton, blossomed under the influence of the railroad and the canal. It also proved to be favorably located for the utilization of water power. Many mills

11. Frederick Times, quoted in Miles' Register, XLV, No. 13 (November 23, 1833), 199.
and manufactories took their places along the canal in the middle of the century. The chief engineer finally called a halt to further expansion in 1866 fearing there would not be enough water left for navigation. Nevertown remained strictly a canal town, its fortunes shifting with those of the waterway itself. Other river communities, like Knoxville and Brunswick, took on renewed life under the combined impetus of the railway and the waterway.

Harpers Ferry in turn succeeded Catoctin as a commercial emporium. It had many more advantages than the latter, because of its location at the mouth of the Shenandoah river. It served as both the channel for the trade of that valley and as the point of deposit for that of the upper Potomac. Its commercial position was not solely dependent on the railroad or the canal, nor was it of recent development. Harpers Ferry already had a long history as an entrepot for north-south and east-west trade. Its increased prosperity under the influence of the railroad and the canal was better grounded and more permanent.

Above Harpers Ferry the most promising site for industrial and commercial development was Williamsport. Here again conditions were favorable to the establishment of mills and manufactories utilizing water power. Dam No. 5, located only eight miles above the town, fed a relatively short stretch of the canal. There would be ample surplus water available. Williamsport might also become the

12. Proceedings of Directors, X, 490 (May 10, 1866); George Hothbury, Agent, Henderson Steel and Wire Manufacturing Company to Coale, October 17, 1860.
13. C.P. Manning to President and Directors, April 12, 1866.
14. Cruger and Purcell to President and Directors, July 4, 1832. A portion of the western trade would also be available at Williamsport. Washington to Golston, January 31, 1836; Letter Book B, 400.
channel for the trade of Hagerstown with the eastern markets via the canal. The railroad was stopped momentarily at Harpers Ferry, and when finally released from that restriction, was too busy constructing its own line to the west through Virginia to pause for the erection of expensive branches across the river back into Maryland. When the canal reached Williamsport in 1835, the scene at Catoctin was repeated, as the town took on new life. Some fifty or sixty canal boats passed through the locks on the first day.

"It was a glorious sight to see" the numerous boats as they lay in the basin by night, each illuminated by a glowing coal fire, which cast "a long level rule" of light across the water; and the silence of night was not unpleasantly interrupted by the cries of the hoarse boatmen, as they were disturbed from their moorings by new arrivals, and driven to closer contact with their neighbors.

Unlike Catoctin, however, Williamsport settled down to become perhaps the outstanding canal town along the route of the Chesapeake and Ohio.

Above Williamsport, the next objective of the canal was Hancock. At this point contact would be made with the turnpike from the west. Here it was hoped the canal might secure some of the wagon traffic from as far west as the Ohio. Great interest was shown on all sides over the prospective rise of another point of exchange. However, the anticipated business did not develop, although the town continued in its role as a local trading center.

16. Williamsport Banner, April 11, 1836, quoted in Niles' Register, XLVIII, No. 6 (April 11, 1836), 89. Niles' Register, XLVIII, No. 6 (April 26, 1836), 134-135.
The town of Cumberland at the mouth of Hills creek is perhaps the greatest accomplishment of the Potomac trade route. Founded by the Ohio Company in 1749, it served as a natural center for the business and commerce of the upper valley. It was also ideally located for the transmontane trade as well. The completion of the railroad and the canal to Cumberland in 1842 and 1850, respectively, brought to the town a cheap means of transportation to eastern markets and a large transfer business in coal from the mines at Frostburg and farther west. 17 Cumberland was also the last "end-of-navigation" town for the canal. It undoubtedly secured a lot of business from the boatmen between runs and during the winter. At any rate the prosperity of the town, its land values and trade alike were closely associated with the fortunes and misfortunes of the canal. 18 By the time the coal fields had been exhausted and the canal had become a magnificent ruin, the town had developed an independent and permanent basis of prosperity and was able to continue as an important industrial and commercial center.

Branch canals

In addition to the main line of the Chesapeake and Ohio canal from Rock creek to Cumberland, several branches or extensions were

17. During the agitation for the completion of the canal, in the 'forties, the proposal to extend the canal beyond Cumberland to the Savage river brought protests from Cumberland citizens who were already anticipating the valuable transfer business the waterway would bring. The revival of the project in the seventies caused another flurry of protests. See Letters Received, 1843 and 1875.

18. The intimate connection between Cumberland's commercial prosperity and land values and the Chesapeake and Ohio Canal was demonstrated as early as 1836, when the announcement of the suspension of work on the canal caused a brief panic in the city. Niles' Register, XLIX, No. 25 (February 20, 1836), 426. See also Ibid., LIX, No. 4 (March 26, 1842), 62.
proposed from time to time. Three projects for independent canals
to tap the trade of the main stem at its eastern terminus were
seriously considered, and two of them were carried into operation.
The long talked-of Maryland canal was never constructed, but the
Washington and Alexandria canals were completed to their respective
connections with the Chesapeake and Ohio. The Alexandria canal,
at least, became an important outlet for the trade of the main line.

The Maryland, or "cross-cut," canal was among the first of the
branches to be mentioned. It was a factor in the interest of Baltimore,
and to that extent in the support of the state of Maryland, in the
Chesapeake and Ohio canal conventions of 1823 and 1826. 10 Enthusiasm
for the "great national project" in that state varied in direct
proportion to the optimism with which Baltimore merchants viewed the
possibilities of affecting the proposed connection. The Maryland
Canal Company was incorporated, March 6, 1826, by the same act which
subscribed $600,000 to the stock of the Chesapeake and Ohio. 20
Preliminary surveys by state commissioners for a route through
Montgomery county seemed to indicate the impossibility of tapping the
main canal far enough up the river to insure the city of Baltimore
much chance for a fair share of its trade. 21 Baltimore merchants and

10. See, for example, Miles' Register, X.Y, No. 10 (November 8, 1823), 145.
20. Baltimore and Ohio Railroad Company vs. Chesapeake and Ohio Canal
Company, Maryland Reports, 4 Gill and Johnson 156 (opinion of Chief
Justice Buchanan).
21. Letter of the Secretary of War, J. Berbour, transmitting a Report of
the Engineer on the survey of a route for the proposed canal to connect
the Chesapeake and Ohio canal with Baltimore, January 11, 1828, 20th
Congress, 1st Session, House of Representatives, Executive Document
No. 58, pp. 6 and 8.
capitalists thereupon turned to another means of securing the trade of the west, in competition with Philadelphia, New York and Boston. The solution which they thought they had found for their own peculiar problem of a waterless, mountainous route was the railway. At this early date, the latter was still strictly in its early experimental stages as a transportation agency in the United States. Nevertheless they secured a charter for the Baltimore and Ohio railroad in 1827 and immediately organized the company that was to construct the road.

Meanwhile, William Howard, a United States engineer, made another survey of possible routes for a canal between the Chesapeake and Ohio and the city of Baltimore. The local merchants followed the surveys with great interest, seeking the reassurance of an alternate means of communication with the west in case the railway did not prove satisfactory. Mr. Howard ran his lines in 1827 and reported his findings to Congress in 1828. He accepted the conclusions which the Maryland commissioners had made earlier that there was no use in seeking further in Montgomery County (or above and to the west of it). Therefore he concentrated his attention on a route indicated by them through the city of Washington to the Eastern Branch of the Potomac (the Anacostia) and then in a northeasterly direction to Baltimore. This course he found to be practicable, although expensive. The estimate for the whole line, excluding land costs, was $2,980,815.40.

22. Answer of the Chesapeake and Ohio Canal Company, 4 Gill and Johnson 33-34.
24. Ibid., pp. 6 and 8.
25. Ibid., pp. 6-7, 8 ff.
The route itself was distasteful enough to Baltimore, offering little likelihood of securing much trade. The cost of the connection, however, quickly brought all talk of the project to an end. Although the dam and feeder at Little Falls and the Georgetown level were planned with a view to supplying the needs of a Maryland canal (and other branches), no more was said of the proposal until the middle thirties.

The scheme for a cross-cut canal to divert the prospective trade of the Chesapeake and Ohio was revived in the thirties after the legal victory of the canal in the Maryland Court of Appeals in its contention for the right of prior choice in the location of its canal in the Potomac valley. This verdict and the compromise act of 1833 seemed to have halted the railroad at Harpers Ferry, at least temporarily. As the need for some connection with the canal increased, so did the reluctance of the Baltimore merchants to accept the findings of the early surveyors as final. Then, too, the Maryland canal had become a convenient political device. Inasmuch as both the Baltimore and Ohio and the Chesapeake and Ohio needed further financial assistance by 1836, they united with the supporters of the cross-cut canal and other internal improvement schemes to push through the assembly an omnibus bill providing eight million dollars for public works. The grants to the Baltimore and Ohio and to the Chesapeake and Ohio were conditioned on the successful organisation of the Maryland Canal Company, with sufficient capital to begin the construction of the long-awaited connection. The company was duly formed, the subscriptions

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26. See above, chapter VI.
made, and the fact of organization recognised by the state treasurer.*

After the subscriptions to the major projects were released, the company lapsed into inactivity. A legislative investigation in 1838 revealed the sordid details of the incident, but it was then too late to rescue the project.

The problems which remained unsolved and which prevented the proposed canal from becoming a reality were the location and cost of the connection. Several surveys of possible routes were made during and after the agitation for the construction of the waterway. Fisk, the Chesapeake and Ohio's engineer, and Hughes, the State engineer, made examinations of three routes entirely within the state in 1836, i.e., the Westminster, the Monocacy-Linganore, and the Seneca routes. They reported in March, 1837, that all three were impracticable because of the insufficiency of water on the summit levels. Meanwhile, the mayor of Baltimore named Isaac Trimble, an engineer experienced in the construction of railroads, to make his own surveys. He reported in March, 1837, that the Seneca route was practicable on certain conditions and at a cost of 36,324,300.28

At this point the citizens of Montgomery county, through which the proposed canal would be constructed, intervened and requested further examinations of the disputed route. All three engineers were recalled and questioned further, but all confirmed their original findings.

In March, 1838, the Maryland legislature ordered the subscriptions to the Maryland Canal Company withheld unless the cross-cut canal was constructed via an all-Maryland route. At the request of the Governor of the state a United States engineer, Col. John J. Albert re-examined the three routes in question, concentrating especially on the one in dispute. In his report in December, 1838, he confirmed the conclusions of Fisk and Hughes that all three were impracticable. At the same time he reported the discovery of a fourth, from Seneca to the Patapsco river via Brookeville. In answer to a request for a further study and estimate, he reported in February, 1839, that for the summit level, 21 3/4 miles in length, the probable cost of construction would be $11,670,000 -- an average of over $500,000 per mile. This staggering figure put an end to all speculation about the connection at that time.

The project died hard, perhaps because of a lurking fear that the railroad would not be able to compete successfully with the canal as a transportation agency. At any rate, the proposal for a cross-cut canal was revived again in the 'fifties shortly after the completion of the Chesapeake and Ohio. By this time the railroad company was firmly enough established to disperse all ideas as to the desirability of a connection. Yet the question came up again in the 'seventies

29. Ibid., p. 360.
30. Ibid.; John J. Albert, Report on a Canal to Connect the Chesapeake and Ohio Canal with the City of Baltimore (1839) (Washington, 1874), p. 35.
33. Letter of Thomas Swann, President of Baltimore and Ohio Railroad Company, in Report ... on the Cross-Cut Canal, pp. 6 ff.
at the height of canal prosperity, when talk of the extension of the Chesapeake and Ohio was also revived. The Maryland legislature chartered a company to build the long-delayed Maryland canal, but it was never organized. 34

A second extension of the main canal was the Washington, or city canal. The project for an artificial waterway through the capital to connect the Potomac and the Anacostia rivers was well advanced as early as 1791. 35 The original plan to unite the Tiber and St. James (or James) creeks was abandoned because of straitened financial conditions in the early 'nineties. 36 Maryland authorized a lottery in 1796 in an effort to provide funds for the company to continue its work, but the receipts were negligible. 37 In 1802, Congress chartered another company to carry on the work, but interest was so slight that no company was actually organized. 38 Vain attempts were even made to raise money in England. 40 The failure was attributed to the momentary suspension of the Potomac Company's work for lack of funds, the sparse settlement on the Anacostia (and hence weak support for the whole scheme), and the general despondency of the citizens. 41

35. The best account of the early history of the Washington canal is that found scattered through the two volumes of Wilhelmus. Bryan, A History of the National Capital (2 vols., New York, 1911-1916). The following summary is based largely upon his account, supplemented by other materials not available to him and by the re-examination of the sources he cites.
38. Ibid., I, 493.
39. Washington National Intelligencer, September 6, 1817. Two years elapsed before the subscription books were even opened to the public. See the public notice of the event, in ibid., June 15, 1804, signed by Thomas Tingey, Daniel Carroll, Thomas Law, and Daniel C. Brent, Washington, June 11, 1804.
40. Ibid., September 5, 1803, quoting letters of Law dated May 30 (1803).
41. Ibid., May 16, 1807. Communication from a meeting of citizens of Washington...
In 1809, another company was chartered to undertake the work. This time the business of organization proceeded much more rapidly. Subscription books were promptly opened, but such was the poverty and apathy of the city that only half of the authorized capitalization of $100,000 was raised. Nevertheless work began within a year. Appropriate inaugural ceremonies were held, on May 9, 1810, near the present intersection of New Jersey avenue and E street, southeast. The President of the United States, James Madison, turned the first spadeful of earth. Two routes were adopted for the canal; the first extended from the Tiber to the foot of New Jersey avenue at the Eastern Branch; the second, constructed later, branched off from the former near the point at which the inaugural ceremonies had been held, and followed the course of James creek to its junction with the Anacostia east of Greenleaf point (present-day War College). Irish immigrants worked on the canal for about a year before bankruptcy threatened to halt construction. The company had almost exhausted its resources in 1812 when Congress came to its rescue. It revived the old Maryland law permitting a lottery to provide additional funds for construction.

After five years of effort, including a brief period of suspension during the invasion of the city in 1814, the company finally completed

42. Bryan, op. cit., I, 499; Washington National Intelligencer, September 6, 1817. The Intelligencer of that date has a short account of the early history of the canal project in a letter of "A Stockholder." Payments on the capital stock that was sold extended over a two year period. Ibid., June 30, 1811.


44. Ibid., I, 501, n. 2. See also any contemporary map of Washington or the District of Columbia.

45. Ibid., I, 500.

46. Ibid. See also the letter by "A Stockholder" in Washington National Intelligencer, September 6, 1817.
The two and one-quarter mile canal. The waterway was formally opened on November 21, 1815, with the usual ceremonies conducted by city and company officials and accompanied by the Marine band.

When the company attempted to exact wharfage fees in 1817 (following two years' delay during which a lock was repaired) there was strenuous objection. It was said that the cost of local firewood was increased by the charges, and asserted indignantly that the terms of the charter had not been met. It was pointed out that at low tide the bottom of the canal was exposed at places. The company on its part insisted that it had complied with the charter and that the work had been duly accepted. The canal proved to be very unsatisfactory in operation; and the middle section was soon filled up by the deposits of the tides in the Potomac and the Anacostia. By 1817-1818 the condition of the canal was so poor that the city was already discussing its purchase and restoration.

The organization of the Chesapeake and Ohio Canal Company revived interest in the city canal as a means by which the trade of the former could be brought into Washington. The city and the canal company

47. Bryan, II, 104; Washington National Intelligencer, October 27, 1815.
49. Ibid., September 2, 1817; Bryan, op. cit., II, 106.


52. Letter of John P. Ingle, November 11, 1830, in Washington National Intelligencer, November 18, 1830; Bryan, op. cit., II, 106.
reached a compromise in 1828 by which the latter agreed to extend its waterway to a basin to be constructed by the former at the mouth of Tiber creek. When the city was slow in taking advantage of this agreement, the Chesapeake and Ohio considered extending its own line to the Anacostia by a different route, generally around the northern fringe of the city. The city authorities finally acted in 1831. The city purchased the old Washington canal and undertook to complete and improve it. The Chesapeake and Ohio thereupon extended its canal along the Potomac to the Tiber creek.

This remained one of the possible outlets for the trade of the Potomac valley until the 1880's. However, for various reasons it was seldom used. The tide was constantly at work filling the channel, requiring continual dredging to keep it open for even the lightest draft boats. Furthermore, in the early years, the trade on the main canal and the demand of the city markets were not great enough to provide much business for the city canal. When the Chesapeake and Ohio was finally completed to Cumberland, the city again put its waterway in

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54. Memorial of the Chesapeake and Ohio Canal Company, December 5, 1828, 20th Congress, 2nd Session, House of Representatives, Document No. 12, pp. 4-5, 7-8; Report [of Roberts and Purcell] on the Extension of the Chesapeake and Ohio Canal to the Navy Yard on the Eastern Branch of the Potomac, filed in Letters Received, 1832.
55. Laws of the Corporation of Washington, 1831, ch. 30: Act for the purchase of the Washington Canal and the completion thereof by the Corporation of Washington, passed January 3, 1831. The canal was finally completed in 1837 at a cost of $110,000, of which Congress appropriated $150,000. The operation of the waterway was under the control of a commission appointed by the city council. It was a public highway, toll-free. Klein, op. cit., p. 66; Bryan, op. cit., II, 110.
56. Letters of F. Rodier, engineer in charge of the construction of the Washington branch, in Letters Received, 1832.
57. There was, however, practically no trade on it after 1855. Communication from the President, 43rd Annual Meeting (December 29, 1871), Proceedings of Stockholders, 5, 185.
repair at a cost of $140,000. Local traders anticipated great trade benefits, pointing out that the Potomac channel on the Georgetown side was rapidly filling up, and that soon large boats would be unable to load fully there. The commercial advantages of the Anacostia wharves would bring the trade of the main stem to that branch of the Potomac. Unfortunately by the time the canal was completed, the canal boats had become so large that navigation under the low Georgetown bridges was inconvenient. Thus trade with both Georgetown and Washington ceased, and the boats crossed the Potomac aqueduct to reach tidewater at Alexandria.

After the Civil War, the Chesapeake and Ohio finally raised the bridges and cleaned out the basin. The city of Washington again began the work of cleaning and renovating its canal. The work had barely begun when the city lost its self-government. Congress, which took over the direction of city affairs in 1874 was not interested in the commercial development of the city as much as it was in its future role as the national capital. The city canal became a nuisance which was abated only when it was finally filled in and covered over.

The third of the proposed extensions of the Chesapeake and Ohio canal, and the most important, was the Alexandria canal.

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59. Letter by "T." in "Washington National Intelligencer", November 1, 1848. See also the letters by "J.C.H." in ibid., October 16, 27, November 3, 8, 15, 1848.
60. Bryan, op. cit., II, 676 and 626. Congress established a territorial form of government for the District of Columbia in 1871. In 1874 it replaced this with the present Board of Commissioners.
61. Ibid., II, 286. The canal was gradually filled in and covered over beginning in 1879. John C. Proctor, "Along the Old Washington Canal," Washington Sunday Star, March 18, 1948. The James Creek section was not covered over until the World War. See Washington Post, October 8, 1940.
Alexandria had the longest history as a Potomac port of any of the District cities. In the eighteenth century, it had served as the hub of the trade between the Ohio Company agents on the frontier and the English market. It was also one of the most active supporters of the Potomac Company. But when Alexandria was included in the federal district, it entered a period of eclipse from which it never emerged. A new city was created for the seat of the government. This city, Washington, obtained all the public buildings and all the favors. In addition, Alexandria suffered a commercial set-back when Congress ordered the construction of a causeway closing of the western channel of the main river in order to accommodate the post road to the South. Congress granted the application of the city for permission to cut a canal through the causeway, but the War of 1812 intervened before this project could be constructed. The sealing of the western channel closed a relatively quiet waterway to Alexandria and forced the river traffic into the more turbulent main channel. Thus the position of Alexandria as a port for the river trade was compromised.

The organization of the Chesapeake and Ohio Canal Company revived Alexandria's interest in that trade. The merchants and bankers of that city actively supported the company collectively and individually.

63. Ibid., see also Annals of Congress, 23d Congress, 1st Session, p. 966 (January 8, 1835), quoted in Bryan, op. cit., 1, 495-497.
the city of Washington forced the company to bring the canal
down to Rock creek and eventually to Tiber creek, Alexandria, like
Georgetown, feared the effect that such an extension would have
on its competitive position. Its leaders professed to have under-
stood that the canal would terminate at Little Falls, at which point
all three cities would have had more or less equal opportunities to
secure their shares of the trade. To obtain a reasonable proportion
of the business of the canal under the new conditions the local merchants
took the lead in the formation of the Alexandria Canal Company. This
company was chartered by Congress in 1830, and organized in 1831.

The purpose of the new company was to construct a tidewater
canal along the south bank of the Potomac from an aqueduct across the river
above Georgetown to Alexandria. The connection with the main waterway
was made just to the west of the city of Georgetown. The major under-
taking in the project was the Potomac aqueduct. It was soon discovered
that a wooden trunk on wooden piers would not bear the weight of the
canal water in the turbulent current of the Potomac.

65. Memorial of Alexandria, loc. cit., p. 3.
66. "Memorial of the City of Alexandria, December 5, 1828," Memorial of
the Chesapeake and Ohio Canal Company, December 6, 1828, 20th Congress,
2nd Session, House of Representatives, Executive Document No. 12, p. 9;
Memorial of the Corporate Authorities of Alexandria, June 15, 1830,
24th Congress, 1st Session, Senate, Executive Document No. 55, p. 5.
See also Bryan, op. cit., II, 110.
67. Memorial of the Alexandria Canal Company, January 31, 1831, 21st Congress,
2nd Session, House of Representatives, Executive Document 71, pp. 1-5.
68. "Memorial of the City of Alexandria, December 3, 1828," loc. cit., p. 9;
Letter from the Secretary of War transmitting a Report and Estimate of
the Chesapeake and Ohio Canal to Alexandria in the District of Columbia,
April 21, 1828, 20th Congress, 1st Session, House of Representatives,
Executive Document No. 254, pp. 6 and 13.
69. Letter from the Secretary of War, etc., April 21, 1828, loc. cit., p. 14.
70. Report of the Committee of the District of Columbia [on the Memorial
of the President and Directors of the Alexandria Canal Company], May 30,
1834, 23rd Congress, 1st Session, House of Representatives, Executive
Document 496, p. 5; Bryan, op. cit., II, 111.
stone piers made the aqueduct a much more formidable and expensive task than had been anticipated. As finally completed, the canal cost $1,250,000 instead of the $202,852 estimated.71 There was some opposition in Congress to building a canal where nature had already provided one.72 Furthermore, the promoters of the Alexandria canal had to overcome the hostility of Georgetown authorities.73 These officials, representing the local merchants, looked with disfavor on the project as a threat to their monopoly of the valley trade. Notwithstanding the opposition, construction began on July 4, 1831.74 With the help of a Congressional appropriation of $400,000, work progressed as well as might be expected.75 Georgetown’s hostility was finally overcome in the Supreme Court;76 and the failure of the Chesapeake and Ohio to build the northern abutment of the aqueduct (as was required of it) was surmounted by the determined efforts of the Alexandria Canal Company.

On December 2, 1843, the canal was completed and opened after twelve years of work.77 Shortly thereafter, the territory in the federal district south of the Potomac was retroceded to Virginia. That state

73. Georgetown used the location of the Northern abutment as the reason for its opposition. Register of Debates, p. 1068 (June 8, 1832), cited in Bryan, op. cit., II, 114.
74. Thompson P. Mason to Mercer, June 29, 1831.
76. Georgetown vs. Alexandria Canal Company, U.S. Supreme Court Reports, 12 Peters 591; Bryan, op. cit., II, 114.
promptly came to the relief of the city by subscribing to a large block of Alexandria Canal Company stock. When the Chesapeake and Ohio canal was finally completed, the Alexandria branch became its primary outlet to the river, for the Rock creek basin was greatly filled in and generally out of repair. During the Civil War, the federal government drained the aqueduct and used it as a bridge, to the detriment of the trade of both canals. After the war, the Georgetown bridges were raised and the basin was cleaned out. Thus in the post-war years Alexandria had to share the coal trade from the Cumberland fields with Georgetown. Its trade gradually declined until it became negligible. Meanwhile, the government cast covetous eyes on the sturdy aqueduct. In 1867, Congress appropriated funds to purchase it and convert it to a bridge, thus closing the Alexandria canal.

The Canal in Operation

When the Chesapeake and Ohio canal opened for trade from Georgetown to Seneca in 1831, a new period began in the affairs of the company. From then on the board of directors would be concerned with both the construction and the operation of the waterway. With characteristic thoroughness the Board issued a comprehensive set of rules and regulations covering navigation on the canal and the conduct of boatmen and

78. Virginia Assembly, Laws, March 1, 1847, cited in Bryan, op. cit., II, 263. It subsequently also guaranteed some of the company's bonds.
80. Proceedings of Directors, N, 362 (June 23, 1887). Some coal companies continued to ship their produce down the river to Alexandria for transshipment there.
The officials. 81 The first stipulation was that all boats or floats on the waterway were to be propelled by a towing line drawn by men or horses. Other provisions required that the greatest care be taken at all times to prevent injury or damage to the canal and to others navigating it. In particular, iron-shod poles were prohibited, as were pointed boats and craft with iron-shod corners. Traffic was to keep to the right in passing, and a system of preference was established to facilitate navigation: boats had the right of way over rafts, descending boats over ascending craft, packets over freight boats at all times, and packets carrying the mails over all others. Boats traveling at night were required to have a light in front. Due notice must be given upon approaching a lock to permit the tender to open the gates; and only if the latter failed to do his duty was the boatman to lock his own boat through, showing at all times proper care for the safety of the lock. Boats were to tie up only on the berm side of the canal to prevent interference with traffic on the towpath. Finally, all boats must be registered and plainly marked on both sides with name, number, and marks denoting the draft of the boat. 82 The regulations that applied to canal officials, collectors, and lock-keepers warned against neglect of duty, urged the greatest care at all times, and assigned responsibility for the protection of company property and interests. 83

81. "Regulations for Navigating the Chesapeake and Ohio Canal," ibid., B, 410-419 and 419-421 (July 18, 1831); revised and brought up to date, ibid., D, 240-252 (February 18, 1835). The major change in the revision was the modification of rule 1, to permit the use of steam on the canal.

82. See also ibid., B, 290 (March 26, 1831). "Provisions against the use of poles and requiring registration and proper marking were adopted even before the general code of regulations.

83. Ibid., B, 419-421 and 422-429 (July 16, 1851).
The canal was organized into divisions of fairly uniform length, each with a superintendent in charge. Although the exact boundaries of the sections changed, they usually coincided with the arrangements of dams or were centered around the leading canal towns, Cumberland, Hancock, Williamsport, etc. New divisions were added as more of the canal was completed. Each superintendent was responsible for his division, but usually received insufficient authority to be effective. The Board also assigned repair gangs and bosses to each division to expedite repairs. Because of the lack of authority and at times the indifference of the incumbent, the formal organization of the canal broke down in practice. It was frequently incapable of enforcing the proper degree of efficiency among the employees and was not always successful in anticipating trouble or remedying it promptly. This condition was not helped by the frequent changing of officials which began in this early period and became more common after the completion of the canal.

The organization of the line became in effect a mere formality, for the Board retained too much authority for itself. As a result, the character and the conduct of the superintendents were not so important in the operation of the canal as they might have been. On the whole, however, the men who held office during most of the early period were not so bad as might have been anticipated on a new work — or as their successors were. If not exceptionally capable, they at least became experienced, and they made some effort to perform their tasks conscientiously. The same may be said for the conduct of most of the
collectors and other officials in the early period. In default of an effective line of authority, the character of the lock-keepers became more important to the welfare of the canal.

On the basis of what little is known of the lock-tenders, not much can be said in their favor. Indeed, despite the important role which devolved upon them in the course of the Board's conduct of canal affairs, apparently little was expected from them. For his services at any hour, day or night, the lock-keeper received his house, an acre of land for a garden and $160 a year. For each additional lock under his care, he received $50 extra, up to three locks and $250. But he was expected to provide his own assistants to tend the extra locks. Married men were preferred and large families favored -- the more hands to do the work. At times women held the position of lock-keeper, usually the widows of the original tender. In March, 1836, the board decided that all women lock-keepers would be discharged May 1, in the interest of more efficient operation.

Exceptions were subsequently made in at least four cases: Mary Ross, Susan Cross, Mrs. O'Riley and Mrs. James Davis, all the widows of former keepers. Male tenders were not always blameless themselves. Many were dismissed for drunkenness, neglect of duty, and absence without notice or without providing a substitute. Repeated complaints

84. Ibid., B, 135 (July 7, 1830), 188 (September 26, 1830); Ibid., H, 144-145 (February 4, 1848). Actually tenders of a single lock received but $100 a year. It was not until July 1, 1831 that their wages were raised to the $150 minimum. Ibid., B, 398.

85. Ibid., B, 135 (July 7, 1830).

86. Ibid., D, 284 (March 18, 1838).

87. Ibid.

88. Mary Ross to President and Directors, March 24, 1835; Proceedings of Directors, D, 287 (March 25, 1836); Ibid., E, 38 (March 30, 1836); Ibid., F, 512 (December 20, 1842); Ibid., G, 146 (April 18, 1844).

89. Ibid., B, 328 (June 3, 1831), 398 (July 1, 1831); Ibid., D, 80-81 (Continued on next page)
were made about the sale of liquor by lock-keepers to boatmen and workers, and the disastrous results of this practice. The Board repeatedly forbade the illicit trade, but with apparently little effect.

The formulation of detailed regulations and the organization of canal employes did not insure the orderly operation of the work. On the contrary, every conceivable abuse was reported at one time or another. The Board immediately saw the necessity of securing some definite delegation of police power from the parties to the charter in order to gain the authority to enforce its regulations. Canal property was misused, tools were lost and stolen, repair materials damaged or stolen, and the towpaths and aqueducts used as wagon roads and bridle paths. Repeated directions for the enforcement of the rules indicate a laziness or indifference on the part of line officials and boatmen alike. Regulations which were singled out for enforcement included the use of iron-shod poles for propulsion, the navigation of the canal by boats and scows that did not conform to regulations, and damage to the locks by the negligence of boatmen and tenders.

89. (Continued from previous page)
(April 25, 1834); ibid., G, 206-210 (November 8, 1844); Stone to Coale, August 29, 1844; Elgin to Coale, March 5, 1846. In the last two cases, the men did not lose their jobs. See also Ingle to Rodgers, August 30, 1837. Letter Book D, 205.

90. Proceedings of Directors, B, 89 (June 4, 1836); ibid., 0, 210-211 (November 8, 1844); ibid., H, 179 (June 5, 1848).


92. Elgin to President and Directors, July 10, 1833; F. Thomas [jr.] to F. Thomas [sr.], December 15, 1837; Elgin to President and Directors, September 15, 1841; Proceedings of Directors, C, 401 (July 19, 1833); ibid., D, 208 (December 24, 1834); ibid., E, 346 (December 20, 1837); Ingle to Elgin, December 20, 1837, Letter Book D, 243.

93. W.R. Bryan to Ingle, August 15, 1831; Proceedings of Directors, H, 290 (March 26, 1831); ibid., C, 30 (November 19, 1831), 388 (June 4, 1833), 392 (June 28, 1833); W. Basby to President and Directors, December 9, 1838.
The boatmen themselves were a rough and ready lot. They usually formed a class apart from their neighbors, intermarrying within their own group, their children being born and raised in the trade, knowing no other life but boating. They received little, but often cared less. They were constantly brawling among themselves for precedence at locks, because of some real or fancied slur, or for exercise; and with others for almost any reason. Their life was at best irregular, unpredictable, and the canalers were like their trade. Many dawdled along the line, taking their own good time in making the run. Others were ambitious, driving their teams and boats at full speed night and day, caring little for themselves, their mules and boats, or for others—least of all for canal property. They were constantly at odds with the company over freight charges and the rate of tolls, and in the early days took unusual ways of expressing their dissatisfaction. One master of a packet staged a regular demonstration in Georgetown.

...we heard a thundering noise of wild music and saw a large Cavalcade Colours flying & having got near, it proved to be Mr. Fenlon, with his teams & crew with the Colours of the packet floating in high glee; he proceeded and paraded down Bridge Street, and made a stop upon the new Bridge and -- refreshing himself and his crew after much music gave the word of command for High Street -- reeling in Saddle all the way; a gang of negroes & boys thronging the street.

94. The description of the boatmen is based on interviews with George Nicholson, General Manager of the Chesapeake and Ohio canal, 1890-1938; "Charley" Egan, 70, and Harvey Hayhutches, c. 50, former boatmen, and Frank E. Carl, newspaper correspondent and local historian, c. 80, Cumberland, Maryland; also with Edward Oswald, c. 70, Clerk of the circuit court of Washington county, Maryland, and McKechnie, a warehouseman, c. 50, a native of Cumberland.

95. The boatmen particularly resented the priority granted to packets, and often engaged in fights among themselves for preference at the locks. See, for example, Van Slyke to President and Directors, April 2, May 26, 1831.

96. P. Rodier to Ingle, September 6, 1831. In later years, after the boatmen had become organized under the duress of the 'seventies, they resorted to strikes as a more effective way of securing their ends.
Usually, however, the boatmen shunned the towns, for it cost too much to feed their teams, and they felt out of place. Even while wintering along the line they had their own settlements on the fringe of the towns or often quite far from the rural communities.

A point of particular grievance to the directors was the quality of the boats operating on the canal. No one was willing to undertake to fulfill their dreams of steamers, double-decked packets, etc. In fact, the boatmen were reluctant to meet even the minimum requirements of the regulations. Complaints were frequently made of iron-shod boats, leaky scows, drifting rafts, and sunken wrecks obstructing navigation. By the enforcement of regulations, the provision of drydocks, the assessment of fines, and by other devices the company sought to drive undesirable craft off the waterway and to encourage the construction of new and larger boats. There was a flat rate discrimination of one hundred per cent against rafts. Nevertheless, the lumber trade and the incidental trade of the farmers, who built their own boats designed to last for only one trip (usually to be sold at Georgetown for firewood), made the struggle for better boats a never-ending one.

The Board also sought to encourage the development of passenger travel and packet service on its waterway. It kept on the lookout for

97. 1st Annual Report (1829), Proceedings of Stockholders, p. 47.
98. Proceedings of Directors, C, 30 (November 18, 1831); J.Y. Young to ————, October 25, 1838. William Easty to President and Directors, December 9, 1838; J.G. Stone to Ringgold, June 6, 1847.
and published news of experiments with new types of boats on European canals. It offered attractive terms to would-be promoters of packet lines, including the privilege of operating toll-free for one year after the inauguration of the service. It offered the same privilege to the first successful steamer to be placed in operation on the canal. It even built a novel all-iron boat of its own as a model packet. In the end, the best it could achieve was a daily packet service, toll-free, but with the privilege of free use by canal employees when traveling on official business. Later on, a ferry service was established across the Potomac aqueduct. But no successful steamer was developed in the early period.

Tolls, Trade and Breaches

The business of the canal in the years before its completion was almost wholly the transportation of agricultural produce. As long as this remained true the company was barely able to meet expenses, and all hopes of the promoters had to be expressed in terms of future prospects. But the canal board refused to accept a comparison of its trade with that of the Potomac Company. Instead it preferred to point to the great lumber and coal resources of the valley and the valuable trade to and from the west. If any comparison had to be made, the directors usually used the successful Erie canal as the measure of

100. Ibid., B, 194-196 (October 4, 1830).
101. Ibid., D, 368 (July 3, 1836); ibid., P, 116 (November 2, 1839).
102. Ibid., D, 220 (January 13, 1835).
103. Ingle to Zachariah Offutt, March 22, 1834, Letter Book B, 203. It cost about $1400, but was found to be unsatisfactory for its purpose and was offered for sale as scrap for $300 in 1836. Ingle to Hugh Smith, December 16, 1836, ibid., D, 9.
104. Proceedings of Directors, D, 398-399 (September 11, 1836); ibid., E, 87 (July 6, 1836); O.M. Linthicum to President and Directors, June 29, 1836.
the future prospects. Nevertheless the company did not ignore
the river trade. Until its own works were completed, it kept the
Potomac Company's locks and canals in repair. This consideration
toward river traffic remained a fixed policy in the construction of
the canal all the way to Cumberland. The rate of tolls also re-
mained the same as that charged by the predecessor company, until 1834.

The first comprehensive rates of tolls were established in the
latter year. They emphasized the agricultural character of the
canal trade at that time. A revised list of charges went into effect
on July 1, 1835, at which time all tolls for river traffic (except
where slackwater navigation in the Potomac bed was technically a part
of the canal) were abandoned. The tolls of 1836 also made the
first distinction between short and long distance trade, providing
lower rates per mile for additional distances over fifteen miles.
Tolls were revised again in 1841 when the charges on the major agri-
cultural products and provisions were raised to a flat two cents a ton per
mile. The tariff on coal and lime remained at one cent a ton per mile.

106. Proceedings of Directors, A, 312-313 (July 7, 1829); 342 (September 9, 1829); ibid., B, 30 (February 24, 1830).
107. In 1833, for example, the board ordered the construction of a
temporary lock around the abutment of Dam No. 5 to permit the
continuation of river trade while the dam was being built. Ibid.,
D, 13 (November 15, 1833).
108. Ibid., B, 194 (October 10, 1830).
109. Ibid., D, 67-69 (April 4, 1834). In preparation for the establishment
of the new schedule of tolls, the company requested information on
charges made upon other canals. See, for example, Ingle to Dr. Silas
Condict, Morristown, N.J. and Ingle to Edward Everett, Boston,
October 5, 1830, Letter Book A, 256-257.
110. Ibid., D, 284-286 (April 23, 1835), 333-334 (June 15, 1835); Ingle to
In 1843 a new Board reduced the tolls to approximately the levels of 1836.\textsuperscript{112} Reductions below the latter rates could be made only with the consent of the state agents according to the terms of the mortgage of 1835.\textsuperscript{113}

The agricultural nature of canal trade which was indicated by the toll schedules and testified to by company officials was also demonstrated by the analyses of trade contained in the annual reports. Although an accurate and detailed listing was not begun until 1842, by which time the canal had already been completed to Dam No 6, fifty miles below Cumberland, the chief products of trade were still flour, wheat and corn. Lumber, lime, stone and some coal were also shipped in varying quantities.\textsuperscript{114} Depending as much as it did on agricultural produce, the canal's trade was subject to fluctuation according to the size of the local crops.\textsuperscript{115} In cooperation with the Virginia society for the advancement of agriculture, the Board reduced charges on fertilizers to help increase the productiveness of the soil, and thus indirectly to stimulate trade.\textsuperscript{116}

On the whole, however, the problem of developing business for the canal was not clearly or fully recognized during the early period.

The directors were prone to look upon their work as a magnificent

\textsuperscript{112} Ibid., G, 56 (May 3, 1843).
\textsuperscript{113} Ibid.
\textsuperscript{114} See Appendix, table IV. In 1881, the company destroyed waybills and toll returns for the period prior to 1847, inasmuch as the accounts were closed and the papers were "of no value for future reference." Proceedings of Directors, H, 449 (June 2, 1881).
\textsuperscript{116} Proceedings of Directors, H, 214 (October 10, 1848), 239 (February 7, 1849).
enterprise to which trade would naturally be attracted. They conceived their task to be merely the construction and maintenance of the waterway. Thus the conduct of the Board was not at all consistent. At the same time that it lowered tolls on manures in order to increase trade and production, it refused to have any connection with the business of transportation. Although it tried to encourage boat-building, it did nothing to establish and operate a freight line of its own boats. It manipulated tolls so as to compete with the railroad for trade, but made no effort to control all the charges of transportation, including freights, wharfage, etc. It spent large sums on dredges, ice-breakers and repair gangs to keep the canal open for navigation, but forbade its employees to have any connections with persons or businesses operating boats on the canal. Although it sought to develop manufactories along its banks by the disposal of surplus water power, it looked upon the sales primarily in terms of immediate profits rather than as stimulants to further trade. Yet at the same time, it was frequently citing in its reports and its petitions the value to the state of New York of the Erie Canal in terms of the trade it produced for the state as much as the profits earned by the canal itself. Subsequently the Chesapeake and Ohio Canal Company reversed itself on all points except the sale of water power.

The minimum task set by the company for itself, the maintenance of the waterway for purposes of navigation, proved to be an unending job. During the early years of operation there were many breaches
which resulted in suspensions of trade for hours, days, or weeks. 117 Most of these could be attributed to any one of several causes: the newness of the works, the high banks required in some places, the lack of experience of the employees, the poor quality of the work, insufficient knowledge of soil conditions in the region, and even the degradations of muskrats. 118 On the other hand, there were also frequent complaints of low water in the canal resulting from droughts in the valley, sand and mud bars washed into the canal by freshets, and leaky dams. 119 Other obstructions to trade during the early years of the canal included sunken wrecks, loose boats, carcasses of dead animals, and fallen rocks and earth. 120 The basin at Rock creek was the source of much trouble on two points, the obstruction of traffic by boats tied up irregularly along its sides and the rapid filling up of the basin by the silt which the creek brought down. 121

The most serious threat to the trade of the canal was the danger of floods in the Potomac valley. Although the worst flood in the

117. Aurcell to President and Directors, November 26, 1830; Van Slyke to President and Directors, October 2, 16, 1830; Van Slyke to Ingle, June 7, 1831; Aurcell to Ingle, October 4, 1831; Young to President and Directors, July 5, 1836; Barnard to Coale, April 1, 1844 (mentions breaches in August, 1842, April, August and September, 1843); Proceedings of Directors, B, 191-192 (October 2, 1830), 236 (November 26, 1830), 382 (June 10, 1831); ibid., C, 12-13 (October 7, 1831); ibid., D, 233-234 (February 9, 1835); etc.

118. There was a reward of 25 cents for each muskrat presented to canal officials if evidence was given that it was killed on the line of the canal. Proceedings of Directors, C, 111-112 (March 24, 1832).

119. G.G. Johnson to President and Directors, November 21, 1838; Petition of Thomas J. Harris and others, July 6, 1842; F. Tilghman, director, to H.G. Sprigg, June 26, 1842; Fisk to Coale, September 19, 1844.

120. Proceedings of Directors, C, 30 (November 11, 1831); ibid., D, 323 (May 29, 1835); Dan Boyle to Washington, June 27, 1838.

121. Proceedings of Directors, C, 112 (March 24, 1832). See also the correspondence with O.H. Dibble, contractor, Letters Received, 1832.
history of the Potomac Company, in 1810, had left its works relatively undamaged, the Chesapeake and Ohio Canal Company was not so fortunate. Freshets occurred more frequently and with greater destructiveness. Serious damage was noted in the freshets of 1836, 1843, 1846 and 1847, but these were by no means the only floods to ravage the canal. Each freshet was a twofold blow at company fortunes, for it deprived the latter of its source of revenue and at the same time made necessary the expenditure of large sums of money for repairs. The canal suffered immediately from both causes; and its future was threatened by the reputation for the unreliability of navigation it was gaining and by the growing burden of debt under which it was laboring.

Water Power

One source of additional revenue from which the canal company expected much was the sale of surplus water from the canal to mills and manufactories along its banks. The Board looked for a twofold advantage: the financial return from the sale of the water and the added business which the industrial establishments would bring it. Unfortunately, in the continued financial straits of the company, the

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122. Furcell to Mercer, January 11, 1832; John C. Mackland, Superintendent, to President and Directors, May 10, 1832; Furcell to Ingle, January 15, 1834. Full reports on the 1836 flood are contained in: Young to Ingle, June 3, 4; Fisk to Ingle, June 3, 4; Rodgers to Ingle, June 4; Elgin to President and Directors, June 6, 1836. The 1843 freshet is described in: Fisk to Coale, September 17, and Ingle to Coale, September 18, 1843. The crest of the river in 1846 was lower than the one of September, 1843, but higher than a minor one in April, 1843. Elgin to Coale, July 8; Fisk to Coale, July 8, 1846. The flood of 1847 surpassed all previous marks. Elgin to Coale, October 8, 9, 11; Stone to Coale, October 8, 10, 12; J. Lambie to ---------, October 9, 1847.
The early promoters of the canal thought that small establishments would spring up all along the line, at every lock at which waste and flume power would be available. This belief was reiterated as late as 1874, despite the obvious failure of earlier expectations to be realized.

In the beginning, of course, the canal company did not even possess the right to dispose of its surplus water by sale to manufacturers. It soon petitioned for the necessary grant of authority from the parties to its charter. Local proprietors along the river in Maryland were particularly hostile to the company's request, for it represented an infringement on their own rights. The canal company had been granted the right to only that water which was necessary for purposes of navigation. Only gradually did the company overcome the opposition of the valley inhabitants. Virginia, whose citizens had the least to lose, gave the necessary authority in February, 1829. Maryland consented, in 1833, in return for the consent of the canal company to the extension of the railroad to Harpers Ferry. Congress gave its

124. See, for example, 3rd Annual Report (1831), Proceedings of Stockholders, A, 161. In 1835 the company was told to expect sales only near cities. Zachariah Allen to C.G. Starbuck, January 1, 1835.
127. A. Lee to Mercer, February 15, 1829; Cruger to Mercer, February 13, 1831.
128. See the Resolution of the Maryland Assembly, December Session, 1830, No. 36, February 19, 1831.
129. Act of the Virginia Assembly, February 27, 1829.
130. Maryland Laws, 1832, ch. 291, passed March 22, 1833.
approval in March, 1837. The only restriction to the power received under these acts was the stipulation of the Maryland law that no water could be sold within the state for the manufacture of grain, a prohibition that would exclude competition with the Baltimore millers. This provision was finally repealed in the 1870’s.

Even after the legal authority was secured, the title of the company to the surplus water from Little Falls, the most valuable source of potential waterpower, was not clear. The claims of John K. Smith under the Potomac Company, which had been the subject of much correspondence after 1816 had been inherited by Amos Binney, a Boston capitalist. The latter, or rather his heirs and his agent, William Steuart, took his claims into court after failing to come to an understanding with the Chesapeake and Ohio Canal Company. Several cases brought by him lingered in the courts for many years. The canal company won out repeatedly, but there was always another case or an appeal. After having won most of its points, the company compromised the few remaining ones, and obtained clear title to the water. Thus it was ready to take full advantage of its rights when Congress consented to the sale of water in 1837.

131. Act of Congress, approved March 3, 1837. It was introduced on March 3, 1837; passed the House of Representatives during the next session, January 20, 1837, and the Senate shortly thereafter, March 2, 1837. Congressional Globe, IV, 110; V, 114, 217.


133. Mercer to Ingle, August 9, 19, 1829.

134. Amos Binney vs. Chesapeake and Ohio Canal Company in Chancery Court, quashed, September, 1829, in Letters Received; Petition of Thomas Swann and Richard Cox, April 9, 1834; Chesapeake and Ohio Canal Company vs. Binney, 4 Granch C.C. 68; Binney vs. Chesapeake and Ohio Canal Company, 8 Peters, 201.

Meanwhile the company was making preparations for exercising its new authority. It studied carefully the procedures on other canals and modeled its own rules after them. It provided for a gradual scale of increasing rental fees and for the location and control of water gauges. Rights were granted at several places along the canal, Williamsport, Newerton, Georgetown, etc., but the most important development was at Georgetown. Here the greatest opportunity was provided for the establishment of industries because of the nearness to markets, labor supply and capital, the location of Dam No 1 at Little Falls, the dimensions of the feeder and Georgetown level, and the absence of restrictions on the use of the water power. Millers, founders and textile manufacturers were numbered among the users of water power in Georgetown. Despite the irregularity of service at times, the development of new sources of power, and charges and counter-charges of abuse, several of these establishments are still using the water power, under what are said to amount to perpetual leases, i.e., twenty year leases, renewable indefinitely upon conforming to certain regulations.137

The actual beginning of water power leases in 1837 did not mark the end of the contest over the disposal of canal water. The concen-

136. Roswell and Colt to Charles Hurd, January 11, 1831 [1832]; Conditions for letting water power in the District of Columbia, March 25, 1839, in Letters Received.

Rights to water power at various points in Maryland not in dispute had been sold in 1835. Having sold these rights, however, the Board discovered that there was not enough water in the canal for navigation, much less for sale as surplus water. The directors were unable to return to Washington via the canal, but made the journey by stage. Proceedings of Directors, D, 311-315 (May 25, 1835).

137. Opinion of George Nicolson. The validity of the leases has been tested in the courts.
tration of industrial establishments in Georgetown because of the more favorable location and laws there put an end to the struggle with Amos Sinney's heirs. In the 'forties, however, the Alexandria Canal Company stepped forward with its claim for a share of the surplus water from Dam No. 1. This claim was supported by the State of Virginia in the act of 1849 guaranteeing $200,000 of repair bonds for the restoration of the Chesapeake and Ohio canal below Dam No. 6. The act restricted the use of the proceeds to that part of the canal above the Potomac Aqueduct and stipulated that the Chesapeake and Ohio must consent to an arrangement with the Alexandria Canal Company concerning its unpaid obligation for the construction of the northern abutment of the aqueduct and the allotment to that company of one-half of the additional water power (later fixed at 1200 square inches) on the Georgetown level resulting from the tightening of the dam and the enlarging of the feeder with the funds thus provided. The Chesapeake and Ohio readily agreed to the conditions, and assured the bonds. Afterwards, it always found some excuse for refusing to grant the required water power (or to pay for the aqueduct). A survey of water power leases in force in 1855 revealed that 1295 inches had been granted on a regular basis and 300 inches on a temporary basis. Subsequently (in 1860) temporary grants amounting to 1200 inches were made permanent despite the agreement with the Alexandria Canal Company.

139. Ibid., II, 282-287 (April 16, 1849).
140. Ibid., I, 159 (April 6, 1849). The report advised against the grant of more than 1200 inches in addition to the 1295 inches already leased on a permanent basis. Thus the Alexandria Canal Company would be entitled to only 600 inches instead of the 1200 inches originally agreed upon. Ibid., 162-164. The Alexandria company was given four months to accept the terms. Meanwhile the Chesapeake and Ohio leased 200 inches to Robert Dodge. Ibid., 168 (May 5, 1855). The Alexandria Canal Company refused the new terms and insisted upon receiving the share allotted to it under the original contract. Ibid., 193 (August 4, 1855). It was supported in its stand by the stockholders of the Chesapeake and Ohio Canal Company, but in vain.
141. Ibid., II, 166-167 (April 5, 1860).
CHAPTER IX
FLOODS, WAR AND POLITICS, 1860-1872

Trade, Politics and Finances in the 'Fifties

After the completion of the canal to Cumberland, in 1860, its organisation was more or less completely overhauled. The Board established six divisions for the supervision of the line: Georgetown, Monocacy, Antietam, Williamsport, Hancock and Cumberland. It retained most of the old superintendents and named former assistant engineers familiar with the upper line to the new divisions. It also appointed new lock-tenders for the recently completed stretch of the canal.¹

The directors then issued a new set of rules to govern navigation on the canal and the conduct of officials on the line.² The new rules were largely a confirmation of the existing regulations modified and brought up to date by the lessons of the first revisions. In spite of the usual opposition from the boatmen to any rules that might be enforced where they had previously been ignored, the president reported satisfaction with the operation of the new regulations in 1861.³

The canal itself was said to be in fairly good condition after a thorough renovation of the whole line. As a matter of fact the work of improvement was still in progress in 1861.⁴ In that year it was

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2. Ibid., 407-414 (February 27, 1861), 431-434 (March 1, 1861).
4. 24th Annual Report (1862), p. 4. $90,402.75 was spent on repairs and improvements in 1861.
necessary to restrict the draft of the boats to approximately four feet, or about 100 to 110 tons burden, for although the water was generally six feet deep, bars in the trunk and low banks reduced the effective depth to five feet in some places. Progress continued to be made in the restoration of the original prism, and by the next year the water level had been raised to a minimum of 5'8" on the entire line.

Upon the completion of the canal the Board adopted a new set of toll rates. Coal soon became the principal article of trade and the toll on that product became the chief source of canal revenue. The directors offered to fix the rate for coal at two mills per ton, if the coal companies would guarantee to ship 800,000 tons a year via the canal. The companies were unable to take advantage of the offer, and the toll was fixed at 1/4 a ton per mile. Other preliminary modifications of the existing charges, adopted in February, 1861, affected a variety of non-agricultural products: sand, gravel, clay, earth, paving stones, fire brick, ice, bricks, and salt; as well as some farm produce and fish.

These early rate changes continued the downward trend of tolls in the forties and anticipated the general reductions which were incorporated in the revised tolls. The new permanent toll list went into effect in June, 1861. It divided all articles transported on

5. 23rd Annual Report (1861), loc. cit., 410.
8. 23rd Annual Report (1861), loc. cit., 412-413.
the canal into six classes. Reductions below the rates established in 1836 ranged from twenty-five to seventy-five per cent, the greatest decrease being that in the toll on coal. Classes I and II including general merchandise, spirits, and most agricultural produce, called for the highest tolls. Class III was reserved for salt. Classes IV and V included heavy freight: lumber, bricks, cement, and manufactured iron. The most important and most highly competitive bulk freight was placed in Class VI upon which the lowest tolls were charged. Included in this group were: coal, limestone, iron ore, etc. 10

There were some modifications of these schedules in the course of the first decade. In an effort to encourage boat-building, and indirectly to stimulate the lagging coal trade, the company again offered in 1852 to reduce the toll on coal to two mills as soon as one hundred new first class boats were registered. The conditions were not fulfilled, so the tolls remained the same. In 1857, there were some slight changes within and between classifications: salt was reduced from class III to class IV rates, corn and fish from class I to class II, boards, shingles, staves and headings from class II to class V. 12 In 1860, on the eve of the Civil War, the rates on all commodities in class I were reduced to class II. 13

10. Ibid., 449-462 (June 2, 1851). The rates according to classes, were:
   I = 2½ a ton per mile for the first 20 miles, 1½ a ton per mile thereafter.
   II = 1½ " " " " " " " 
   III = 1½ " " " " " " " • 3/4 " " " " " 
   IV = 1½ " " " " " " 1/2 " " " 
   V = 1½ " " " " " 1/4 " " " " 
   VI = 1/4 a ton " " .

11. Ibid., 570 (December 9, 1852).
12. Ibid., I, 333 (January 8, 1857).
Before the newly completed canal was able to get fully under way on the new phase of its existence, it was struck a double blow at its future prospects of success. The worst flood in the history of the Potomac, to that date, devastated the waterway from one end to the other in 1852. In the same year, political influence again assumed a major role in the direction of canal affairs.

The flood of 1852 was as great a surprise to the canal board as it was a disaster to the waterway itself. The directors had raised the embankments at the most exposed places above the level of the highest freshets in the history of the valley. They had based their course on the levels attained in the flood of 1847, which had been the worst in sixty years. The precautions proved to be in vain, for in April, 1852, the river rose six feet higher, in some places, than the levels attained in 1847. At Great Falls, it reached the unprecedented height of sixty-four feet. Had the crest been only two or three feet lower, the canal might have escaped serious injury on the lower sections. 14 By the time the restoration was completed, the cost of repairs to the damage done by the rampaging Potomac amounted to $100,000. 15 The towns of Georgetown and Alexandria, and banks in the District of Columbia advanced the necessary funds. 16 The canal itself was weakened by the disaster, but the effect on its trade and its financial condition was even more serious, as a later president pointed out in a summary of the flood. 17

15. 25th Annual Report (1853), p. 3.
The disaster occasioned by the flood in the spring of 1662, was very detrimental to the interests of the company, in causing not only a large debt, and heavy expenses in repairing the canal, and the loss of three or four months revenues during the suspension of navigation that year, but had a still more unfavorable influence by the loss of confidence in the stability and reliability of the work as a means of transportation.

Hard on the heels of the destruction wrought by the flood came an equally devastating assault on the fortunes of the canal by political interference in its management and operation. At the annual meeting in June, 1852, the controlling stockholders, the State of Maryland, acting through the state agents, appointed a new administration for the company. The dominance of the State in company affairs meant, in effect, that the political party in power in Maryland also controlled the selection of the canal board, and indirectly the many subordinate positions on the line. The latter became the objects of party patronage. Canal appointments had been used for party purposes once before in the early 'forties. At that time there had been two successive sweeps of offices, as the one party installed its political friends and the other promptly reinstated the older officials when it returned to power. 18 Thereafter there had been no large-scale interference for about a decade. The new administration in 1852 proceeded to re-institute the spoils system in the management of the canal, reaching all the way down to the look-tenders and bosses in the thoroughness of its sweep. 19 Thereafter,

18. See above, chapter VI, pp. 141-142.
19. Proceedings of Directors, H, 537-541 (July 15, 1852), 550-551 (September 30, 1852), 556 (October 1, 1852).
more or less complete reorganizations occurred throughout the
'fifties and early 'sixties as new boards succeeded the old ones
and replaced their political enemies with their own cohorts. 20
There was little or no concern for the welfare of the canal, which
was considered merely as an adjunct of the state government and
therefore subject to the spoils system.

The serious effects which the continued political interference
had on the fortunes of the canal were later graphically described by
a group of dissatisfied bondholders: 21

Therefore [after 1850] as the State administration changed,
so did the management of the Canal, until about 1870, when
it was ascertained that during the twenty years preceding [sic]
there had been a dozen different administrations and executive
heads in the management of this once popular and magnificent
State Work. As an inevitable consequence of this too much-management,
the Canal became a magnificent failure; transportation was uncertain;
the big ditch was gradually filling up; the Culverts were delapidated;
interest on the Bonds was unpaid and largely in arrears; and the
Bonds themselves sunk in the market to a point below sale or
quotation.

For this state of affairs Maryland was solely responsible, 22
for
the State...by virtue of her ownership of five Eighths of the
Capital Stock, has had...the Exclusive Management, and has
absolutely shaped and controlled the policy of the Company.
Administering its affairs by officers chosen by her;
changing those officers with every change of her politics;
removing one year officials who had just begun to be familiar
with the duties and responsibilities of their position....It
is no wonder this great Enterprise has languished.... Without

20. Ibid., I, 181 (June 30, 1866); ibid., I, 277-282 (June 27, 1866);
Ibid., K, 1-10, (March 30-31, 1868), 14-16 (April 18-18, 1868);
19 (May 5, 1868); ibid., K, 183-184 (May 16, 1860), 192-193 (June 2,1860);
ibid., K, 272-275 (February 12, 1862).

21. Memorial of certain bondholders of the Chesapeake and Ohio Canal
Company to the Board of Public Works of Maryland, 53rd Annual Meeting
(1881), Proceedings of Stockholders, E, 341.

22. Ibid., 343.
a fixed and stable policy; without a corps of trained and experienced officers; without judicious and systematic economy, paralysed by perpetual changes in its administration; the victim of abuses, mismanagement and lavish expenditures; its power and influence constantly used in the service of [the] political organisation which, for the time, appointed its officers and regulated its direction...

The wonder is that the waterway suffered no more than it did from the frequent shifts of personnel and the variety of reorganisations which it underwent.

Despite these obstacles the amount of trade on the canal increased during the decade. This growth was indicated in the annual tonnage figures. It was also reflected in the rising toll receipts (for tolls remained relatively constant during the 'fifties'), and in the increasing number of canal boats registered and built. The growth of canal trade was irregular, however, and the fluctuations experienced were discouraging at best. The frequent interruptions of navigation were partially to blame for the irregularity of trade. The coal trade also proved to be a disappointment in the early years of the decade. Poor crops and the competition of other agencies further reduced the amount of agricultural produce shipped via the canal.

Various ways were tried to stimulate trade. The board gave permission for the construction of basins on the Georgetown level to

23. See Appendix, table IV.

24. The number of boats registered on the canal rose from 154 in 1861 (including 78 new ones, usually over 100 tons each), to 216 in 1862 (of which 61 were new), to 343 in 1866. Of these, however, it was said many were out of repair and that only 280 could be counted upon. But over a hundred new boats were added for the 1867 season. 23rd Annual Report (1861), Proceedings of Stockholders, p. 412; 24th Annual Report (1862), p. 12; 26th Annual Report (1866), pp. 8-9. 28th Annual Report (1867), p. 12.


encourage the development of transfer facilities there. It requested the Alexandria canal to keep its locks open later at night until 8 p.m. 29 The directors deprived the packet boats of their right of way over loaded freight boats descending the canal in order to reduce the delays in the passage of trade on the waterway. 30 To augment the small coal trade the canal company directed the Baltimore and Ohio railroad to permit the construction of a spur from the Cumberland Coal and Iron Company's railroad across the former's tracks to a projected wharf on the canal. 31 This procedure had been provided for in the contract of 1851 between the canal and the Baltimore and Ohio, by which the former permitted the railroad to cross the canal in order to enter Cumberland, and to continue to the west on the north bank of the Potomac.

Several proposals were also considered for the improvement of the canal itself. There were plans for raising the Georgetown bridges, for the installation of a steam pump near the mouth of the South branch (the original location for Dam No. 7, which had never been built), for repairs to all the Dams from No. 5 down, and for the cleaning of the Washington branch. 32 The most important of these for the trade of the canal was the raising of the Georgetown bridges. The latter had originally been planned and constructed according to

29. Ibid., I, 248 (March 6, 1856).
30. Ibid., I, 251-252 (April 3, 1856).
31. Ibid., I, 267-268 (June 13, 1856).
the practice prevailing on the Erie canal in 1828 and 1829. They allowed a clearance of only eight feet. By 1850, the boats had become so large that, although they could pass fully loaded under the bridges, they could not return light until the water in the canal was lowered. Thus long and costly delays were encountered which inconvenienced trade to and from the Rock creek basin and soon forced most of the canal’s business to pass over the aqueduct and down the Alexandria canal to tidewater at that city. To reopen the route through Rock creek and into Washington, eight bridges and the market-house in Georgetown, one bridge over the basin, and two in Washington would have to be raised to allow at least twelve feet clearance. This was first proposed in 1851, at a probable cost of $12,500. It was again referred to in 1852 and the importance of the project emphasized. On closer examination, however, the subject was found to involve greater expenses and property infringements than had been anticipated, and in 1854 the matter was dropped as long as Alexandria canal remained open. An appeal to Congress for financial assistance in carrying out the proposed improvement failed to pass the House of Representatives, in 1856, after winning the approval of the Senate. Nothing more was done before the outbreak of the war.


34. 24th Annual Report (1852), pp. 5-6; Proceedings of Directors, H, 511-517 (March 31, 1852).

35. Proceedings of Directors, H, 516-517 (March 31, 1852). East of Congress Street, Georgetown, the bridges were to be raised to allow 10-1/2 feet clearance.


The forces of nature continued to cause trouble for the canal. No year passed without some interference with the navigation of the canal. In 1853, the year after the great flood, a severe drought during the months of June and July caused a five-week suspension of trade because of low water in the levels below Dams No. 4 and 5. Canal traffic was also hindered, though not stopped during August and September of the same year. Low water in the canal below Dam No. 6 resulted in the loss of two months' trade in 1854. To prevent a recurrence of this unexpected failure the Board contracted for a steam pump early in 1855. It was installed at the mouth of the South branch as proposed in 1852, and was completed in 1856, but upon testing proved to be defective. After further work upon it, it was finally accepted in 1858.

The interference of floods, frosts and droughts continued to be felt in the latter years of the decade. A flash freshet in August, 1855, washed out a road culvert and caused a partial suspension for three or four weeks. The opening of the canal for business in 1856 was delayed because of the severity of the winter. A drought in August of the same year brought a renewal of complaints of low water in the canal below Dams No. 4 and 5. This time the company determined to abate the nuisance permanently. In 1853 it had been content merely

41. Proceedings of Directors, I, 143 (January 26, 1856).
43. 28th Annual Report (1856), pp. 3-4.
44. Ibid., p. 4.
to repair the old brush and rubble dams. In 1856, it decided to replace them with new, tight, masonry dams, at a much greater expense. Contracts were let for Dam No. 4 in October, 1856, and for Dam No. 5 in January, 1857.

No sooner were the new dams contracted for than a great ice freshet, caused by the sudden breaking up of the river ice, in February, 1857, roared down the valley. In fact, not one, but four successive floods swept over the canal in 1857. The first one badly damaged Dam No. 4 and carried out 500 feet of Dam No. 5. By April 12th, temporary cribs had been installed in the latter, closing the gaps. On that day, a second freshet occurred, undoing some of the work previously thought to be secure. Repairs had again reached an advanced stage and were within a few days of completion on May 4, when the river rose for a third time and poured over the dams. After a heroic but futile four day struggle to save the structures, the torrent had its way and carried off half the repairs that had been done. A fourth flood in the middle of the month delayed repairs for a few days and tore a hole in Dam No. 4.

The disasters of 1857 all but wrecked the company financially. It had never been in better than a precarious condition since the completion of its waterway. Debts had continued to pile up during

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47. Proceedings of Directors, I, 298-299 (August 27, 1856), 316 (November 7, 1856).
50. The expenditure of $100,000 for repairs was authorized, of which $71,000 was borrowed. Proceedings of Directors, I, 356 (May 29, 1857), 366 (August 4, 1857).
the decade to add to the already staggering burden of acceptances, balances due, scrip, state loan, and the repair bills after the freshet of 1847. The company had borrowed heavily from Selden, Withers and Company (to the extent of $143,000) to pay the semi-annual interest on the construction bonds until the canal could get on its feet. The flood of 1852 suspended even these efforts to meet the most pressing obligations and saddled the company with an additional repair debt. The irregular course of trade in the early 'fifties and the necessity of making unavoidable repairs prevented the company from reducing the debt burden substantially. The flood of 1857, coming on top of all these debts, almost drove the company into bankruptcy. By a new device, toll certificates which were sold to the coal companies at 75 per cent of their face value, the company was able to repair its canal and to continue for a while the work on the new dams. Over $118,118.78 secured in this way between 1858 and 1860 was still outstanding in the latter year. By the end of the decade

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51. 24th Annual Report (1862), p. 4; 25th Annual Report (1863), pp. 5-6; Proceedings of Directors, i, 124 (November 8, 1864). Debts that were officially recognized amounted to $1,653,382.92. They were listed under the following categories:

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canal Scrip</td>
<td>$457,595.75</td>
</tr>
<tr>
<td>Acceptances</td>
<td>$154,369.00</td>
</tr>
<tr>
<td>Bonds for Post Notes</td>
<td>$6,928.00</td>
</tr>
<tr>
<td>Bonds for Contractors</td>
<td>$236,818.88</td>
</tr>
<tr>
<td>Interest (to January 1, 1855)</td>
<td>$709,000.00</td>
</tr>
<tr>
<td>Total</td>
<td>$2,855,437.21</td>
</tr>
</tbody>
</table>

52. Proceedings of Directors, H, 398 (January 8, 1861); ibid., i, 132 (December 16, 1864); 24th Annual Report (1862), p. 10.


54. On the contrary, the company increased its obligations by assuming the debt of Hunter, Harris and Company, contractors for the completion of the canal, to the amount of $280,000. 27th Annual Report (1865), p. 9. See also, Application of Hunter, Harris & Co. to the Chesapeake and Ohio Canal Company for relief (August, 1863) (Baltimore, 1863).

55. Proceedings of Directors, K, 80-81 (January 6, 1869); 33rd Annual Report (1861), pp. 5-6. The Board requested holders of the certificates not to use them before August 1, 1859, and then required tolls to be (Continued on next page)
the company was in partial default to the workers and officials on the line for their wages. 66 Bankruptcy and foreclosure were at hand and were anticipated by the canal board. 57

The Vicissitudes of the Canal during the Civil War

The outbreak of war in 1861 came at a time when the fortunes of the canal seemed to be approaching their lowest point. As a result of the secession of Virginia, the canal found itself lying on the border between the two countries, in the path of the contending armies. Consequently during the first two or three years of the conflict, its trade was greatly reduced and its works alternately occupied and/or destroyed by the opposing forces. Thus in the critical early years of the struggle, the condition of the company and its properties materially deteriorated from even its gloomy pre-war status. Only toward the end of the war did the interference with navigation decline, and trade and financial conditions improve.

During the first few years of the war, great destruction was wrought upon the canal and its trade. In 1861 and 1862 Southern troops cut its embankments at vital places, tried to blow up some of the dams, and attempted other spot destruction in order to halt trade on the canal. At the same time they tried to prevent repairs by harassing

55. (Continued from preceding page).
paid at least 50 per cent in current money. See Proceedings of Directors, K, 91 (March 3, 1859).

56. Proceedings of Directors, K, 152-153 (January 8, 1860). The Board, however, refused to issue toll certificates to pay the workers.

the canal workers.  

In September, 1862, advance forces of Lee's first invasion of Maryland again breached the banks and damaged some of the locks to stop canal traffic. Repairs which had been begun with federal aid after the repulse of the Confederates were delayed by further raids in October and November. Lee's second invasion in June and July, 1863, wrought the same type of destruction and again the activities of rebel pickets hindered repairs after the withdrawal of the main forces. In 1864, other raids, this time by Early, Mosby and White, caused widespread damage to the canal. Boat-burning and mule-stealing had become regular occurrences by then, while the more permanent and expensive works -- locks and aqueducts -- continued to be damaged or destroyed. The raids lasted from June to November despite the pleas of canal officials for adequate protection at the numerous ferries across the upper Potomac, especially during periods of low water in the river.

58. Baltimore American, June 11, 1861; Washington Evening Star, June 11 and 14, 1861; A. Spates, President, to W.S. Ringgold, Clerk, June 13, 1861; A.K. Starks, General Superintendent, to A. Spates, June 26, July 6, 1861; A. Spates to Ringgold, August 13, 1861; S.P. Smith to Ringgold, October 23, 1861. See also the purported copy of Confederate orders for the destruction of Dm No. 6, dated October 20, 1861, in an anonymous pamphlet, To the People of Maryland: The Canal and its Management Vindicated (n.d.).

59. C. Spates, Superintendent, to Ringgold, September 13, October 6, November 28, 1862; J. Masters, Superintendent, to Ringgold, September 22, 1862; A. Spates to Ringgold, October 6, 1862; T. Bassett to Ringgold, October 14, 1862; Washington Evening Star, September 26, 1862.

60. L. Lowe, Superintendent, to Ringgold, June 20, 1863; A. Spates to President and Directors, June 30, 1863; Masters to Ringgold, July 19, 1863; H. Miller, Collector, to Ringgold, July 22, 1863; A.C. Greene, Director, to Ringgold, July 25, 1863; Masters to President and Directors, August 4, 1863.

61. A. Spates to Ringgold, July 5, 1864; O. Spates to Ringgold, July 16, 1864; Masters to Ringgold, July 18, 1864; Miller to Ringgold, July 18, 1864; L. Benton, Superintendent to Ringgold, July 20, 1864; Lowe to Ringgold, July 25, 1864; O. Spates to President and Directors, July 25, 1864. In all, about sixty boats were burned during Early's raid.

62. Greene to Ringgold, September 2, 1864; Greene to A. Spates, September 29, (Continued on next page)
If anything, the destructive purpose and results of the raids became more vicious in the latter years of the war, although they did not cause such long suspensions of navigation or interfere with the revival of trade on the waterway.

In addition to the damage caused by the battles raging across its line, the canal suffered as the result of the occupation of its works from time to time by the rival armies and by the federal government. In the course of their belligerent operations, Confederate troops seized and held portions of the canal during the summers of 1861, 1862, 1863 and 1864. Federal troops also moved into position along the line in 1861, and remained for protection and patrol throughout most of the war. The federal government also occupied portions of the canal property, including the Rock Creek mile, the Potomac Aqueduct, and at times fleets of canal boats. The government took over the aqueduct in 1861, drained it and converted it to a bridge, thus depriving the canal of its only practicable outlet to the river tidewater.

62. (Continued from previous page)

63. It was still occupying portions of the mile as late as 1867. Proceedings of Directors, L, 66 (October 23, 1867); William Godey to Ringgold, January 10, 1868.

64. Skirmishing occurred at the aqueduct as early as May 2, 1862. On May 24, Federal troops occupied the Virginia shore opposite Washington. By December 5, the bridge over the aqueduct was being built. On December 18, the water was drawn off to permit the erection of the trestling for the bridge, and by December 23, a dam had been placed across the Georgetown entrance of the aqueduct, closing it to the trade of the canal. Washington Evening Star, May 2 and 24, December 5, 18 and 23, 1862.
In March and April 1862, during the panic accompanying the spectre of the Merrimac running wild on the Potomac and bombarding Washington, the government seized about one hundred canal boats. These were taken to Georgetown and held there for use in case of emergency. As the period of forced inactivity lengthened, shippers and canal officials became restless and complained bitterly about government interference and red-tape. Amid rumors and premature announcements of their pending release, about thirty-six of the boats were loaded with rock and taken down the river. There they were to be sunk if necessary to block the channel. Some six or eight of them eventually were sunk. The other boats were subsequently released and returned to their owners. Later, however, in October, 1862, and in June and July, 1863, more of the boats were seized by the government for briefer periods.

A third way in which the war adversely affected the fortunes of the canal was in the destruction of its markets and the damage wrought

65. J. Wolfe, Collector, to Ringgold, March 10, 1862; Greene to Ringgold, April 11, 1862. On the panic in the cabinet, see Diary of Gideon Welles (3 vols., Boston, 1911), I, 61 ff.

66. Greene, an agent of the Borden Mining Company as well as a director of the canal, wrote that in his opinion nothing "stronger than red-tape or indifference" was holding the boats in Georgetown, and that it looked almost like a "conspiracy" between the government and Pennsylvania interests to destroy the coal trade of Maryland in favor of that of its northern neighbor. Greene to Ringgold, April 11, 1862.


68. War Department Circular, October 24, 1862, confirming Order No. 44, filed in Letters Received, December, 1863; Washington Evening Star, July 15, 1863.
to some of the mills along its course. The mere existence of a
state of war reduced the coastal trade which had created some of
the demand for canal coal. The Treasury Department soon stepped in
and restricted the coastwise shipment of coal to the region north
of the mouth of the Delaware river. In this area, Cumberland coal
faced severe competition from Pennsylvania coal. The institution
of the Potomac blockade by federal forces also handicapped the coasting
trade of canal coal from the port of Georgetown. The subsequent
cessing of both the shipping restrictions and the blockade came none
too soon. The effect of the war on some of the mills along the
canal can be seen in the experiences of two widely-separated examples.
A large cotton factory in Georgetown, a user of water power from
the canal, was cut off from its supply of raw material and forced to
shut down in 1861. Farther up the river, another mill was caught
in the ebb and flow of the military operations, and was alternately
occupied by troops and idle because of the lack of water power from

69. Washington National Intelligencer, April 21, 1862. Two of the
better markets for canal coal were South America and the British
West Indies. These would be eliminated by the prohibition as
first issued. See 45th Annual Report (1873), p. 16.

70. Greene to Ringgold, April 7 and 11, 1862. In the second of these
letters, Greene wrote, "In the meantime the Penna. interests are
moving heaven and earth to maintain themselves in the ground they
were enabled to occupy by our disasters last summer." They had
reduced charges thirty cents a ton, he continued, and would go
further, "in order to exclude us from market another year, when
an attempt to regain it on our part will be almost impossible."

71. Washington Evening Star, May 2, 1861. There was much unemployment
among river pilots because of the blockade and the stagnation of trade.

72. Washington National Intelligencer, April 21, 1862. The Treasury
department modified the prohibition to read: "ports north of Cape
St. George, South America, and west of that longitude."

73. J. Pryor Williamson and Co. (Pioneer Cotton Factory) to President
and Directors, June 20, 1861. The reasons assigned for the shut-down
were: high wages, high prices and scarcity of raw cotton, lack of
markets for finished goods, and ruined credit.
the damaged canal. 74

The effect of the restrictions and destruction of the war on the business of the canal was almost disastrous. Military operations resulted in the virtual extinction of trade on the canal from late April to early in August, 1861. 75 September and October, always the best months for the canal, showed only a slight revival. 76 From a business standpoint, the following year, 1862, was on the whole even worse. Although there was no single month as poor as May, June or July, 1861, between the seizure of the canal boats in the spring and the rebel raids in the summer and fall, no month witnessed a satisfactory amount of business. 77 So complete was the severance of trade that in August an agent of one of the coal companies and a director of the canal wrote in exasperation, "There has been no real through navigation on the canal this year." 78 Even after the revival of trade

74. Jacob Miller to President and Directors, May 1, 1863. He wrote that his mill was occupied by troops in the spring of 1862. After that, the water was out of the canal from July 1 to 12, for twelve days in August, and from September 14, 1862, on. During the last named period of suspension his mill was again occupied by troops, first as a hospital after the battle of Antietam and then as a pickets' rendezvous. When the soldiers moved out, they left the mill a wreck, taking everything movable with them and destroying what they could not carry off. By then it was too late in the year to resume operation, even if the repair materials had been available.


<table>
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<th>Year</th>
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<th>June</th>
<th>July</th>
<th>August</th>
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<tr>
<td>1860</td>
<td>$19,214.19</td>
<td>$18,529.80</td>
<td>3657.36</td>
<td>206.27</td>
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<td>1861</td>
<td>353,084.06</td>
<td>28,005.02</td>
<td>$23,061.10</td>
<td>2,444.07</td>
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No complete was the suspension of trade in 1861 that the President reported there was "comparatively no business on the Canal before September." 34th Annual Report (1862), p. 3.


<table>
<thead>
<tr>
<th>Year</th>
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<td>1860</td>
<td>353,084.06</td>
</tr>
<tr>
<td>1861</td>
<td>$10,509.22</td>
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77. 35th Annual Report (1863), Appendix B, p. 8.

78. Greene to Ringgold, August 11, 1862. Of course, the invasion in (Continued on next page)
got underway in 1663, the canal was harassed and often set-back in its recovery by rebel activity. Lee's second invasion and the raids which followed it in 1663 reduced trade from the middle of June until early in October. July of that year was the worst single month for canal navigation since July, 1861. Again in 1664, early's raid in July, followed by Hobey's and White's incursions in August and September halted for a while what promised to be the best year in the Canal's history. The month of August saw no through navigation at all, giving the canal its new low for a single month since July, 1861. By this time, even the threat or rumor of a raid was sufficient to send the boatmen scurrying for shelter. But perhaps the most severe set-back in business experienced by the canal due at least in part to the irregularity of navigation during the war was the loss of two-thirds of its share of the flour trade. In the years before

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78. (Continued from previous page)
    September and October of that year ruined the trade on the canal for these months. Tolls fell to $5,282.48 and $538.73 respectively. 36th Annual Report (1863), Appendix B, p. 8.


80. 37th Annual Report (1865), Appendix B, p. 10. Tolls for August amounted to only $396.80. See also Washington Evening Star, August 22, September 13, 1864.

81. Greene to Ringgold, September 2, 1863; Greene to A. Spates, September 29, 1864; G. Spates to Ringgold, October 16, 1864.

82. Charles Embry and Son to Mrs. Dellinger (a canal director, Williamsport, April 26, 1862. The Baltimore and Ohio railroad had made a determined effort to win the flour trade away from the canal in the 'forties, Milton Reisenstein, an Economic History of the Baltimore and Ohio Railroad, 1827-1885, Johns Hopkins University Studies in Historical and Political Science, 15th Series (1897), nos. vii and viii, pp. 62-63. Notwithstanding these efforts, the flour trade continued to be one of the larger though erratic sources of canal revenue. From 14,880 tons in 1843, it rose to 25,721 tons in 1861 and fell to 11,087 tons in 1860. In 1861 it had dropped to 7,067 tons, and after a slight recovery it had dropped to 5,982 tons and 5,363 tons in 1864 (Continued on next page)
the canal reached Cumberland and the coal fields, this trade had practically supported the company through its darkest days, and even after coal had supplanted it as the principal article of trade, it remained a large and lucrative business for the canal.

The sharp reduction in its business was accompanied by declining revenues. This added to the financial crisis which the canal had faced at the beginning of the war. While the company's income dropped from $191,890.20 in 1860 to $75,741.80 in 1861 and $72,624.96 in 1862, its operating expenses maintained themselves at an irreducible minimum of approximately $100,000 a year. Thus the canal was forced to struggle through several more bleak years by means of further loans from the coal companies in the form of toll certificates and by continued non-payment, in part, of its employees. Receipt of the toll certificates was almost immediately suspended in the face of continued business failure, and the redemption of them was only gradually restored in the latter years of the war. Meanwhile

82. (Continued from previous page)

and 1866 respectively. 18th Annual Report (June 3, 1844), Appendix No. 11, p. 48 (10-1/2 barrels equals a ton), for 1843; 24th Annual Report (1852), Appendix b, p. 28, for 1851; 33rd Annual Report (1861), Appendix C, p. 16, for 1860; 34th Annual Report (1862), Appendix B, p. 11, for 1861; 37th Annual Report (1865), Appendix B, p. 12, for 1864; 38th Annual Report (1866), Appendix C, p. 15, for 1865.


84. 34th Annual Report (1862), Appendix G, p. 16. The extent of the non-payment of wages is shown by the following comparison of expenses and expenditures.

<table>
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<th></th>
<th>1860</th>
<th>1861</th>
<th>1862</th>
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<tr>
<td>Expenses</td>
<td>$32,636.15</td>
<td>$32,257.66</td>
<td>$28,537.37</td>
</tr>
<tr>
<td>Amount paid</td>
<td>28,247.06</td>
<td>14,701.62</td>
<td>16,265.91</td>
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</table>


85. Proceedings of Directors, E, 238 (October 1, 1861). Over $17,000 of the certificates were still outstanding on May 31, 1865. 37th Annual Report (1866), Appendix H, p. 20.
rising costs of living brought demands from the canal employees for higher wages. In view of the immediate and pressing needs of the company for every cent of its revenue, necessary repairs were poorly and hastily made, and important improvements -- the raising of the Georgetown bridges or the construction of an inclined plane above the aqueduct -- were postponed.

The canal experienced many lesser difficulties or annoyances during the course of the conflict which are directly attributable to the war.

Disloyalty among canal officials and employees was an ogre which continued to harass the board of directors. In January, 1861, a director and former president of the company wrote sympathetically of the divided sentiment in Frederick, his home town, towards the impending break-up of the Union. Apparently he was more discreet in the expression of his sentiments after the outbreak of war than was the wartime president of the company, Alfred Spates. The latter was thrice arrested and detained by military authorities for disloyal conduct. An engineer engaged in the construction of the new masonry dam (No. 5) was also imprisoned briefly in 1863 for the same reason.

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86. Petition, numerously signed, to President and Directors, April, 1863; G. Spates to President and Directors, March 31, 1864.
87. Testimony of Alfred Spates, before the committee of the Maryland General Assembly investigating the Chesapeake and Ohio Canal. Report of the Joint Standing Committee...in the Chesapeake and Ohio Canal Investigation (Annapolis, 1860), pp. 494-495.
88. L.J. Brengle to Ringgold, January 1, 1861.
89. Baltimore American, September 3, 1863, January 25, 1864; Fred Fickey, Jr., a Maryland Commissioner of Public Works, to Ringgold, September 1 and 3, 1863; Brengle to ---, September 15, 1863; Greene to Brengle, January 25, 1864.
90. Brengle to ---, September 15, 1863; Stake to Brengle, September 17, 1863; Washington Evening Star, September 2, 1863.
In 1862 and 1863 there were several complaints of disloyalty against George Spates, a superintendent on the Monocacy division, and against several of the men under him.91

The effect of the draft was greatly feared, although in operation it was not so serious. The first announcement of the scheme elicited a letter from the company requesting blanket deferment for canal employees.92 Several lock-keepers who were eventually drafted borrowed money and paid for substitutes, and then petitioned the company for the payment of over-due wages.93 In another case, where no substitute could be obtained, the lock-keeper's family carried on for him.94

The presence of so many troops along the line was the cause of some excitement. The discovery of gold at Great Falls by California troops stationed there caused a momentary flurry.95 The presence of so large a body of soldiers along the canal also brought problems of health to plague canal officials.96 Finally, the proximity of the battle-field on occasion resulted in the hasty conversion of canal property to hospitals and morgues.97

Meanwhile, the older problems of the canal continued to interfere with its success. Political influence brought about two wholesale

91. Capt. R.C. Bomfort to Directors, August 28, 1862; Proceedings of Directors, Vol. 361 (December 17, 1863).
93. J.O. White to Board of Directors, April 10, 1863.
94. G. Spates to Directors, October 30, 1864.
95. E.B. Swanson to A.B. Cammerer, October 26, 1862, in National Capital Parks, File 1460 (Chesapeake and Ohio Canal), in Department of Interior.
97. J. Miller to President and Directors, May 1, 1863. G. Spates to President and Directors, November 30, 1864.
turnovers of employes in 1860 and 1862. Although these were the last to be experienced during the war years, the men who were appointed in the latter year were not particularly attentive to their duties, according to the testimony of canal officials as well as others. And the top officials continued to intrigue in state politics throughout the war. The canal also experienced the usual trouble with floods and droughts. Freshets were especially severe in the dark years of 1861 and 1862, while serious droughts were noted in the summers of 1862 and 1863. The latter were of great concern both for the effect on trade and for the increased danger of rebel raids from across the river during periods of low water.

Despite the troubles of the early years, the canal was an important transportation agency during the war.

Between raids and repairs, the canal did yeoman service for the Union, hauling troops and supplies, particularly the precious coal which the government hoarded so jealously. The canal provided the sole direct link between Washington and Harpers Ferry for the transportation of men and materiel to that important post, as well as to other points in the Potomac valley. Only late in the war did

99. Ringgold to Greene, August 8, 1862; Letter Book H, p. 58; Greene to Ringgold, August 11 and 12, 1862; Capt. A. C. Bomford to Directors, August 28, 1862; Chambers to Directors, December 10, 1862; Massett to President and Directors, May 4, 1863.
100. A. Spates to Ringgold, May 12, 1863. There was to be no meeting of the Board of Public Works that year, to avoid a reorganization of it. See also, B. B. BOOTMAN, lock-keeper, to Directors, April 4, 1862.
101. Baltimore American, April 16, 1861; June 11, 1861; Washington Evening Star, April 17, 1861; C. Embry and Son to Dillingar, April 26, 1862 (reporting the seventh highwater in seventeen months); Greene to Ringgold, April 29, 1862; Masters to Ringgold, April 13, 1864.
102. Greene to Ringgold, August 6, 1862; September 2, 1862.
the government begin to realize the importance of Harpers Ferry and the whole Shenandoah valley, and only then did the weakness of the connection provided by the canal become apparent.

The canal, together with the river, was a natural defense line for the U.S. troops, and it was used as such during a large part of the war on the upper Potomac. The canal also provided the government with an established route of communication, staffed by sufficient personnel, along the boundary between North and South. In December, 1862, the Treasury Department took cognizance of this fact in appointing six of the employees along the line to act as revenue agents.

Finally, the canal may have been an influence for the Union in western Maryland, affording as it did a channel for the trade of that region with the capital and offering, in Washington an alternate market to that of secessionist Baltimore.

The black picture of the early years of the conflict was largely reversed towards the end of the struggle. Despite continuing raids and occupation, trade on the canal began to revive in 1863 and improved steadily until the end of the war. Tonnage rose from a low of 126,793 tons in 1862 to 265,847 in 1863 and 290,772 in 1864. The improvement in business was paralleled by increasing revenues. The general inflationary tendency of prices toward the end also per-

104. A. Spates to Hingold, December 1, 1862; Proceedings of Directors, X, 315 (December 11, 1862).
105. See Appendix, Table IV.
mitted the toll on coal to be raised from 1/4/ a ton to 3/1/2 a ton in April, 1863, to 3/8/ a ton in April, 1864, and finally to 1/2/ a ton per mile in July, 1864. Annual revenues soared to $163,024.10 in 1863, $234,699.30 in 1864, and $359,734.66 in 1865.

On the strength of this sudden financial prosperity, and at the expense of effecting permanent repairs, the company raised the wages of its employees and began to pay off its back debts. It was immediately deluged with requests for payment from long-suffering claimants. The federal government also demanded the payment of its tax on canal revenues, amounting to two and one half per cent of the gross receipts. This claim the board of directors rejected, insisting that by its charter, the canal was tax-exempt. By 1865, the board was able to boast that it had paid off all debts contracted by it and about $150,000 of the more recent obligations of its predecessors.

**Post-War Years**

The canal emerged from the war on both a somber note and a hopeful one. The waterway itself had suffered great physical damage from the depredations of the opposing armies. Furthermore, the government continued to occupy the Potomac aqueduct and part of the Rock creek mole, to the detriment of the canal's business. On the other hand, the company’s finances had measurably improved as a result

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107. See Appendix, table V.
111. Proceedings of Directors, X, 511 (September 5, 1866); ibid., L, 56 (Continued on next page).
of the revival of trade in the latter years of the conflict. Bankruptcy no longer seemed to be so near. And the bettered commercial and financial status of the company made it possible to undertake necessary and long-delayed repairs and improvements.

The physical condition of the canal in 1865 was much worse than it had been before the war. Despite increased trade and revenues and some increase in repair expenditures towards the end of the conflict, the waterway had for the most part been sadly neglected. The destruction of its works by the war had been serious. In addition it had not received the attention required for normal maintenance. Only the most imperative repairs had been made, and then usually in a hasty and slipshod fashion. The Rock creek basin had been filled in to a large extent by the deposits of the creek, and the basin itself infringed upon by the extension of the city streets. The tide lock was also filled and out of repair after being damaged by government occupation and operation. The lower dams, No. 1, 2, and 3, were said to be in poor condition. The towpath had been worn down by the traffic on it and needed to be raised at many points. The prism of the trunk itself was shrinking as a result of the deposits.

111. (Continued from previous page)
(October 23, 1867; Bvt. Lt. Col. James Moore to Ringgold, May 28, 1866; William Godey to Ringgold, January 10, 1868 (reporting that the government was about to surrender its portion of the mole).

112. Manning to President and Directors, May 31, 1866.


114. Ibid., K, 469 (May 10, 1866); 39th Annual Report (1867), p. 5.


116. John Cameron, Superintendent, to President and Directors, November 9, 1865.
along the inner slopes and the floor of the canal. Many breaches were reported in the spring and summer of 1866. Finally the Washington canal and the Washington extension of the Chesapeake and Ohio were impassable, being obstructed by bars and refuse.

Sorely needed improvements had been postponed and those in progress had come to a halt during the war years. Work on the new masonry dam No. 5 continued intermittently during 1861 and 1862, and then was suspended. Although the closing of the Potomac aqueduct seriously inconvenienced canal trade, the company had no money to raise the low bridges in Georgetown or to construct the proposed inclined planes from the canal to the river above the aqueduct.

In 1863, Congress finally appropriated $13,000 to raise the bridges, after having deprived the company of the use of the Potomac aqueduct in the preceding year. The actual work did not get underway until after the war, however, for no contracts were let until April, 1866.

The restoration and improvement of the canal began almost immediately after the conclusion of the war. Construction of the masonry dam replacing the temporary structure at Dam No. 5 was resumed, and by 1866 over half of it had been completed.

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117. Letters Received, April - July, 1866.
119. Manning to President and Directors, May 31, 1866.
120. Testimony of A. Spates, Report of the Joint Standing Committee on the Chesapeake and Ohio Canal Investigation, pp. 494-495.
121. Proceedings of Directors, K, 325 (March 12, 1863). Action on the measure had been pending for almost a year. See Ringgold to Greene, April 16, 1862, Letter Book M, p. 36.
122. Proceedings of Directors, K, 422 (April 12, 1866).
123. Manning to President and Directors, February 1, May 31, 1866.
consideration for the improvement of Dams No. 1 and 3. In the same year, the company finally came to an agreement with the corporate authorities of Georgetown concerning the manner of raising the bridges over the canal in that town. The work began promptly, and the new structures were ready by 1867. The basin was also cleaned out and the outlet lock repaired. Several proposals were also made for the restoration of the extension from Hook Creek to Tiber Creek.

The post-war years were not without their difficulties, however. Heavy floods were reported in the Potomac valley in 1865 and 1866. The freshet in the latter year swept away sixty feet of the temporary coffer Dam No. 5. In the spring of 1866, an ice freshet carried off one-half of Dam No. 1. The end of the war also brought a depression in trade as the demand for coal declined from the wartime peaks. Disputes between the miners and the coal companies, which broke out in May and June, 1865 and again in the spring of 1866 over the rate of wages to be paid for those years, reduced trade on the canal during those months. In the face of the deflationary tendency

125. Ibid., p. 5; Proceedings of Directors, X, 491-492 (May 10, 1866).
126. 39th Annual Report (1867), p. 5. See also the Ordinance of the Corporation of Georgetown, June 26, 1866, permitting the substitution of iron bridges for stone ones, so as to prevent a change in street grades.
128. Ibid., p. 5; Isaac Mans, Superintendent, to President and Directors, July 11, 1868.
130. 38th Annual Report (1866), pp. 3 and 6; 39th Annual Report (1867), p. 3; Manning to Ringgold, April 22, 1866; Greene to Ringgold, April 27, 1866 (reporting the backbone of the strike broken).
of coal prices and the decreasing demand for that product, the Board reduced tolls to four mills per ton in September, 1866 and back to 1/4 a ton per mile in March, 1868. The interference of local political influence was also renewed after the war. The brief period between 1865 and 1870 witnessed no less than four changes in canal administrations. Along with the frequent political upheavals came charges of fraudulent conduct on the part of predecessors. The wartime president, Alfred Spates, was accused of falsely obtaining for his own purposes appropriations for work already paid for. Although the evidence presented indicates a strong probability of misconduct, a later administration, apparently more favorable to Mr. Spates, dropped all charges without further investigation.

Despite unsettled trade conditions, political interference and the appropriation of large amounts for the work of restoration and improvement, the financial condition of the company continued to improve. Canal trade recovered quickly from each set-back, and revenues and profits remained high. By 1887, the company had paid off all but $10,000 of its floating debt of $300,000, which had been acquired since the late 'forties. It was then ready to resume the

131. Proceedings of Directors, 7, 611 (September 5, 1868); ibid., L, 82 (March 28, 1868). See also the petitions of the coal companies, June 12, 1866 and March 16, 1868; Greene to Ringgold, March 16, 1866, and the petition of Allegheny county citizens, March, 1868.
132. See Appendix, table II.
133. Proceedings of Directors, L, 233-246 (December 9, 1869). There were no less than nine separate charges in the accusation.
134. Thomas Anderson, counsel, to J.C. Clarke, July 15, 1870; Proceedings of Directors, L, 380-1 (December 8, 1870).
135. See Appendix, table V
payment of its long-term obligations according to the priorities laid down by the court in the case of Commonwealth of Virginia vs. the Chesapeake and Ohio Canal Company. 137 The first on the list were the repair bonds of 1849 and the interest on them. Repayment on these finally began in 1869. 138

The Clarke Administration, 1870-1872

The advent of James C. Clarke as president of the canal company in June, 1870, marks the beginning of the most stable and prosperous period in the history of the waterway.

Despite the repairs and improvements already made, there was still much to be done. The chief engineer recommended a thorough over-hauling of the canal in 1871, at a cost of $78,000. Included in the proposed repairs were locks, aqueducts and the waterway itself. 139 The restoration of the Washington branch was discussed, but no agreement was reached for either the improvement or disposal of it. Inasmuch as few boats had used it in the past fifteen years and none since 1860, nothing was done. 140 The board turned to the problem of expediting traffic through the tunnel. 141 The great increase in canal trade had resulted in frequent and long delays at the tunnel while the boats awaited their turn to enter the long and narrow passage. There were

140. Proceedings of Directors, L, 463 ff (November 10, 1871). Yet the canal could not be abandoned without the consent of the city of Washington. See also 43rd Annual Meeting (December 29, 1871), Proceedings of Stockholders, E, 184; Ibid. (January 4, 1872), loc. cit., 196-197.
141. Report for the Year 1870 (February 1871), pp. 7-8.
two proposals, one for a system of signals to show when the boats might enter and the other for the assignment of a watchman to direct traffic. The latter method was chosen.

Trade continued to improve, mounting to new highs each year. A minor freshet in 1870, a strike of boatmen and dock laborers in 1871 and a drought which lasted from August to October in the same year did not perceptibly interfere with the rapidly expanding prosperity of the canal. The greatest obstacle to the further growth of business on the waterway in 1872 was the difficulty experienced in obtaining enough coasting vessels to load coal at Georgetown. Stocks piled up on the wharves forcing a deliberate curtailment of shipments over the canal.

The commercial prosperity which the canal enjoyed at the opening of the decade made possible a further improvement in its financial condition. The repayment of the long-term obligations of the company which had begun in 1869, proceeded rapidly according to the order on priority laid down by the courts. By 1871, the last of the interest and principal of the repair bonds of 1849 had been paid off in full. The Board then turned immediately to the payment of the back interest on the construction bonds of 1844. The last coupon

142. Proceedings of Directors, L, 366 (October 12, 1870), 392 (January 11, 1871); Report of the President for the Year 1871 (December, 1871), p. 6; 43rd Annual Meeting (December 29, 1871), Proceedings of Stockholders, 2, 182. The tonnage of boats was reduced from 100-118 tons to 85-90 tons during the drought.

143. Report for the Year 1871 (December, 1871), p. 5; Proceedings of Directors, N, 14 (May 10, 1872).

144. Proceedings of Directors, L, 412 (June 22, 1871).
to be paid on these bonds had been the January, 1852 one. Coupons falling due in July, 1852, January and July, 1853, and January, 1854, had been funded by an earlier Board. The Clark administration therefore began with the first of the unprotected coupons, the one for July, 1854. In May and June, 1872, two coupons were paid, marking the beginning of a new era in canal finances.

The growth of canal trade created a serious problem for the Board on the Georgetown level. Unloading and transfer facilities were unable to handle the increasing business which was brought to them. As a result, boats lined up in the canal awaiting their turn to unload. Not only were the delays annoying and costly to the boatmen, shippers, and the company alike, but the congestion on the Georgetown level was a problem in itself. The waterway was not wide enough to accommodate both the ordinary traffic to and from the basin or aqueduct and the clamoring boatmen awaiting access to the coal wharves. The president of the company described the seriousness of the condition to the stockholders in a special report in December, 1871.

As it now is, it is not infrequently the case that from sixty to eighty boats have to lie along the Canal bank singly, so as to allow sufficient room in the Canal for boats to pass in opposite directions. Often a string of loaded boats from half mile to a mile in length is seen lying above the Collector's Office in Georgetown, waiting their turn to get to the wharves to discharge their cargoes.

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146. Ibid., I, 37 (July 29, 1853).
146. Ibid., I, 18 (May 10, 1872), 31 (June 10, 1872).
147. Report of the President, 43rd Annual Meeting (December 29, 1871), Proceedings of Stockholders, 2, 187-188.
There seemed to be two courses which the Board might follow to alleviate the congestion at the eastern end of the canal. In view of the increased trade on the canal there was a greater demand for water for purposes of navigation. This in turn necessitated stricter control of water leases and of the abuses that had come about in the use of the surplus water. The easiest way to solve the problem was to compel the return of the water gauges to the canal bank where they could be controlled by the company. The Clarke administration attempted to carry out this policy but was unable to achieve complete success in the face of the bitter opposition of the millers.

The other course which the Board adopted to reduce the delay in unloading on the Georgetown level was the construction of outlet locks above the aqueduct, connecting with the river. This alternative had been proposed during the Civil War after the government took over the aqueduct, but had been postponed because of the lack of funds. The present administration, while admitting that the locks were the obvious answer to the problems it faced, also refused to undertake the expense of construction. It preferred to devote its sizable profits to the payment of interest on the bonds of 1844. However, private capital was willing to build the locks if guaranteed the right to charge a fee for the use of them that would insure a return on the investment. This arrangement was satisfactory to the canal company, as long as it retained the option to purchase the locks whenever its funds would permit. On these terms the contract with H.H. Dodge was made in the spring of 1872. It was one of the last acts of the Clarke regime.

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148. See above, pp. 149.
CHAPTER X

THE GORMAN ADMINISTRATION AND AFTER, 1872-1889

The Hey-day of the Canal

In June, 1872, another revolution occurred in the direction of the Chesapeake and Ohio Canal Company. The regular Democratic party secured control of the Maryland Board of Public Works which promptly chose Arthur P. Gorman to be the new president of the company. The choice was not a popular one because of the political connections of the appointee and the appointment and because the two years under the administration of James C. Clarke had been the most successful in the canal's history. The new incumbent was an ambitious young, thirty-three year old member of the Democratic State central committee from Howard county. He was expected to run the company as an adjunct of Democratic party patronage. He proceeded to live up to expectations, and in so doing built up for himself a machine that carried him to the leadership of the party in his state and to an influential position in the national party councils. However, he also applied his energy and acumen to the problems of the canal, perhaps considering it a challenge to his ability. In him the canal company gained for the first time a powerful political personage, who was an energetic promoter and an able antagonist of the Baltimore and Ohio's dominance of the State. During his administration the Chesapeake and Ohio Canal Company reached the zenith of its trade
and prosperity, attaining the levels of which its creators had dreamed.

The new administration encountered many of the obstacles with which its predecessor had struggled. On the whole, it successfully carried to completion the work of restoration and improvement, and repeated accusations of political intrigue from all sides. One of the first steps taken to continue the good work of the Clarke administration was the resumption of the fight to gain control of the water gauges and restore them to the canal banks where the original leases of water power had stipulated they should be placed. In this way the use of water power by the Georgetown millers could be closely checked and the many abuses of the rights which had arisen effectively prevented. The bitter struggle of the millers in this phase of the program continued as it had under the earlier administrations. The increasing demand for water for the purposes of navigation on the Georgetown level however made strict regulation of water power leases imperative.

A severe drought in the Potomac valley during August, September, October and November, 1872, also emphasized the need for adequate control. The low water in the river and in the canal led to the adoption of various measures to maintain navigation on the waterway.

The supply of water to the millers was cut off in the daytime, for a brief period in September. The board reduced the draft of canal boats from four and one-half to four feet in October and November. It considered the replacement of Dam No. 1 by a tighter structure and ordered the re-installation of the steam pump at the mouth of the South branch. To prevent a recurrence of the experiences of 1872, it withdrew the permission previously granted for the use of water power to unload boats. And it called upon the government to restore the feeder from the dam at Great Falls and to repair Dam No. 1, in order to assure the canal enough water for the purposes of navigation, according to the agreement of 1853.

Nature again interfered with canal trade the following year. In September, 1873, a flash flood following fourteen days of rain so swelled the smaller tributaries of the Potomac that the culverts under the canal were not able to pass the miniature rivers. Many of them were washed out by the torrents. The total destruction was the greatest experienced by the canal from natural causes since 1852. Repairs were delayed and in some cases undone by a succession of storms which struck them while in an exposed stage of reconstruction.

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3. Ibid., M, 53-54 (September 16, 1872).
4. Ibid., M, 68 (November 7, 1872).
6. Ibid., M, 81-82 (December 12, 1872).
7. Communication of A.P. German to the Stockholders, Jan. 4, 1873; Proceedings of Directors, H, 86 (January 7, 1873). See also Proceedings of Directors, H, 568 (December 9, 1872).
Despite these setbacks and the widespread hostility to the new directorate, the Board successfully carried forward the second part of the program inherited from the Clark regime, i.e., the restoration of the canal to its original excellent condition. By 1874, the original prism of the waterway had been restored and the strength of the banks increased that a freshet in the same year which completely submerged the canal on the levels below Dams No. 4 and 5 did no appreciable damage. Improvements beyond the mere restoration of the canal included the macadamizing of a part of the towpath on the Monocacy division, on which the clay was so bad that the path was hardly passable in wet weather. The president also suggested the purchase of additional steam stone-crushers and macadamizing the entire towpath. The extent of canal improvements was at least partially reflected in the increased tonnage carried by the freight boats. The annual average rose from 109½ tons in 1872 to 112 tons in 1873 and to 113½ tons in 1874. One boat passed over the entire line in 1873 carrying 131 tons of coal. In addition to the work of restoration and improvement, the Board collected supplies for repairs in anticipation of future trouble. It sought thereby to expedite the actual work of repair and to reduce the interruptions to navigation.

10. Ibid., pp. 11-12; Monthly Report of the President, Proceedings of Directors, M, 154-155 (April 15, 1874).


12. Ibid., p. 9.

Meanwhile trade continued to improve between 1872 and 1875. There were incidental hindrances such as the drought of 1872 and the flood in 1873 already mentioned. Sickness stripped the boats of their crews in 1873 and was also responsible for the loss of many canal mules.  

14. The canal was closed earlier than usual by ice in 1872.  

15. Strikes of boatmen and miners in March and April, 1873, delayed the opening of trade in that year.  

16. Notwithstanding all these annoyances, total trade on the canal rose to new highs each year up to 1875. The Board also discovered a new source of business in the gas coal trade.  

18. It granted drawbacks, the first on this canal, to encourage the development of this new trade.  

Later, however, the trade became a source of much trouble for the company.  

Both the coal companies and the canal company undertook to facilitate this increasing trade. Nineteen new canal boats were built at Cumberland in 1873 and put into service, increasing the number of vessels plying the waterway to 564, averaging 112 tons burden.  


15. 46th Annual Report (1873), p. 3.  


17. See Appendix, table IV.  

18. 46th Annual Report (1875), pp. 16-17.  

19. Proceedings of Directors, M, 162 (March 12, 1874), 206 (January 10, 1875).  

In 1874 the drawback was 4% a ton for 50,000 tons or more; in 1875 it was 5% a ton for 100,000 tons or more and 6% for 200,000 tons or more. The gas coal trade declined almost as rapidly as it had developed because of the excessive amount of sulphur in the West Virginia gas coal and the strict inspection standards in the District of Columbia. See B. H. Bartol, President, Washington Gas Light Co., to Gorman, April 3, 1878. However, some of the Youghiogheny gas coal was shipped via the canal.  

20. Testimony of A. Spates, Report of the Joint Standing Committee on the Chesapeake and Ohio Canal Investigation, p. 495. The tar which resulted from the burning of the gas coal was dumped into the Washington branch of the canal. When company workmen sought to clean it out, the acid in the tar burned their clothes and their legs.  

In 1875, six steamers navigated the canal, realizing for the first time the great dream of the canal's founders. Regular steamboat operation continued for many years on the old ditch. The Board watched the first craft carefully for signs of damage to the canal resulting from the speed of the boats or the action of the propelling mechanism. The company finally decided that serious damage was done if the steamers exceeded the speed limit, but that if they adhered to the rules no appreciable harm was done.

The canal company on its part abolished the sporadically enforced Sabbath law prohibiting Sunday runs. It maintained that the canal was a public highway and as such was open to traffic at all times. It also tried to rush the construction of the outlet locks on the Georgetown level above the Potomac aqueduct, in order to relieve the congestion at that end of the line. When the financial stringency in the country postponed even the commencement of the work, the Board purchased a steam dredge and cleaned out the Rock Creek basin. This improvement came none too soon, for, in July, 1874, a large breach occurred on the

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26. *Monthly Report of the President, Proceedings of Directors, M, 133* (December 4, 1873); *Proceedings of Directors, M, 163* (June 16, 1874); *48th Annual Report (1876)*, p. 12; *47th Annual Report (1875)*, p. 8. The dredge cost $10,000. In 1873 alone, it removed 32,230 cubic yards of sand and mud at a saving of $11,079.22 over previous cost of removing it by hand during suspension of navigation. Thus, the dredge paid for itself in one year, and gave the additional benefit of keeping the canal open for maximum draft boats during the entire boating season. In 1874, it removed 25,685 cubic yards more, thus adding to its record of service and economy. The latter figure also gives a good indication of the rate at which the basin and the Georgetown level filled up in the course of a year.
Alexandria canal, and the basin provided the only remaining means of communication with the river. At the other end of the canal, the directors planned extensive improvements in the Cumberland basin. The proposals were dropped, however, in the interest of economy, after an arrangement was reached with the Consolidation Coal Company for increased accommodations for the canal trade under its wharf. To promote the continued expansion of the coal trade, the canal company willingly facilitated the construction of the Cumberland Valley railroad and the Western Maryland railroad where those lines touched upon the canal's rights. In the latter case, the anticipated increase in trade did not materialize. The Chesapeake and Ohio, which had expected to carry most of the railroad's coal from Cumberland to its western terminus at Big Pool (near Williamsport), attributed the poor trade to the failure of the Western Maryland to obtain adequate terminal facilities in Baltimore -- to enable it to compete with the Baltimore and Ohio.

As trade increased, company income and profits also mounted. In 1873 and 1874 receipts exceeded a half-million dollars, and net income for each year was over a quarter of a million dollars.

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29. 45th Annual Report (1873), pp. 16-17. The Cumberland Valley railroad first secured permission in 1869.
31. See Appendix, table V.
excess of revenues over current expenses was applied to the
tremendous task of restoration and improvement and to the repayment
of the back interest due on the preferred construction bonds. 32
In the three and one-half years of its tenure up to December, 1875,
the Gorman administration paid off nineteen coupons, representing
nine and one-half years’ interest, amounting to $902,467.88. 33
The financial condition and reputation of the canal rose perceptibly
from even the high levels to which the Clarke regime had raised it. 34
So great were the achievements of the canal in the early ’seventies
that many took its record as a demonstration that railroads could
never hope to compete with canals in the cheapness of their trans­
portation. Agitation revived for the construction of additional
waterways between the middle west and the Atlantic seaboard. 35
A rally of the friends of the Chesapeake and Ohio was held at Cumberland
in September, 1873. 36 Eventually, Congress took an interest in the
movement and authorized surveys of the several routes proposed for
the connections. The report on the extension of the Chesapeake and
Ohio to the Ohio river brought out several interesting points. For
one thing, the preliminary report in 1874 stated that the Pittsburgh

32. 45th Annual Report (1873), p. 8. $199,000 of the $200,000 repair
bonds had been paid off, with interest, by 1873. The next in order
according to the court decision were the preferred construction bonds.
34. Testimony of Hon. A. P. Gorman before U.S. Commissioner G. Morris Bond
(Baltimore, May 31, 1860), p. 2. The average price of bonds was 67
in 1872, 100 to 106 in 1873, 92 in 1874, and 115 in 1875. During
1876, the market price of the bonds declined to 110. Thereafter it
fell to 70 in 1877 and 65 in 1878.
36. Proceedings of Directors, H, 121 (August 8, 1873). The meeting was
scheduled for September 10, 1873.
branch of the Baltimore and Ohio railroad had appropriated almost
the exact route originally recommended for the canal via Wills
creek. The extension of the main line to the west, up the Potomac,
did not interfere with an extension of the canal, however, for the
railroad had had to allow room for the canal in the Potomac valley,
pursuant to the court decision in 1833.\textsuperscript{37}

Nevertheless, the route via Wills creek was so obviously the
best possible one that the engineer requested special permission
to concentrate on it notwithstanding the specific prohibition against
it in the authorization of the surveys.\textsuperscript{38} The report stated further
that the cost of any canal from Cumberland to the Ohio would be so
great that local advantages must be subordinated to the primary
object -- the connection with the Ohio. For this purpose the best
possible route should be taken regardless of local interest.\textsuperscript{39} The
engineer then observed that for practical purposes the dimensions of
the Chesapeake and Ohio canal must be those adopted for the extension
if the large size of the canal already in operation were not to be lost.
Also, the Ohio river must be dredged so as to be six feet deep at
all times, if the advantages of the canal were to be fully utilized.
The cost of the canal fifty-four feet wide (thirty feet at the bottom)
and six feet deep, from Cumberland to Pittsburgh, was estimated at
$28,801,313.\textsuperscript{40}

\textsuperscript{37} Letter of the Secretary of War on the Extension of the Chesapeake
and Ohio Canal, April 14, 1874, 43rd Congress, 1st Session, House
of Representatives, Executive Document No. 208, pp. 8 and 9.
\textsuperscript{38} Ibid., p. 5.
\textsuperscript{39} Ibid.
\textsuperscript{40} Ibid., pp. 7-8.
The final report in 1876 confirmed most of these findings and concluded that the canal, while difficult and expensive, was still practicable. The dimensions of the proposed waterway were increased to seventy feet wide and seven feet deep and the locks to 120 feet long and twenty feet wide to enable the route to compete with the proposed James river and Kanawha connection. Despite the larger size of the canal, the total cost was reduced to $24,237,080 by the utilization of slackwater navigation on the Youghiogheny below Connellsville.

Nothing further was done to bring about the extension of the Chesapeake and Ohio. The canal board retained hopes, however, that at least their waterway would be extended up the Potomac to the heart of the coal region, but even this proposal failed to win support.

Despite the great prosperity of the canal (especially in view of the widespread depression in trade and industry after 1873) and the substantial improvements already made, President Gorman was not yet satisfied. He recommended the continuation of the general program of improvement and expansion designed to modernize the canal as a carrier and establish it more firmly as a future transportation line. He cited the reasons for his stand and the course he proposed to take in a long report made in 1876. It is worthwhile to quote parts of the

41. Letter of the Secretary of War transmitting report of Engineer Merrill on Chesapeake and Ohio extension, March 2, 1876, 44th Congress, 1st Session, House of Representatives, Executive Document No. 137, p. 2.
42. Ibid. The locks would be ten feet longer and two feet wider than the Erie Canal.
44. Ibid., p. 31; 47th Annual Report (1876), p. 19.
recommendations in detail, so clearly were the canal's past and present condition and future prospects described.

In reviewing the changing position of the canal in the Cumberland coal trade, the president cited ample reasons for undertaking a program of far-reaching improvements to strengthen its competitive position.  

It is well known when this work was constructed it was then of larger dimensions than any other Canal in this country; and the carrying capacity of the boats sufficient to make the cost of shipping coal, much less than by any of the then competing lines.

Since then, but comparatively little attention has been paid to making improvements, so as to reduce the cost to a minimum. While on the other hand, the best talent of the country has been employed in perfecting the system of railroad transportation and with wonderful results.

When this Canal was completed in 1850, it was not supposed that a ton of coal could be profitably moved by rail for less than two (2) cents per ton per mile, whereas it is now transported from Cumberland to Baltimore for a fraction over one cent per ton per mile.

It is true, that during the same time, reductions have been made in tolls and wharf charges by the Canal, so that a proper difference has always been maintained in its favor. But further improvements are being rapidly pushed forward by other transportation companies, which, when completed may, and probably will, require further reductions on our part.

Up to this time the Baltimore and Ohio Railroad has been our only formidable competitor.

The able and comprehensive minds who direct the affairs and shape the policy of that Company, have long since recognized the necessity for greater reductions in the cost of transportation, and to that end, have been for some years constructing its third track from Baltimore to Cumberland, which, when completed will enable it to reduce the cost of delivering a ton of coal from the mines on board of vessels in the harbor of Baltimore to a minimum railroad rate, which, together with the superior facilities of the port of Baltimore, as compared with Georgetown and Alexandria, for shipping to Northern ports, will make it absolutely necessary that a corresponding reduction in cost and improved facilities shall be furnished by this Company.

Within the past four years another competing line has been constructed to the coal fields, which is owned and controlled by the Pennsylvania Railroad Company; the very able and astute managers of which recognize the great value and importance of securing the transportation of a large portion of the products of the Maryland mines,... [The older, Maryland lines have advantages of being shorter and cheaper thus far.]

But the Pennsylvania Railroad Company owns and controls the Canals leading up the Juniata, and have for some years been making extensive improvements by enlarging them, and it is now proposed and recommended by their accomplished engineers to expend only one million dollars more, which would complete their enlarged Canal and slack water to a point within 80 miles of our mines.

Then by railroad of only 80 miles, and a Canal of sufficient capacity for section boats of 300 tons passing through to Philadelphia and New York, they claim that a large portion of the tonnage of this Canal, as well as of the Baltimore and Ohio Railroad must be diverted.

After a brief justification of his activities during the first three years of his administration, he outlined his program of improvements and the present state of its achievement.

Early in our administration, but after a careful examination of the various questions involved in this subject, we were convinced that no time should be lost in inaugurating a general system of improvements, involving the expenditure of considerable sums to complete them, but distributing it over a series of years, so as not to diminish our payments on account of debts. The improvements already made and results obtained, have been fully set forth.

CONTEMPLATED IMPROVEMENTS.

The improvements contemplated and deemed necessary, were:

First. To restore gradually the water-way of the Canal to its original dimensions, so that with the present locks, the tonnage of the boats should be increased from 109 to 120 tons.

Second. To control the amount of terminal charges.

Third. To secure such a control as would enable us to fix and maintain a uniform rate of freight charges.

46. Ibid., pp. 16-17.
Fourth. Enlarge the locks of the Canal so as to increase the capacity of the boats to two hundred and fifty (250) tons.

To complete these improvements, and supply the work with improved steam appliances, would necessarily involve the expenditure of a large sum of money.

But that they are desirable, if not absolutely necessary, no one can question, and that they can be completed within a reasonable time, without diminishing the usual payments, on account of indebtedness, we do not doubt.

To that end we have, within the past three years, purchased improved steam machinery to pump water, steam dredge to widen and deepen the Canal, and furnish an outlet to the Potomac River, at Georgetown, so as to give ample opportunity for wharf facilities, and thus reduce the cost at that point.

2nd. We have leased, during the present year, sufficient wharf facilities at Cumberland, to control the cost of wharfage at that point.

3rd. We have made some progress in preparing material to enlarge the locks. 47

These improvements, he insisted, must be continued and expanded, in the manner of those already described on the Pennsylvania canals.

Furthermore, the canal company must forget past concepts of its function as a carrier and devise new ways and means to control effectively all charges on its waterway. Thus the last vestiges of distinction between the railroad and the canal would be obliterated (excepting physical differences). 48

Another difficulty in the successful management of this work, arises from the fact, that it is not within the power of the Company to fix the rate of charges for freights. The theory was, that as a public highway, free to all boats who paid

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47. The directors received authority to sell repair bonds to lengthen the locks in July, 1881. Proceedings of Directors, N, 146 (July 19, 1881).

certain charges, free competition in the carrying trade would insure the lowest freight charges. The practical operation has been and is, that a combination of a few interests can dictate these charges, with no power on the part of the Company to control them. Indeed it has gone so far as to reverse it, and dictate to the Company what its rate of tolls shall be.

The time has now arrived, when this Company must adopt some measure whereby these charges can be fixed and controlled by rate for his [sic] labor and investment, while at the same time, rates we can inform the Coal Companies, before the opening of navigation we can inform the Coal Companies, before the opening of navigation, each spring, what rate of charges will be made for the year.

The insistence on continued efforts to improve the canal's position as a transportation line was not out of place, even in the banner year of 1875. There were already ample indications of rough sailing ahead.

In August, 1874, trainmen on the Cumberland and Pennsylvania railroad went on strike. Meanwhile, the boatmen had finally organized in 1873, and it was logical to assume that they would resist reductions in boating charges. On August 20, 1874, they also struck, demanding $1.35 a ton freight rates from Cumberland to Georgetown. The investigation of the strike by the canal board uncovered serious abuses in the system of boating, then in operation on the canal which tended to support the boatmen’s position. The urgency for the resumption of business, however, did not allow time to remedy these grievances. The judicious use of strike-breakers and police soon brought the boatmen to terms.


50. Ibid., M, 176-177 (September 10, 1874). The Boatmen's Benevolent Society of Cumberland had been active in 1873 protesting toll charges, liquor traffic, etc. See, e.g., Proceedings of Directors, M, 94 (February 13, 1873), 102 (March 11, 1873).


52. Ibid., 182-183, 184.
In addition to these troubles, there was always the threat of a rate war between competing coal carriers. The volume of coal shipped via the railroads fell off in 1874 although the canal's trade actually improved in the same year. 53 In the spring of 1875 there was a general reduction of charges, including tolls, wharfage and freights. 54 As a result, although trade on the canal increased in 1875 to an all-time high, canal revenues actually declined from the peak year of 1874. 55

The Struggle for Existence

In 1876 the great nation-wide depression finally reached the canal. Trade fell off sharply; and that part of it which was retained was kept only by lowering the rate of tolls and wharfage from 61/2 to 46/ per ton from Cumberland to Georgetown, the lowest it had ever been up to that time. 56 By January, 1878, the canal had adopted for the first time a system of drawbacks on published rates for coal companies shipping large quantities of coal via the canal. 57 The effect of the depression on the company's affairs was officially described in these terms. 58

The continued depression in all branches of industry has so lessened the demand for coal as to seriously affect our business. The depression has also induced the shippers of coal from other regions and transportation lines leading to tide water, to reduce the price of coal at commercial centres, so that a large reduction in prices was necessary in Cumberland coal.

54. Proceedings of Directors, p. 210-211 (April 6, 1876). Over-all charges were reduced twenty cents: tolls - 8 1/2, freight - 10 1/2, and wharfage - 2 1/2.
55. See Appendix, tables IV and V.
56. Proceedings of Directors, p. 256 (April 18, 1876); 48th Annual Report (1876), p. 10. The Baltimore and Ohio railroad had reduced its charges from $2.30 a ton to $2.02 a ton to Baltimore.
57. Proceedings of Directors, p. 248 (January 6, 1876). Drawbacks were granted to the Consolidation Coal Company and the Maryland Coal Company.
The Board also gave the president blanket authority to fix tolls at competing points on the canal at whatever rates were necessary to retain the trade. In line with this authority, he reduced the toll on flour to $3/4$ a ton per mile from all such points between Williamsport and Havertown. In an effort to lower the cost of canal coal and to stimulate trade, President Gorman secured the passage of a law by the Maryland Assembly to compel the Cumberland and Pennsylvania railroad (which carried most of the coal from the mines to the canal) to reduce its charges on coal from $3/4$ to $2/4$ a ton per mile. The railroad resisted the law, however, and the reduction was not secured until the Maryland court of appeals upheld the validity of the enactment in 1877. Surveys were also made up the north branch of the Potomac in 1876 with a view to extending the canal to the mouth of Savage river and establishing a direct connection with the coal fields.

Notwithstanding all efforts to stimulate trade, reduce costs, and provide direct connections with the fields, the coal trade (and consequently the total trade) on the canal continued to drop as the production of the Cumberland region fell off markedly. The unsatisfactory state of affairs was succinctly summarized in the annual report for 1876.

The business from the Maryland Coal region during the year, has proved one of the most unsatisfactory in its history. The decrease in the number of tons of coal shipped from

59. Proceedings of Directors, M, 256 (April 18, 1876).
60. Ibid., M, 266 (May 17, 1876). See also Cockrell and Angle to Gorman, January 26 and March 9, 1877, on the affects of rate-slaashing by railroads on the flour trade via the canal.
61. 49th Annual Report (1877), p. 3; Proceedings of Directors, M, 296 (May 10, 1877).
63. See Appendix, table IV.
64. 49th Annual Report (1877), p. 3.
this region to tide water amounts to 507,692 tons, equal to a decrease of twenty-one (21) per cent, as compared with 1875.

This large decrease in the business of that region, is attributable to the general depression that has followed the financial crisis of 1873, coupled with the fact, that the Cumberland and Pennsylvania Rail Road Company, over which all the coal from the Cumberland basin to [the] Canal must pass, refused to comply with an act of the Legislature of this State, reducing its charges, thereby preventing our coal from being put in market at such a price as to compete successfully with other coals.

The decrease in trade and the reduction of tolls caused canal revenues and profits to fall to approximately two-thirds and one-fourth the respective levels for 1875. 65 Your unavoidable, but costly breaks in embankments cut heavily into the net income. 66 Most of the improvements which had been projected or were in progress were brought to completion or suspended. The outlet locks at Georgetown were finally finished by the end of the year and were leased by the company for twenty-five years at $15,000 a year. 67 By the time they were ready for business, the decline in trade had relieved the canal of the immediate need for them. The work of lengthening the locks was curtailed -- only three of them, all on the Georgetown level, were improved during the winter of 1876-1877. 68 One more coupon was paid on the construction bonds, bringing the total payments up to 1865. The one for July, 1864, was the only one paid in 1876, and it proved to be the last ever to be honored. 69

65. Ibid., p. 4; see Appendix, table V
67. Proceedings of Directors, M, 286-287 (January 11, 1877), 288 (February 13, 1877). The locks were said to have cost $146,566.77.
69. Ibid.; Proceedings of Directors, M, 281 (December 12, 1876).
The year 1877 promised no improvement in canal trade or revenue. The country was still in the grip of the depression, and a rate war among the transportation lines was in the offing. The Baltimore and Ohio reduced its charges 22¢ below the published rate for 1876 (to $1.81), and was reportedly offering even lower rates to canal shippers for their trade. It was generally believed by the canal directors that the railroad had offered rebates of 18 - 20¢ in 1876; it was thought the rebates offered in 1877 would be at least as large.

Although the Cumberland and Pennsylvania railroad was finally compelled to lower its charges 1¢ a ton per mile, the competition of the Baltimore and Ohio railroad interests and the Pennsylvania Clearfield anthracite coal was so great that the canal board decided early in April that it would be impossible to make any profit on the coal trade that year, and that the important thing was to hold the trade which the canal already had.

The Board thereupon plunged into the thick of the rate war. It reduced tolls several times in the course of the year, from 41¢ in April to 22¢ a ton from Cumberland to Georgetown in August.

The troubles of the canal in 1877 were only beginning, however. On June 21, the boatmen struck again, tying up on the first level above Seneca. There they awaited some redress from their grievances, for


72. Proceedings of Directors, p. 4 (August 21, 1877); 50th Annual Report (1878), p. 6. Tolls were 48¢ on April 1, 1877 (including wharfage) and 25¢ on September 1, 1877 including wharfage. See Appendix, table VII.
from the reach of coal companies or the canal board. The strike lasted for two months, during which canal trade sank to negligible proportions. The men finally returned to work on August 20. 73 By that time many canal shippers had made arrangements with the railroad for the transportation of their business for the rest of the year. The canal directors fixed tolls at a nominal rate and attempted to make up as much of the lost ground as possible in the few months of navigation that remained. 74

Three months later -- fortunately near the end of the boating season -- the last of a series of misfortunes which befell the canal in 1877 occurred. On November 24 another great flood swept down the Potomac valley. This one was the worst in 150 years of the recorded history of the region. In its wake it left the canal almost a total wreck and, of course, brought navigation to an end for the season. In all there had been only 161 days of navigation during the year. 75

The crest of the flood was generally two feet higher than the previous record established in 1852. At Great Falls, the water reached a point seventy feet above the low water mark. 76 Damage was generously scattered along the entire line, but the middle section suffered the most injury. There were fourteen breaches on the Cumberland division, and the walls and towpath were badly washed in many places. In addition, the abutments of Dams No. 5 and 6 were seriously damaged. On the middle

73. 50th Annual Report (1878), p. 3.
74. Ibid., p. 6; Proceedings of Directors, N, 4 (August 21, 1877).
75. 50th Annual Report (1878), p. 3. Proceedings of Directors, N, 1 ff (December 12, 1877).
division the worst blow was the destruction of Dam No. 4. The river tore a gap about 200 feet wide in the middle of this new masonry structure which was thought to be one of the best of its kind in the country. There were also many breaches and washes, and the canal was completely filled at some points. On the Georgetown division the damage was limited to heavy washes and large breaches. All along the line quantities of repair materials, stores, and cargoes were lost.

The work of restoration began immediately. As in every disaster that struck the canal professional mourners all turned out to bemoan the passing of the old ditch and to inter the remains. The board of directors did not give up so easily. Repairs began on November 26, as soon as the waters had receded and the nature and extent of the damage was ascertained. As an economy measure all lockkeepers, collectors, etc. were suspended; but many of them probably found employment directing and making the repairs. All winter long the work continued as rapidly as possible. All available company resources were used, augmented by loans of $115,000 from coal companies, banks and individuals. The canal reopened for business on April 15, 1878.

77. There is a full report of the damage to the canal in Proceedings of Directors, N, 11-13 (December 12, 1877). See also, 50th Annual Report (1878), pp. 9-10; and the Baltimore Sun, November 26, 27, 28, 1877.

78. Proceedings of Directors, N, 14 (December 12, 1877).

79. Ibid.

80. Ibid., N, 14, 17-20 (December 12, 1877 - April 10, 1878).

only one month later than usual. But the magnificent effort had cost the company $236,500.21 and had left it exhausted, saddled with a debt of $196,463.93.

Once again President Gorman went to the state legislature for help. By the terms of an earlier court decision the right of the company to issue bonds for repairs on a pledge of its revenues was recognized as legally unrestricted. To insure a market for the bonds, however, it was deemed necessary to limit the right to some sum that might reasonably be repaid. Upon the request of the canal company the legislature passed an act in February, 1878, specifically waiving the state's prior lien on canal property for repair bonds up to $500,000 in amount. The additional pledge of canal property for the repayment of the bonds was considered necessary to strengthen the market value of the issue. Only the few bonds required to cover repair costs were issued at first, for they were not subject to cancellation before maturity. More than ever the canal company needed a revival of trade at profitable rates in 1878 to enable it to get out from under the new burden of debt and to resume payments on the construction bonds.

Prospects for a marked recovery, however, appeared to be slight.

Business remained generally depressed, and coal prices continued their...
deflationary tendency. The price of a ton of coal on board vessels at Georgetown, which had been $4.65 in 1872 fell to $2.80 in 1878–1879. The railroads also continued their cut-throat competition and rate wars. Under these conditions trade remained slow, and revenues had little opportunity to rise. Once again, the state legislature, which was becoming increasingly hostile to the Baltimore and Ohio railroad — as were many others in the state — came to the aid of the waterway. In 1878, it passed an act curbing the competitive practices of that railroad. On the strength of this act the canal board raised tolls from 25¢ to 40¢ a ton from Cumberland to Georgetown.

Meanwhile the company turned to other ways and means of improving its position as a carrier. At least four courses of action were possible: to secure an independent connection with the coal fields; to gain control of freight rates on the canal; to reduce operating expenses; and to come to some agreement with competitors. All four ways were tried.

The object of securing an independent connection with the coal fields was to reduce the cost of transportation for the coal companies and to free the canal of its dependence on the Baltimore and Ohio and its subsidiaries. The company made special arrangements with the owners

86. 52nd Annual Report (1880), p. 7.
87. 51st Annual Report (1879), p. 11.
88. Act of Maryland Assembly, [January session, 1878, ch. 155]; Frederick Examiner, February 27, 1878; March 3, 1878. The terms of the act are given in the latter issue. See also, 50th Annual Report (1878), p. 12.
89. Proceedings of Directors, N, 20 (April 10, 1878). The revised charges represented 15-1/2 per cent of the total cost of transportation via the canal, compared to only 12 per cent in 1872. 52nd Annual Report (1880), p. 7.
of the Davis mine in West Virginia in 1879 for the transportation
of the product of that mine.\textsuperscript{92} It sought to facilitate the con-
struction of no less than four independent railroad connections
with the canal. Among these was one which proposed to build a line
all the way down the Potomac from the coal fields near Georges Creek
and Savage river to the canal basin at Cumberland. This road, the
Georges Creek and Cumberland railroad, received the assistance of
the canal company in its attempt to force the Baltimore and Ohio to
permit a crossing of its tracks (in order to reach the canal basin)
according to the terms of the 1851 agreement.\textsuperscript{93} Two other roads,
the Bloomington and Fairfax and the Potomac and Piedmont, agreed in
1880 to build short feeder lines to the Baltimore and Ohio line on
the promise of special rates from the canal for coal shipped over it.
In the same year, the canal board invoked the agreement of 1851 at the
request of the Pennsylvania railroad to compel the Baltimore and Ohio
to permit the former road to cross its tracks in order to enter
Cumberland.\textsuperscript{95}

The purpose of the endeavor to gain control of freight rates on
the canal was to reduce the profits of the various agencies involved
in canal transportation so as to enable the company to reduce over-all
charges while maintaining a profitable rate of tolls. It was said that

\textsuperscript{92} 52nd Annual Report (1880), p. 12.
\textsuperscript{93} Ibid., p. 12.
\textsuperscript{94} Ibid., p. 13; Proceedings of Directors, N, 99-100 (February 18, 1880),
112 (July 20, 1880).
\textsuperscript{95} Proceedings of Directors, N, 114-115 (July 20, 1880), including the
letter of Henry Loveridge, Vice President of the Pennsylvania Railroad
Company (in Maryland) December 19, 1879, and resolutions of that company.
Gorman intended to institute a canal transportation line controlled by the company in order to reduce freight charges. Although this is entirely likely, nothing was accomplished in that way before the turn of the century. The assault on another of the agencies in canal trade was more successful. The rates charged by the owners of wharf facilities at Cumberland and Georgetown were the cause of great concern to the canal company. The wharf owners received a handsome return on their small investment, and at the same time their charges were so high that they forced the canal company to reduce its tolls in order to compete with the railroads for business. The low rate of tolls, on the other hand, did not produce enough revenue to pay anything on the great investment of capital represented by the canal. The board dredged the Rock Creek basin and repaired the outlet lock in order to make the river bank available for wharf facilities at Georgetown and in that way tried to force wharfage fees down to a fair level. At Cumberland, the canal company leased the Potomac wharf and cut rates until others were forced to reduce theirs. Later it purchased the largest wharf from its proprietors and secured a permanent control over wharfage at that end of the canal.

96. Act of Maryland Assembly, [January Session, 1878, ch. 58, sect. 4]. See also F. D. Hammond to Gorman, November 21, 1877, and the Baltimore Sun, January 28, 1878.

97. Testimony of A. P. Gorman before U.S. Commissioner G. Morris Bond, [Baltimore, May 31, 1880], U.S. Circuit Court for the District of Maryland, D. K. Stewart vs. the Chesapeake and Ohio Canal Company, p. 22. Wharf owners made $344,000 income in 1874 alone on their investment of $300,000. The revenue for the canal company in the same year was approximately $428,000 on an investment of over $11,000,000.


99. Testimony of A. P. Gorman, p. 22; Proceedings of Directors, M 291 (March 14, 1877); Ibid., N 56 (September 17, 1878).
The company attempted to reduce its own operating expenses by introducing improvements of various types. It sought thereby to permit a reduction in tolls which would lower the over-all cost of transportation, but which would still leave the canal a profit. One improvement along these lines was the installation of a telephone along the waterway. It followed the route of the canal with the exception of the tunnel. The entire line was completed and put into operation by October, 1879. There were forty-three stations located along the canal so as to be within easy reach of any point on the line. It was at that time the longest single circuit in existence. Another proposed improvement was the lengthening of locks. It was estimated that twenty-seven locks must be lengthened to 120 feet each if any benefit were to be derived from the improvement. Only fourteen had been extended by 1882, however. Thus the advantages anticipated from the operation of double boats were denied to the coal shippers and the canal.

The efforts to come to an agreement with competitors involved both force and compromise. The company enlisted the assistance of the assembly to bring the Baltimore and Ohio to terms in 1878. It voluntarily cooperated with the latter and the Pennsylvania railroad to fix charges on the coal trade at profitable levels. This latter arrangement enabled the board to raise the tolls in April, 1880.


102. See above, p. 290.

The attempts of the canal board to improve the position of its transportation line was not carried out without obstruction. In 1879 there was a strike of miners, from September 4 to October 8, and a serious drought to hinder the recovery of the canal. In 1880 a strike of boatmen interfered with navigation for eight weeks beginning in the latter part of June. Trade was reduced from an average of 21,374 tons to 13,870 tons a week during the strike. Hardly was the strike settled than the river lock gave way and was abandoned. In the same year a bondholder, Daniel K. Stewart, challenged the right of the company to sell repair bonds of 1878 to raise funds to lengthen locks. The influence of local politics was manifested in 1882, after the company had won a dubious victory in the Stewart case, when Governor Hamilton, an opponent of Gorman, expressed his doubts as to the legality of using the bonds for that purpose.

The opposition of these two men ruined the market value of the bonds and brought the improvements to a halt. Meanwhile the Georges Creek and Cumberland railroad was having trouble securing the necessary

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permission to cross the Baltimore and Ohio tracks to the canal basin. Thus the canal was still without its independent connection with the mine fields, as late as 1861. 109 Another severe drought in August and September of that year so reduced the water in the river and in the canal that boats could be passed only in fleets every six or eight days. Water was collected by the upper dams and then passed through the canal along with the boats down to the lowest levels. 110 Finally, in 1882, another strike occurred among the miners which lasted until August. During the strike there was virtually no trade on the canal. By the time the miners agreed to go back to work there were only three months of navigation left, and many of the boatmen had left the canal, despairing of doing any boating at all that year. 111 Trouble between boatmen and shippers flared up again in the spring of 1883. 112

During the great strike of 1882, Gorman left the company. He had been trying to quit ever since his appointment as U.S. Senator in 1880. In June, 1882, he refused re-election, and formally retired from the administration of the company.

Trade and Finance in the Nighties

Following the ten-year reign of Senator Gorman as president of the canal company, there was a succession of short administrations by


110. Cambrill, General Superintendent, to Gorman, October 5, 1881, Proceedings of Directors, 151-152 (October 6, 1881). The draft of canal boats was reduced from 5 3/4 feet to 4 1/2 feet. Printed also in 54th Annual Report (1882), Appendix A, p. [15].


political appointees. In the background there was always the shadow of the senator, still the political boss of the Democratic party in Maryland. Under the continuing depressed state of canal trade there was little the officials could do in the decade to put the canal back on its feet. Indeed it was scarcely possible to keep the canal in shape for navigation. The dilemma in which the canal board found itself was set forth in 1866.\(^{113}\)

the work cannot for any considerable period be kept in good navigable condition unless the amount expended on it is increased nor can its revenues...be maintained unless the canal is improved so as to keep pace with the increased facilities that are constantly being made by rival lines of transportation.

On the whole, the story of the old ditch in the last decade of its independent existence presents a dreary picture of trade stagnation, financial depression, physical deterioration, political leadership and outside intrigue. The hey-day of the canal had definitely passed. The canal's business by this time was almost entirely dependent on the demand for coal.\(^{114}\) In view of the continued depression in industry this demand remained relatively stagnant in the early years of the decade. The competition of the great railroad lines also acted to keep the coal shipments via the canal at a minimum.\(^{115}\)

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114. So dependent upon coal was the canal that after 1878 the company stopped listing the amount of other produce shipped on the waterway. See Appendix, Table IV.

"The improvement in the motive power of railroads, whereby one crew of hands can now do the work which formerly required three crews, has tended greatly to cheapen the cost of transportation..." but in canal transportation such improvements have not yet been reached. The same number of horses or mules are required to draw the boat and the number of hands are now employed to man it as were needed when the Canal was first opened. Canals have not kept pace with the improvements and money saving inventions introduced into

(Continued on next page)
among the boatmen threatened to break out again in 1883. In 1884 the canal's business was curtailed by the efforts of the coal companies to force the Board to lower its charges. Navigation was suspended for four of the first six months of 1885 by the paralysis of business. Rate wars and strikes again interfered.

Freight warfares between trunk lines of railroads have added to the decrease in receipts of all carrying companies, and compelled a marked reduction in the tolls heretofore charged by this Company. Strikes or threatened strikes in the coal regions have caused also a diminished shipment of coal.

The general stagnation of the canal's trade was clearly reflected in the annual tonnage figures for the early eighties.

Canal revenues also remained stagnant and even declined in the face of the continued rate warfare among the coal carriers. Canal tolls were reduced from 40¢ (including wharfage at Cumberland) in 1883 to

116. (Continued from previous page)

the service of other carriers.

"Until some means shall be devised to diminish the cost of the motive power on the Canal, and until the locks shall be lengthened so that double boats may be passed through them, or some other means found to cheapen the cost of transportation, successful competition is almost hopeless.

"Whatever the means needed or adopted to lessen the cost of canal carrying may be, the C. & O. Canal is utterly unable to supply them.

"... it is powerless to aid itself."

117. Report of the President, Proceedings of Directors, II, 260 (June 20, 1884). Pressure on the canal to lower its tolls was by no means novel. As recently as 1878, leading coal companies in the Cumberland region had brought concerted pressure on Gorman to reduce tolls. The arguments used are significant as indicative of a tendency that was then present - though not so serious as the coal companies would have one believe. The decline in popularity of Cumberland coal, the growing demand for anthracite, the greater handling and breakage of canal-shipped coal, the obsolescence of Georgetown as a port, and the dependence of the canal on the coal trade were all mentioned. William Borden to Gorman, April 1, 1878; Henry Loveridge to Gorman, April 15, 1878; George Reppplier to Gorman, April 19, 27, 1878.


119. Ibid.

120. See Appendix, table IV.
36% in 1864 and finally to 26% in 1866 to meet the competition of the railroads and to stimulate trade. In 1865 the Baltimore and Ohio railroad was carrying coal to deep water docks at Locust Point for $1.30 a ton whereas as late as 1866 it had charged $5.50 a ton. The decline in revenues made the position of the debt-ridden, obsolescent canal all but impossible. If the interest on the repair bonds went unpaid for too long (two years according to the decision of the U.S. Circuit Court in 1886), the bondholders might obtain a foreclosure. On the other hand, if the canal's income was used to pay this interest, the company would not have the funds to make improvements necessary to enable the canal to compete with the low freight charges of the railroads and thereby to obtain the money to repay the loans. The repeated somber warnings of the canal officials show that they were fully aware of the canal's precarious position.

To resolve its financial dilemma as well as it was able, the company resorted to several devices. First, it cut the ordinary expenses of operation whenever and wherever possible. During the suspension of trade in 1862 during the miner's strike, the salaries of lock-keepers, bosses and laborers on the line were reduced approximately 50 per cent. The wages were only partially restored after the


122. 58th Annual Report (1886), p. 9. It was reported that the railroad frequently carried coal for as low as $1.00 a ton.

123. Ibid., pp. 8-10.
strike ended, and it was not until the following May that they were
fully restored. During the winter months of 1883-1884, lock-keepers'
salaries were again halved, and 105 laborers were discharged.
Still further reductions in the working force in May, 1884, brought
the total number of employees down to about one-half the 1882 force.
In June, 1884, the regular salaries of the employees were reduced by
twenty to twenty-five per cent, and in July, the Board abolished the
offices of general superintendent, engineer, assistant superintendent,
and assistant collector at Georgetown. At the same time, it reduced
the salaries of the office staff twenty per cent. Even these measures
proved insufficient, and the company found itself unable to pay all its
obligations to its employees in the early years of the decade. By
December, 1884, there was a floating debt of $170,662.94, a
large portion of it due to employees who had worked hard
and faithfully to earn what is due them, and who have waited
with unprecedented patience and forbearance for their wages,
except some few who reside in Washington county —
$189,000 of the repair bonds were sold in 1885 at eighty-six per cent
of par, to pay these debts; but the Board confessed that:
Until the right to consummate the sale shall be settled, we
are wholly unable to relieve the distress of many who have
been deprived of their wages for more than a year, and whose

124. Proceedings of Directors, N, 189-190 (August 31, 1882), including
Report of Gambrill to President and Directors, August 31; ibid., N, 214
(May 10, 1883).
126. Gambrill to L. Smith, May 14, 1884, Proceedings of Directors, N, 257-258
(May 15, 1884).
127. Report of the President, N, 267-268 (June 20, 1884), Report of the
President, Proceedings of Directors, N, 274 (July 24, 1884). Proceedings
of Directors, N, 276 (August 21, 1884).
129. Ibid., p. 7.
130. Proceedings of Directors, N, 317-319 (September 1, 1885).
sufferings for the bare necessaries of life have been
great and painful during the past winter.

Although the company made a great effort and paid off all indebtedness
for wages incurred in 1885, there was still a debt of $120,540.96
left over from an excess of expenditures over receipts between 1878 and
1885, amounting to $154,625.50.

The canal company applied its economy measures to the work of
maintenance and improvement. Only necessary repairs to the waterway
itself were undertaken. The comprehensive program of improvements
laid down by the Gorman administration was suspended, except for the
payments on the purchase of the Basin Wharf at Cumberland. The
Rock creek basin was kept clean by continual dredging, but this had
become imperative after the purchase of the Potomac aqueduct by the
government in 1887 for conversion into a bridge. The guard bank
at Great Falls had to be raised to protect the canal there, after the
government had raised its dam, but Congress provided the necessary
funds for that work. Later the board reversed its stand on improve­
ments and began to sell repair bonds to lengthen the locks, but another
challenge by the bondholders of 1844 again ruined the market value of
the bonds. Even the decision of the court was not clear on the
legality of the use of bonds for that purpose. Until other funds could

132. 58th Annual Report (1886), pp. 11-12.
133. Ibid., p. 6.
134. 57th Annual Report (1885), pp. 5-6, 9-10.
135. Proceedings of Directors, N, 378 (April 19, 1888). Only $22,000
was still due.
136. Ibid., N, 362 (June 23, 1887).
137. James G. Berret to Major E.I. Lydecker, Engineer-in-charge of the
Aqueduct, May 4, 1883; Berret to President and Directors, May 10, 1883,
Proceedings of Directors, N, 212-214 (May 10, 1883).
be obtained the work came to an end. The general deterioration of
the canal was indicated by the request of Cumberland shippers that
the canal and river be dredged at the outlet lock there to permit
boats to load at the Potomac wharf, and then enter the canal. The company also neglected another not completely essential adjunct
to the canal, the Washington extension.

In a desperate effort to wipe out the floating debts of the
company, the Board resorted to the sale of repair bonds on a large
scale. Before 1885 only $125,000 of them had been sold to pay for
the repairs and improvements to the waterway after the great flood of
1877. In September, 1885, however, $189,000 of them had been sold
to Robert T. Baldwin, at 86, with an option to purchase $71,000 more
within two years. This proved to be the beginning of a mad scramble
to secure control of the canal through a majority holding of the
repair bonds.

In 1886, the period without major disasters came to an end.
Between 1882 and 1886 there had been only one flood, a minor one,
though untimely and expensive, in Washington county in July, 1884. The trouble started with a general strike of miners in March, 1886.

139. Proceedings of Directors, N. 361 (May 25, 1887), quoting letter
from Col. George Schley.
141. Proceedings of Directors, N. 300 (December 8, 1884).
142. Ibid., N. 317-318 (September 1, 1885).
143. Report of the President, Ibid., N. 273 (July 24, 1884).
144. Ibid., N. 328 (March 9, 1886).
On April 1, a flood swept down the entire length of the upper Potomac valley, tearing a great gap in Dam No. 6, and generally wreaking havoc to the waterway. On April 6, another freshet widened the hole in the dam and added to the destruction of the canal proper. At that time a complete report of the damage caused by the two floods revealed that over 200 feet of the dam had been entirely swept away, leaving 125 feet on the Virginia side weakened though still standing and 150 feet on the Maryland side which was described as old and rotten. In addition there were the usual serious breaches in the banks, the partial filling of the canal by bars washed into the trunk, large rock and earth slides, and heavy washes on the towpath.

A third flood, on May 9, widened the hold in Dam No. 6 to 237 feet, added fresh damage to the canal, and retarded the repairs already in progress.

About the only hopeful sign in the otherwise black record for the year was the completion of the Piedmont and Cumberland railroad. The independent connection with the West Virginia coal fields had at last been realized. This railroad had built its line down the valley to the south of the Baltimore and Ohio, and therefore was not balked in its efforts to reach the canal by the refusal of that road to permit a crossing of its tracks. The ill-fated Cumberland and

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145. 59th Annual Report (1887), pp. 5-6. See also the reports of Superintendents Biser and Maloney, ibid., Appendix A, pp. 15 ff, Appendix B, pp. 23 ff.


Georges Creek railroad had been blocked in this way for many years, and as late as April, 1888, was still requesting the canal company to compel the Baltimore and Ohio to permit the crossing it wished. 149 The Piedmont and Cumberland railroad approached the canal basin from the other direction and easily gained the consent of the canal board to build its tracks across the waterway to a connection with the basin wharf. 150

To meet the costs of the restoration of the canal after the floods of 1886, the company began to sell the remaining repair bonds of 1878 without restraint. On April 22, 1888, it ordered the firm of Robert T. Baldwin, or his assignees, Robert A. Garrett and Sons, to exercise the option to purchase 371,000 of the bonds. 151 Subsequent sales were authorized and made in the same year for $113,000 more, making a total of $498,000 sold by January, 1887. The sales were effected at prices averaging eighty per cent of par. The $189,000 sold in 1885 had brought 86; the price required by the option for the $79,000 was 80; John A. Hambleton and Company bought 375,000 of the bonds in August at 78; and the final sale, at the end of the year, was for 338,000 at 76. 153

The bonds were particularly desirable, for they carried a preferred mortgage on the physical property of the canal, not merely a claim

150. Ibid., N, 345-346 (December 14, 1886).
151. Ibid., N, 332-333 (April 22, 1886), including a letter of L. Victor Baughman, President, to R.T. Baldwin and R. Garrett & Sons, April 22, 1886.
153. Proceedings of Directors, N, 317-318 (September 1, 1885), 332-333 (April 22, 1886), 338-339 (August 5, 1886), 344 (August 26, 1886), and 348-349 (January 5, 1887).
against its revenues. By the middle 'eighties the life of the
canal under its present management was widely held to be only a
matter of time. In the reorganization that would inevitably follow
its bankruptcy, the canal would probably be sold. Hence the bonds
were a good investment. Railroad companies, eyeing the canal right
of way as a possible roadbed, were especially interested, for the
control of the 1878 bonds could force the sale of the canal in the
bankruptcy proceedings. Two companies that were vitally concerned in
the route occupied by the canal were the Baltimore and Ohio which
feared a competitor on its flank, and the West Virginia Central which
sought an outlet for its line from the West Virginia coal fields to
Cumberland. The sales of $260,000 of the bonds to Baldwin and his
assignee, Garrett, ultimately gave control of the bonds to the Baltimore
and Ohio. Meanwhile, the West Virginia Central interests, including
several Senators, possibly A.P. Gorman, began buying up the bonds.
They soon discovered that the Baltimore and Ohio already possessed a
majority of them and suspended their purchases.

The Bankruptcy of the Canal

Notwithstanding the gloomy predictions of its impending failure
and the struggle for control that was already developing, the condition
of the canal actually improved slightly in 1887 and 1888. Tonnage
increased steadily as the canal recovered from the blow of 1886, and as
general business conditions improved. Revenues rose abruptly on the
strength of the growing trade and higher toll rates. For the first

155. See Appendix, tables V and VI.
time a distinction was made in toll charges between coal destined for the Washington market in which there would be less competition and that which was intended for competition in the eastern markets. The charge for the letter was fixed at 34¢ a ton from Cumberland to Georgetown, while locally-consumed coal paid 40¢ a ton in 1887 and 44¢ a ton in 1888. However, the tolls were still too low to produce revenues or profits on the scale of those in the prosperous post-war years. They were not, in fact, sufficient to provide enough money to pay the ordinary expenses of operation, much less to meet the interest on the repair bonds. Balances due to employees for unpaid back wages continued to mount rapidly, until by September, 1888, over $93,000 was owed to the men. The omission of the payment of coupons on the repair bonds increased the threat of foreclosure. By July 1, 1888, three successive coupons had been passed. One more would complete two years without payment, making the canal liable to foreclosure.

As the year 1889 began, the future of the canal had not measurably improved, despite the recovery in trade. The new year soon gave indications that it would be repetition of the disastrous year of 1886. Successive misfortunes assailed the canal from almost the opening day of navigation. On March 24, a large break occurred in the limestone region above Shepherdstown, interrupting navigation until April 2.

156. Proceedings of Directors, N, 360 (April 21, 1887), 372 (February 14, 1888).
158. Ibid.
On April 8, a rock slide occurred in the cut at the lower end of the tunnel. The canal was filled for a hundred feet, to a point several feet above water level. The repair gang finally removed the rocks, some of which weighed fifteen to twenty tons, by April 17.

All year long the Rock Creek basin proved particularly troublesome. It had already been dredged twice by May 8, and was reported to be rapidly filling up again. 159

Between May 30 and June 1, disaster again struck the canal. A titanic flood swept down the Potomac, the crest of which was higher than ever before in the history of the valley. It began with a disturbance that was described as a cyclone which struck the valley near Martinsburg, West Virginia, and crossed the river a few miles above Williamsport. 160 It was followed by heavy rains which swelled the Potomac until it burst over its banks. 161 The story was pretty much the same all along the canal. At Cumberland the water rose both in the main river and in Will Creek until it completely submerged the land between them. 162 At Hancock, it reached a point three feet above previous records set in 1877. 163 At Williamsport the crest was 44 1/3 feet above the low water mark, seven and one-half feet above 1877 levels. The junction of the Potomac and the Conococheague was described as a huge lake. 164 At Sandy Hook, opposite Harpers Ferry,

159. Ibid., N, 413 (May 8, 1889).
160. Cumberland Evening Times, May 30, June 1, 1889. The storm crossed back into West Virginia at Falling Waters. Washington Evening Star, June 1, 1889.
161. Hagerstown Mail, June 7, 1889.
162. Cumberland Evening Times, June 1, 1889.
163. Ibid.
164. Hagerstown Mail, June 7, 1889.
The water rose to a point eight feet higher than the railroad tracks which were seventeen feet above the canal itself. At Washington the crest was three feet above the level of the 1877 flood.

The damage caused by the rampaging river was fully as impressive as the record heights established by the flood. There were the usual large breaks in the canal's banks, especially on the lower division. Lock-houses, warehouses, sheds, etc., were swept away by the torrent, including all the company's buildings, tools and materials at Sandy Hook. It was reported to be

one of the peculiarities of the freshet of 1889 that the stonework of the walls, etc., is more generally involved than on any previous occasion of the kind. The telephone wires [also] have been swept away, ... and every bridge for which the canal company is responsible is down.

Many frame buildings in the valley were torn from their foundations and carried downstream by the river. Attempts to save the buildings at Knoxville by roping them to trees and stumps failed. Additional damage to the canal itself included the destruction of Dam No. 8, in which the Potomac opened a 100 foot gap, and heavy washes of the towpath and the banks. Canal boats, teams and cargoes were carried away by the river, and the boats destroyed or deposited crazily along

165. Frederick Examiner, June 5, 1889. The river rose to the tops of locomotives which had been run onto the railroad bridge at Harpers Ferry to prevent it from being swept away. Hagerstown Mail, June 7, 1889.

166. Washington Evening Star, June 1, 1889.

167. The full report of the damage is in the Special Report of the President and Directors June 13, 1889, to the 61st Annual Meeting, in Circuit Court for Washington County (Md.) George S. Brown et al. vs the Chesapeake and Ohio Canal Company (Equity No. 4191), pp. 6-9.

168. Cumberland Evening Times, June 11, 1889.

169. Hagerstown Mail, June 7, 1889.

170. Frederick Examiner, June 5, 1889.

both sides of the valley.\textsuperscript{172} Mills, warehouses and wharf facilities along the canal and at Georgetown were also caught in the swirling current and severely damaged.\textsuperscript{173} Preliminary reports estimated the damage to the canal at from \$500,000 to \$1,000,000.\textsuperscript{174} One fact was clear to all, the canal was a total wreck.

\textsuperscript{172} Washington Evening Star, June 1 and 3, 1889; Cumberland Evening Times, June 5, 1889; Hagerstown Mail, June 7, 1889.

\textsuperscript{173} Washington Evening Star, June 1 and 3, 1889; Hagerstown Mail, June 7, 1889.

\textsuperscript{174} Washington Evening Star, June 4, 1889, quoting Gambrill.
CHAPTER XI
RECEIVERSHIP AND COLLAPSE, 1890-1945

Aftermath of the Flood

As the river receded to its normal channel, the full extent of the damage to the canal became apparent. The destruction of the waterway was said to amount to between $500,000 and $1,000,000.\(^1\)

The blow to the canal did not end with the damage done to its works. Canal boats which carried its declining trade were scattered all along the river, on both banks, often at some distance from the nearest water. Others had been swept down the river and smashed against the aqueduct and the Long Bridge. Still others were left in the dry canal bed subject to early destruction by rotting.\(^2\)

Several hundred persons were thrown out of work by the destruction of the canal. These included some 250 canal employees and their families, from 200 to 300 boatmen and their families and mules, and countless others in related occupations.\(^3\)

Many of these people lost the only means of making a living they had ever known. Large numbers of the boatmen, for example, lounged around the company offices in Georgetown, stunned by the blow to their livelihood and more or less at a loss as to what to do.\(^4\)

Those towns which were closely associated with the canal in their prosperity,

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2. Ibid., June 3 and 4, 1889; Cumberland Evening Times, June 5, 1889; Hagerstown Mail, June 7, 1889.
4. Washington Evening Star, June 4, 1889. The beginning of the dispersal of the boatmen from the Potomac valley was noted in the Hagerstown Mail, August 2, 1889.
like Williamsport, were reported to be particularly hard hit.\(^5\)

The destruction wrought by the flood had its effect on the entire valley. The loss of the canal as its primary line of transportation and communication was only one side of the story, although it may well have been the most important. An indication of the far-reaching effects of this one result of the flood can be seen in the statement that the entire road system of the valley on the Maryland side had been keyed to the canal. Only inferior connections existed with the railroad and the main highways.\(^6\) Another effect on the valley as a whole was the destruction of the small industries in the valley. Mills, warehouses, etc., were damaged or entirely swept away all along the river.\(^7\) Property values plummeted as the full extent of the flood damage became apparent.\(^8\) Industries in Georgetown were particularly hard hit, because of their dependence on the canal for their water power and their raw materials. Millers and lime kilns suffered the most, although none escaped. The Borden Mining Company closed its agency in Georgetown permanently.\(^9\) The Meredith and Winship wharves were wrecked and a large part of their stores washed away.\(^10\) Millers fumed over the loss of water power.\(^11\) At least three of the largest lime kilns went out of business, adding to the widespread unemployment and loss of purchasing power. Prices of canal-shipped goods, wood, coal,

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5. Cumberland Evening Times, June 16, 1889.  
7. Hagerstown Mail, June 7, 1889.  
10. Ibid., June 1 and 3, 1889.  
11. Ibid., June 4, 1889.  
12. Ibid., June 5, 1889.
and lime especially, rose rapidly.\textsuperscript{13}

The valley above Georgetown and outside of the canal towns suffered from the damage to the land and the canal. The storm accompanying the flood and the waters of the river devastated hundreds of acres of rich farm land in four counties of western Maryland.\textsuperscript{14} Not only were the farmers thus deprived of their subsistence; they also lost the cheap access to markets which they had enjoyed via the canal. Valley inhabitants lost the not inconsiderable business which was subsidiary to the canal -- feed-stores, boat-building, repair docks, warehouses, etc.\textsuperscript{15} There was widespread poverty in the valley immediately after, and as a direct result of, the destruction wrought by the flood. On top of all else, the empty canal, with its stagnant pools and exposed murky bottom constituted a real menace to the health of the suffering citizenry.\textsuperscript{16}

As soon as the extent of the wreckage of the canal became apparent, speculation on its future became rife. The subject had already been widely discussed by state newspapers even before the flood of 1889. The press of western Maryland was particularly active in the debate. The excuse for the seemingly premature outburst of speculation had been the repeated assertions of canal officials that the canal was a failure.\textsuperscript{17} The Hagerstown Mail was perhaps the first to take up the agitation for the disposal of the canal (which was of

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\textsuperscript{13} Ibid. The price of wood rose 50\% a cord, lime prices were up $10-15/\textsuperscript{15}$ a barrel, and coal cost 75\% - 81.00 a ton more.
\textsuperscript{14} Ibid., June 10, 1889; Hagerstown Mail, June 14, 1889.
\textsuperscript{15} Hagerstown Mail, June 14, 1889.
\textsuperscript{16} Cumberland Evening Times, June 15, 1889.
\textsuperscript{17} See, for example, Hagerstown Mail, April 5, 12, 1889.
\end{flushright}
no direct assistance to its city). The gist of the Mail's argument was that the section of the canal above Williamsport should be sold to the Western Maryland railroad to give the latter access to the Cumberland coal trade and to enable it to compete with the Baltimore and Ohio. The Mail believed that the railroad could be compelled to keep the canal below Williamsport open for local trade. To those who disagreed that the canal was a failure, especially the citizens of Cumberland who had a stake in it, the Mail replied that they just refused to face the facts. To those who were unwilling to see the canal destroyed for the benefit of Hagerstown and its railroad, the Mail asserted belligerently that it was only fair that the state's metropolis, Baltimore (terminus of the Western Maryland railroad), should profit from the expenditure of the state rather than a foreign port (Georgetown). In its stand it was supported by other papers with a stake in the railroad, like the Westminster Sentinel and opposed by those with a stake in the canal, like the Cumberland Times and the Montgomery (County) Advocate. All papers and interests were thinking in purely selfish terms of the net value to themselves. When accused of this, the Mail bluntly admitted it, but triumphantly called for a majority decision on the question (which would have meant a decision in the interests of the city of Baltimore, aided and abetted by its ambitious little imitator, Hagerstown).

18. Ibid., April 5, 1889.
19. Ibid., April 12, 1889.
20. Ibid.
21. Ibid., April 26, 1889.
22. Ibid., April 5, 19, 26, 1889.
23. Ibid., April 26, 1889.
After the flood, speculation increased by leaps and bounds. On one point there was fairly general agreement, at least in the period of shock that immediately followed the disaster. As the Cumberland Times observed, "It is the opinion of nearly everyone living along the river that the canal is irreparably injured." The state press agreed generally, and usually without regrets. State and canal officials, including Senator Gorman, Director Berret, the Honorable George Peter, Speaker of the Maryland Senate, ex-President James Clarke, and President Gambrill, all thought so. The Coal Trade Journal, reflecting the opinions of shippers on the canal, agreed. And the boatmen themselves were reported to be generally pessimistic over the future of the waterway.

The next question was the disposal of the canal company, its rights and its magnificent wreck. On this point there was no general agreement. Rumors as to the course of action that was to be taken were almost daily occurrences. One report had it that the company was going to secure a loan of one million dollars from a group of capitalists in Amsterdam for the purpose of restoring the canal. Another version was that ex-President Clark would head a syndicate of American capitalists who would take over the canal, restore it, and operate it "without political interference." A third rumor

25. The attitude of the state press was particularly irritating to the sober, ambitious Hagerstown Mail. See especially June 14, 1889.
27. Quoted in the Cumberland Evening Times, June 17, 1889.
29. Ibid.
30. Ibid., June 12, 1889.
claimed that the company would issue $300,000 in toll certificates to repair the canal. This provoked the Mail to observe that canal securities on the pledge of canal revenues under the mortgage of 1844 were selling for $5 to $10 each, and that there would probably be no market for the certificates which would have in effect the same security.

The most popular group of rumors was that the canal would be sold, presumably to a railroad company for the construction of a towpath railroad. This was the last stage in the development of the speculation. Popular imagination soon pictured the Western Maryland, the Pennsylvania and the West Virginia Central railroads as all interested in the canal. This brought up in turn the question of the attitude of the Baltimore and Ohio railroad toward the canal, for this railroad had emerged as the majority bondholder under the mortgage of 1878. Opinion was divided as to whether the Baltimore and Ohio would foreclose its mortgage or not.

Inevitably there was a reaction in favor of the canal, from the extremes of gloom and despair that had followed the flood. The early estimates of $500,000 to $1,000,000 to repair the waterway were soon

31. Hagerstown Mail, July 12, 1889.
32. Washington Evening Star, June 6 and 8, 1889; Hagerstown Mail, August 2, 1889.
33. Colonel Berret said that the minority bondholders would sue for foreclosure if the Baltimore and Ohio procrastinated. Washington Evening Star, June 6, 1889. On the other hand, President Gambrill expressed doubt that the railroad would try to foreclose, pointing out that the latter would probably prefer to have a crippled canal as a competitor than another railroad. Cumberland Evening Times, June 22, 1889.
reduced officially to $250,000 to $300,000. The Georgetown millers had been anxious for the restoration of at least the Georgetown level ever since the extent of the damage had been ascertained. They had been unable to convince others in the District of Columbia that their interests also required the repair of the canal, and the millers were unwilling to undertake the expense themselves. The large number of business failures, actual or impending, helped bring about the reaction in favor of piecemeal restoration of the old ditch, along the lines laid down by the millers. The same reaction brought informal offers to repair sections of the canal at Cumberland and Williamsport.

The Maryland Canal Union at Cumberland undertook a correspondence with a New York society to secure information on the relation of the state of New York to the Erie Canal, looking forward probably to a revival of the Times' earlier suggestion that the State of Maryland take over the Canal and operate it as a free public highway, like the Erie. A convention of friends of the canal met in Georgetown to consider ways of restoring the waterway, perhaps by a lease to capitalists. Even the Mail was swept up in the general enthusiasm and conceded that the canal had been invaluable to the farmers and miners of the State as well as profitable to shippers.

35. Washington Evening Star, June 4, 8, 1889.
36. Ibid., June 13, 1889. There were renewed proposals for the restoration of the canal with loans from the coal companies. The state was prohibited from extending its credit to public works companies.
37. Hagerstown Mail, July 19, 1889. Cambrill denied that any definite offers had been made.
38. Cumberland Evening Times, June 21, 1889. The proposed conversion of the canal to a state-owned public waterway had been vehemently rejected by the Hagerstown Mail, April 12, 1889.
40. Hagerstown Mail, February 28, 1890.
The Receivership Controversy

The preliminary speculation over the future of the canal was brought to an end by the admission on the part of the canal company that it was unable to raise funds to repair its works and that it was bankrupt. At the same time the Baltimore and Ohio railroad emerged as the majority owner of both the 1878 and 1844 bonds. Thus it held preferred mortgages on the physical property and the revenues of the canal. Seemingly it would be the one to decide the future of its former great rival. The railroad weighed the comparative costs of a forced sale to a possible competitor (or to itself at a high price) or the restoration of the canal at its own expense. It chose the latter course.

In December, 1889, it petitioned the court for the appointment of receivers under the mortgage of 1844. 41 In January, 1890, it also petitioned the court for the sale of the canal under the mortgage of 1878, 42 in order to prevent others from filing the petition by default. It pushed the claim of the first petition.

The next question was what court would be competent to appoint a receiver for the entire canal. The Chesapeake and Ohio Canal Company had been chartered by Virginia, Maryland, Pennsylvania and the United States. It owned property in Virginia, Maryland and the District of Columbia; and did business in Maryland and the District of Columbia.

41. George S. Brown et al vs. the Chesapeake and Ohio Canal Company, Circuit Court for Washington County (Maryland), No. 4191 Equity, p. 1. The bill of complaint was filed December 31, 1889.

42. George S. Brown et al vs. the Chesapeake and Ohio Canal Company, Circuit Court for Washington County, No. 4198 Equity. The bill of complaint was filed January 31, 1890. One petition for sale had already been filed by Anna M. Hughes and Thomas Hughes. Ibid., pp. 38-39.
The solution to this problem was the simultaneous petition for receivers in Maryland and District of Columbia courts. The choice of the Maryland court was a curious one. Apparently after much thought, the railroad company passed over the state courts and brought suit in the circuit court for Washington County. Was a county court competent to decide the fate of the canal which extended through several counties? Many observers thought not. They reckoned without the presiding judge of the court. Justice Alvey was an ambitious and proud jurist in an ambitious county, and he was destined to go far in state political and judicial circles. Judge Alvey believed that he was quite competent to sit in judgment on the case, and he so ruled. The choice of Washington county circuit court, if accidental, proved to be a fortunate one, for Judge Alvey and his successors consistently ruled in favor of the railroad's interests on almost every point of legal interpretation while the canal was under its jurisdiction.

Another point of interest in the case that was shaping up was the position of the State of Maryland, the majority stockholder and secondary mortgage-holder in the canal company. Many professed to see in the stand which the state took an indication of the position of A. P. Gorman, the political boss of the majority party. Maryland intervened in 1890, and requested the sale of the canal. The trustees of 1844, acting for the Baltimore and Ohio railroad, the majority

44. George S. Brown et al vs Chesapeake and Ohio Canal Company, Nos. 4191 and 4198 Equity, pp. 31-32, 34.
bondholder, objected to the intervention and petition of the State on the grounds that it had already waived its prior liens and urged therefore that the request for the sale of the canal should not be granted. It is possible that Gorman hoped that by forcing the sale of the canal, the West Virginia Central railroad, with which his name was associated (along with several other Senators), could secure an outlet to tidewater. He probably had the support of Baltimore interests, although for a different reason. That city controlled the Western Maryland railroad which it had built during the reaction against the Baltimore and Ohio, but which had been stopped short of Cumberland and the coal fields. Baltimore probably hoped to buy enough of the canal, i.e., from Williamsport to Cumberland, to complete the Western Maryland.

The proceedings of the case are interesting for the evidence they contain of the interplay of rival pressure groups seeking to gain control of the canal for their own purposes. The Baltimore and Ohio’s conduct can be explained by its efforts to prevent the canal from falling into the hands of a potential competitor, at the lowest possible expense to itself. The state urged the sale of the canal, ostensibly to realize some return on its $2,000,000 loan and $8,000,000 investment in canal stock, but really to bring about the ends sought by the various interests supporting the state’s position. Minority bondholders of 1878 accused the Baltimore and Ohio of seeking receivership under the mortgage of 1844 merely to prevent the sale of the canal to a competitor. They

45. Ibid., pp. 35-36.
46. Ibid., pp. 31-32, 34, and 69.
urged instead the sale of the waterway, each for their own selfish interests. The canal company itself, represented by its president, Stephen Gambill, requested the sale of the old ditch, but insisted that it be sold in toto. This position may have reflected most clearly the real wishes of A.P. Gorman, brother-in-law of the president.

After hearing all parties interested, Judge Alvey rendered his decision. He confessed himself unable to see the basis of the canal company's appeal for immediate sale, for that would inevitably mean its self-imposed destruction. On the other hand, he accepted without question the contention of the Trustees of 1844 that the canal might be operated profitably if restored and freed from political control, a very convenient and over-worked vague epithet of damnation. He determined that the canal should be given another chance, and agreed to appoint receivers under the mortgage of 1844 to restore and operate the canal. The early reports of the receivers glowed with optimistic statements of probable repair costs and of the willing cooperation of the coal companies (at least one of which was controlled by the railroad company). Then a note of gloom settled over the receivers and the

47. Answer of Anna Hughes and Thomas Hughes, Trustees, ibid., pp. 58-39.
48. Ibid., p. 81.
49. Opinion of the Court, ibid., pp. 80-89.
50. Ibid., p. 89. Receivers were appointed, March 3, 1890.
51. 2nd Report of Receivers, June 9, 1890, ibid., pp. 111-133. As exhibits, the receivers filed estimates of engineers that the total cost of restoration would be $228,698.00, and that counting the work already done locally on the Cumberland, Williamsport and Georgetown levels, the cost would be only $180,198. Furthermore, they stated that the coal companies had guaranteed an annual tonnage of 450,000 tons for four years, which would be equivalent to $134,360 tolls per year. See also 4th Report of District Receivers, ibid., pp. 180-181.
The court. 52 The latter agreed that the restoration of the waterway could not be achieved at a cost that might reasonably be expected to be repaid. 53 Furthermore, the delay in restoration was beginning to arouse opposition and to resemble the age-old procrastination tactics of the railroad company. On September 1, 1890, Judge Alvey announced himself ready to issue an order for the sale of the canal in toto. 54 Sometime during the following month, the railroad company must have come suddenly to life and decided that restoration of the canal was after all the cheapest policy. At any rate, the receivers announced that they had changed their minds and were ready to repair and operate the canal. 55 On October 2, Justice Alvey, not in the least upset by this apparently capricious conduct, ordered the sale as promised, but suspended it on the condition that the trustees of 1844 promptly restore the canal. 56 The decision of the District of Columbia court followed the same course as that of the Washington county court.

Restoration and Operation

Under the compulsion of this form of the decision of the railroad undertook the reconstruction of the waterway. The actual work of repair

52. The change in tone of the petitions was abrupt. It is obvious in the petition of the trustees of 1846: 1844: that the canal must not be sold to the Cumberland and Washington Railroad Company, to whom it surely would go if a sale was to be ordered then. Ibid., p. 196.
53. Opinion of the Court, September 1, 1890, ibid., p. 211.
54. Ibid.
55. Final Opinion of the Court, October 2, 1890, ibid., p. 217.
56. Ibid. Order for the sale of the canal issued, October 2, 1890, ibid., p. 228.
took much longer, and was more expensive than had been anticipated. At least part of the additional cost of the work was due to the delay in commencing repairs 57 for which the railroad company was itself responsible. The repairs were finally completed by September 1891 and the canal was reopened for business. The total cost of the restoration of the canal was $430,764.43, all of which had to be borrowed from other sources. 58

Canal trade recovered quickly, but was unable to expand beyond the low averages of the 'eighties. 59 Many of the boatmen had left the valley or had turned to other occupations. The position of Georgetown as a port had suffered greatly as a result of the prolonged suspension of canal navigation. The rate of tolls established for the coal trade, 40¢ a ton from Cumberland to Georgetown plus 4¢ wharfage less 10¢ rebate, was not likely to divert much of the trade from the Baltimore and Ohio railroad. It is not unlikely that the probable result was a consideration in the establishment of the rate. At that the low toll charges did not attract enough business to meet expenses. At no time after 1890 did the canal operate profitably.

The railroad company resorted to a shadow corporation to enable the canal to show a profit, as the court order had required. It organized the Chesapeake and Ohio Transportation Company which entered into a contract with the canal company in 1894. In return for the


58. Ibid., p. 110.

59. Ibid., pp. 110-112.
latter's guarantee to keep the waterway in a navigable condition, the transportation company agreed to provide whatever boats were necessary to carry the trade offered to the canal, in addition to the boats already in service. It further guaranteed the canal company an annual profit of $100,000. The court ratified the contract over the protest of the state, and extended the time limit before the order for the sale of the canal would become effective until 1901. With the annual "profits" the receivers proceeded to pay the costs of receivership, the loans for the restoration of the waterway, and the bonds of 1876, in the sequence established by the court. In 1901, the court again extended the time limit four years, until December 31, 1905. In 1905 it approved a revised contract between the receivers and the transportation company by which the latter agreed merely to guarantee the canal company from loss. Thereafter, the time was automatically extended each year upon evidence that the canal was not operating at a loss.

The obvious purpose and result of the contract with the transportation company was to postpone indefinitely the order for the sale of the

60. Ibid., pp. 114-116; the contract is dated January 30, 1894. It went into effect, January 1, 1896. Report of the Trustees, April 6, 1901, ibid., p. 129.

61. Answer of the State of Maryland, February 15, 1894, ibid., pp. 117-120; Opinion of the Court, February 15, 1894, ibid., p. 121. The state of Maryland appealed the decision on July 30, 1894, but the Court of Appeals affirmed the decision of the lower court, June 17, 1896 (State vs. Cowen et al). Ibid., pp. 121-122, 129.

62. Report of the Trustees, April 6, 1901, ibid., 129-130. The trustees said that the transportation company would continue its contract for the full ten years if the court would extend the time allowed the trustees. The State of Maryland objected, on the grounds that its interest would in effect be destroyed if the canal were not sold, but the time extended. The court, as usual, ruled in favor of the trustees, April 29, 1901. The state appealed the decision, May 4, 1901, but the order of the lower court was affirmed, January 15, 1902. Ibid., pp. 133-136.

63. Report and Petition of the Trustees, December 13, 1905, and Court decree, (Continued on next page)
The Baltimore and Ohio railroad was the chief bondholder under the mortgages of 1878 and 1844. To have exercised its rights under the former would have resulted in the immediate sale of the canal. The railroad company would have then faced the alternative of out-bidding other prospective buyers or risking the sale of the property to a potential competitor. It was relatively more simple to assert its rights under the mortgage of 1844 and to argue innocently that the canal could, in its opinion, be operated profitably so as to repay the costs of restoration and the interest and principal of the 1878 bonds and then resume payment on the 1844 bonds. The unexpectedly high cost of reconstruction and the insistence of the court that the canal show a profit from its operations forced the railroad to use the device of an intermediary company to absorb the operational losses of the canal. In effect, the railroad loaned the money to the canal receivers which made possible the restoration of the waterway. It then created a dummy corporation through which it paid the canal enough money to cover its expenses and to repay the money borrowed from the railroad. When the railroad had paid itself back for its own loans, and paid itself something on account of the bonds of 1878 (pursuant to court order), it modified the contract arrangement to provide merely that the canal should be guaranteed against loss. The court was thus satisfied that on paper the canal was not operating at a loss, and the railroad was assured of security from competition at the cost of the restoration and operation of the canal.
plus the small expenses of receivership.

In 1902 another step was taken towards the establishment of a complete control over freight charges on the canal. The Canal Towage Company was organized, along the lines first suggested by A.P. Gorman. The primary function of this company was to provide some regularity in the runs on the canal. To do this, it provided the boats, teams and equipment, and established a regular schedule for the boatmen to follow. There is no doubt that the company improved the service and the efficiency of canal navigation, but in so doing it destroyed the last shred of independence on the part of the boatmen and deprived the canal of almost all its romance. Boats were numbered rather than named. They were uniform and utilitarian rather than colorfully individualistic. Spirited, unruly and lackadaisical boatmen were alike undesirable to the company. The rougher ones were not permitted to use its boats. Traffic became regularized on a time-table basis.

The chief article of the trade that was offered for transportation on the canal was coal. Line and building materials were also carried and some flour. The farmers who brought their crops to market via

64. Information on the operation of the Canal Towage Company was obtained in an interview with George Nicolson, former engineer and general superintendent of the canal company, 1893-1938.

65. Interviews with former boatmen and with Mr. Nicolson. See chapter X, n.114 and Appendix, table IV. See also Report of the Trustees for 1922, 1923, 1924, filed February 6, 1925. The latter argued that it was inadvisable to repair the canal for other than the coal trade. See also, "Summary of the History and Present Status of the Chesapeake and Ohio Canal" in George Washington Memorial Parkway Commission, File 500-10, Sec. 2.
the canal also continued to cause the company some anguish with their makeshift boats and irregular habits, but they were the last representatives of an age on the canal that had long since passed. During the world war the canal carried coal to the government proving grounds at Indianhead, down the river. For the first time tugs were used regularly to haul the canal boats up and down the Potomac from Georgetown to Indianhead with their precious cargoes. On the canal itself, steamboats were prohibited as too destructive to the banks. Experiments were conducted with the use of tractors on the towpath, but it was quickly discovered that the old mule teams and wooden barges provided the cheapest and most efficient means of transportation. At no time did the amount of trade on the canal justify the continued operation of the waterway. Only the support of the Baltimore and Ohio enabled it to remain open for business.

Disposal of Canal Property

The importance of the canal in the receivership period was not so much in the trade it carried or in its position as a transportation agency. It was rather its role in the struggle of the railroad titans for the control of the route it occupied.

The focus of this struggle was the attempt of George Gould to extend his inland railroad empire to the Atlantic coast during the first decade of the twentieth century. Several changes had occurred in the control of the competing roads in the western Maryland - West Virginia

coal fields. The Baltimore and Ohio railroad had gone into receivership in 1896 and had fallen under the control of its arch rival, the Pennsylvania railroad, between 1899 and 1901.67 In 1902, the city of Baltimore sold its control of the Western Maryland railroad to a syndicate representing the Gould interests. Another syndicate in which Gould was represented had purchased the West Virginia Central railroad.68 Even so, Gould's line to the east was not unbroken.

There were several gaps in the system, among which the most formidable was that between the western terminus of the Western Maryland railroad at Big Pool on the Chesapeake and Ohio canal near Williamsport and Cumberland, the eastern terminus of the West Virginia Central.70

In 1903, the Western Maryland railroad petitioned the Maryland Board of Public Works for permission to extend its line up the Potomac valley to Cumberland, crossing and recrossing the canal en route.71 The state legislature, representing several converging interests, supported the petition. It was still very hostile to the Baltimore and Ohio railroad, partly because of the legacy of opposition from the 'seventies and 'eighties and partly because it had fallen under the domination of

68. Ibid., p. 36.
69. Ibid.
70. Ibid., p. 37; see also the map between pp. 36-37.
71. Petition of the Western Maryland Railroad Company, June 13, 1903; Order of the Court, June 13, 1903; Petition of Western Maryland Railroad Company, October 5, 1903; in Chesapeake and Ohio Canal Company vs Western Maryland Railroad Company, pp. 146-149.

a foreign corporation, the Pennsylvania railroad. The permission to cross the canal was duly granted and the plans approved. The court confirmed the arrangement over the protests of the trustees, ostensibly because of interference with canal navigation and infringement on canal property.\textsuperscript{72} The State approved the grant in 1904.\textsuperscript{73} The receivers made the best of the situation by taking the money paid for abutment sites and continuing to pay off the claims against the canal company in proper sequence.\textsuperscript{74} In effect all this meant was that the Baltimore and Ohio, after failing to prevent the construction of a competing line, accepted the money for the lands surrendered and paid itself on account of its holdings of 1878 bonds. Notwithstanding his victory in Maryland, Gould failed to complete his projected line to the Atlantic coast, partly because of the effective opposition of the Pennsylvania and New York Central interests and partly because of the financial difficulties in which he became involved in 1907.\textsuperscript{75}

Meanwhile in 1904 the state proceeded to dispose of its holdings in the canal company for whatever price they would bring. The authority for the disposal of its interest on these terms had been granted to the Board of Public Works by the state constitution and by a subsequent act of the legislature. Payment was to be made in state bonds -- a

\textsuperscript{72} Answer of Trustees, October 5, 1903; Order of the Court, October 17, 1903, October 20, 1903; Special Report of the Trustees, January 26, 1906; in ibid., pp. 157-159, 172-173, 315.

\textsuperscript{73} Act of the General Assembly of Maryland, passed March 9, 1904, in Special Report of Trustees, January 26, 1905; ibid., pp. 315-317.

\textsuperscript{74} Ibid., pp. 320-325, 341-346.

\textsuperscript{75} Report on Railroad Combination in the Eastern Region, \textit{e.g.}, \textit{I.}, 58-59.
revival of the old connection between public works and state finances. Fairfax S. Landstreet, vice president of the Western Maryland railroad, bid $155,000 for the $2,000,000 loan rights and the state holdings of over $5,000,000 of canal stock. The bid was accepted in December, 1904, and the transfer consummated. When the Gould properties were driven into receivership in 1907, the Western Maryland’s holdings of canal stock eventually fell to the Baltimore and Ohio railroad. 

At the same time, the Pennsylvania railroad began to divest itself of its holding in Baltimore and Ohio stock, fearing the intervention of the Interstate Commerce Commission and the federal courts and the possible forced sale of the stock under less favorable conditions. The Baltimore and Ohio thus resumed its independent existence, and the relationship between the canal and the railroad returned to the status of 1896.

Other canal properties were disposed of by the receivers from time to time, with the consent of the court. The Baltimore and Ohio secured the right to lay a spur track beside the canal from a point on its Metropolitan branch just outside the District of Columbia to the Rock creek hole. It also secured several valuable parcels of land on the hole and in Cumberland for the erection of warehouses, etc. Proceeds from the sales were used to pay the interest and principal

76. Chesapeake and Ohio Canal Company vs Western Maryland Railroad Company, pp. 326-328.
77. The deed, dated July 29, 1907, filed in Washington County Liber 126, Folio 209, records the transfer of stock to the Continental Trust Company of Baltimore. See also Auditor’s 10th Report, August 8, 1841.
of the bonds of 1878, so the paper sales cost the railroad nothing.

The canal company was unable to prevent the inroads on its domain because the railroad now controlled both the bonds and a majority of canal stock.

Permission was also granted to the Potomac Light and Power Company for the erection of a power station near Williamsport. The sale of the Virginia properties of the canal company at Great Falls, inherited from the Potomac Company, was ordered by the courts over the protest of the trustees. The purchaser was the Great Falls Power Company, but the power project never actually developed beyond the planning stage. Even the federal government became a party to the piecemeal disposal of the canal, beginning in 1915, when it sought to obtain the mole in order to reopen the mouth of Rock creek in connection with the Rock creek and Potomac Parkway project. In all cases, the proceeds of the sales, amounting to about $800,000, eventually found

79. On the acquisition of lands in Cumberland by the Baltimore and Ohio, see Auditor's Report No. 3, ratified by the court order of November 19, 1910, Brown, et al vs. the Chesapeake and Ohio Canal Company. Lands on the mole were reserved by the terms of the contract of sale to the United States.


81. The original agreement between the trustees and the Great Falls Power Company was dated March 19, 1901, ibid. However, the litigation in the case was not finally settled until 1925. See the opinion of Chief Justice Holt, in Chesapeake and Ohio Canal Company vs Great Falls Power Company, Circuit Court for Fairfax county (Virginia), Special Court of Appeals, October 1, 1925.

their way to the Baltimore and Ohio railroad in payment of the principal and interest on the 1878 bonds. During the entire period in which the canal was operated by the receivers not one penny was ever paid to the bondholders of 1844.

The End of the Canal

In March, 1924, the long over-due flood in the Potomac valley occurred, and the canal was wrecked for the fifth time in its history.

The canal had not wholly escaped the ravages of floods in the interim since 1890. On the contrary, freshets had occurred with depressing regularity, in 1897, 1902, 1907, and 1914. The work of repair and restoration was never over. As soon as the rough spots from one freshet were smoothed out, another would bring in new bars, cause new breaches, and wash the towpath again. None of the floods, however, had been so serious as to make the railroad hesitate over the question of restoration and none had approached the proportions of the freshets of 1877 and 1889.

83. See, for example, the agreements with the Western Maryland Railroad Company, January 16, 1905 (ratified March 7, 1905), May 28, 1912 (ratified June 28, 1912), and July 10, 1912 (ratified July 20, 1912), for the sale of lands and rights valued at $500,000, $167,500, and $2,000 respectively. The proceeds of these sales went to the Baltimore and Ohio Railroad Company or its officials in repayment of principal and interest on the trustees' notes which were issued to repair the canal after 1890 and on the repair bonds of 1878, all of which were owned by the railroad company. After all these sums had been paid out, there was still $132,500 unpaid on the principal of the repair bonds. See Auditor's Report No. 4, July 30, 1912, Brown, et al. vs Chesapeake and Ohio Canal Company.

84. Information of the freshets and the effects on the canal was supplied by Mr. Nicolson.
Then, too, the trade on the canal was growing ever smaller. The lack of aggressive leadership for the canal undoubtedly contributed to this decline. The obsolescence of the canal as a means of transportation, of Georgetown as a port, and of the Potomac River as a channel for trade also hurt the competitive position of the old ditch. Irregularity of navigation played its part, although the loss of time had been reduced. The freshets, occasional breaches in the trunk—especially in the lime sinks of the limestone region, and innumerable incidental occurrences—interfered with navigation. Above all, the Cumberland coal region, so frequently referred to in the early years of the canal as inexhaustible, was almost worked out. The miners' strike in 1922 is evidence of the declining productivity of the region, and was itself almost a death-blow to the region and the canal alike.

On March 29, 1924 the waters of the Potomac began to rise at Cumberland. Heavy rains swelled the river so that it mounted at a rate of thirty inches an hour to levels approaching the record crest of 1889. At Williamsport the river reached a point twenty-eight feet above normal, seven feet below the mark of 1889. A brief cold snap momentarily halted the rise of the Potomac, and even reversed it. The next day the river rose again, but by that time the threat of a major disaster was past, as

86. The influence of the depression in the Cumberland coal trade and particularly the effect of the miners' strike was noted in the Report of the Trustees for 1922, 1923, and 1924, filed February 6, 1925, Brown et al vs. Chesapeake and Ohio Canal Company. The exhaustion of the Cumberland mines was generally cited as a cause for the decline of canal trade by former boatmen and local inhabitants in Cumberland. It is also shown by statistics on coal production in the United States.

much of the run-off had been accomplished. The survey of the damage in the valley revealed that the flood was not nearly so serious as had been feared. There was really little destruction outside of the canal. The latter had been badly mauled on the Cumberland level, where the torrent in the river had leveled some of the banks.

The dams survived the onslaught of the river fairly well, and the lower valley escaped serious damage altogether.

The flood of 1924 provided the opportunity for the railroad to relieve itself of the expense of operating the canal. No effort was made to restore the canal beyond the Georgetown level. Enough repairs were made to protect what was left of the waterway and to enable the receivers to assert that the canal could be quickly put into navigable condition if sufficient business was presented to warrant the effort.

Thus the canal was left a magnificent wreck, but technically a going concern in which the water rents received from the Georgetown factories paid the expenses of the minimum operating staff. The court accepted the position of the receivers, and ruled that the canal had not forfeited its rights by non-operation, but that the "other" aspect of its business, the maintenance of a canal for purposes of navigation, was merely suspended temporarily in the absence of remunerative

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88. Hagerstown Morning Herald, April 1, 1924.
89. Washington Evening Star, March 31, April 1, 1924; Hagerstown Morning Herald, April 1, 3, 1924.
90. Washington Evening Star, March 30, April 2, 1924; Hagerstown Morning Herald, April 1, 1924.
91. Reports of the Trustees for 1922, 1923, and 1924, and for 1925 and 1926, filed February 6, 1926 and May 6, 1927, respectively, Brown et al vs Chesapeake and Ohio Canal Company.
business. Both the receivers and the court continued to maintain the ludicrous contention that the canal was not abandoned, and could easily and quickly be put into navigable condition if trade was offered — even after dams and feeder filled up and washed out, locks and lockhouses deteriorated into a hopelessly unusable condition, and saplings two, three, and four inches in diameter grew in the trunk, destroying the puddling and often obscuring the canal itself.

The U.S. Purchase

After the obvious abandonment of the canal, except for purposes of legal fiction, speculation again broke out as to the future of the historic old relic. This time most proposals centered on the purchase of the right of way, or at least part of it, by the federal government. Early plans called for the construction of a scenic highway in place of the canal, perhaps as a continuation of the George Washington memorial highway from St. Vernon to Great Falls. Another suggestion

92. United States of America vs. the Chesapeake and Ohio Canal Company, Supreme Court of the District of Columbia, in Equity, Spring term, 1936. The court chose to adopt this interpretation, in line with the decision in the case of Canton Company vs the Baltimore and Ohio Railroad Company, on the grounds that abandonment is a matter of intention, not appearance. The decision is interesting in view of the 20th section of the canal company's charter with states: "And if, after the completion of the said canal and locks, the president and directors shall fail to keep the same in repair for twelve months at any time, then, in like manner, the interest of the company in the navigation and tolls shall cease, and their charter be forfeited."

93. Much of the early material in George Washington Memorial Parkway Commission, File 500-10 (Chesapeake and Ohio Canal), Section 1, contains discussions, proposals, and action looking toward the acquisition of at least a part of the canal bed for a highway. See also Blanch C. Hewlett, "Great Boulevard from Capital Way Follow Old Canal Course," Washington Star, May 16, 1926; and ibid., August 5, 1925, and Washington Post, August 8, 1926.
was for the conversion of the canal into a fish and wild-life refuge.  

The government, on its part, was still interested in the role for
the extension of the Rock creek and Potomac parkway.

The attitude of the Baltimore and Ohio towards the discussion over
the future of the canal was typical of its dealings with the canal.  
For the most part, it waited and said nothing. Officially its position
was that the canal was not abandoned, and it successfully defended
this contention in court. It was determined that if any sale were made
the contract should guarantee the railroad that under no circumstances
would the canal fall into the hands of a competitor. Once again, the
railroad gave evidence of its abiding fear of the threat to its
business represented by the canal, a fear that was exaggerated in the
thinking of the railroad beyond any possible injury which a competing
line along the canal bed could cause. Finally, if a sale was to be
made, the Baltimore and Ohio wanted a good price for the magnificent wreck.

The interest of the federal government in the acquisition of the
Chesapeake and Ohio canal was limited at first to the section between
Rock creek and the Point of Rocks. Only gradually did the idea of

94. The idea of converting the canal into a wildlife sanctuary persisted
as late as 1938. See Charles J. Smith to the Director, National
Park Service, February 7, 1938, National Capital Parks, File 1460
(Chesapeake and Ohio Canal), Section 1.

95. U.S. Grant 3rd to E. Walton Moore, February 15, 1929, George Washington
Memorial Parkway Commission, File 500-10 (Chesapeake and Ohio Canal).
See also Informational Material in Re Chesapeake and Ohio Canal,
Records of the Rock Creek and Potomac Parkway Commission.

96. On the attitude of the Baltimore and Ohio, see the account of an interview
with Nicolson in the Office Memorandum of Fred E. Coldren, Secretary,
Park and Planning Commission, November, 1926, George Washington
Memorial Parkway Commission, File 500-10, Section 2.
buying the entire canal and restoring it as a national park and a
historical shrine gain widespread acceptance. Early negotiations,
in 1934, were conducted in reference to the canal below the point of
Rocks. The cost of that section was estimated at between $1,250,000
and $1,500,000. While the project worked itself out, the government
took steps to improve its bargaining position. In 1936 it sought
unsuccessfully to establish that the canal was no longer a going concern,
and therefore was subject to the forfeiture of its rights.

At this point, a new development altered the picture and reversed
the relative position of the government and the railroad. The Baltimore
and Ohio, hard hit by the depression in the 'thirties, applied to the
Reconstruction Finance Corporation in December, 1937, for an additional
loan. As security for this increased indebtedness, the railroad
company scraped the bottom of its property holdings and produced along
with other security the title to the Chesapeake and Ohio Canal. On
February 1, 1938, the collateral officially changed hands. The railroad
expressed itself willing to dispose of the entire canal for
$2,500,000 or $3,000,000. The proceeds of the transaction would be

97. On the development of the idea of buying the entire canal, see the
brief history of federal interest in the project, in "Memorandum
to the Chesapeake and Ohio Canal Company," George Washington
Memorial Parkway Commission, File 500-10, Section 2.
98. F.D.R. Delano to the Secretary of the Interior, December 26, 1934,
referring to a recent conference with President Willard of the
Baltimore and Ohio. See also A.B. Cammerer to Frank C. Wright,
May 2, 1936, ibid., Section 1. Mr. Cammer er reported that the
Commission had no plans for the acquisition of the canal above
Point of Rocks.
99. T.J. Battle to Mr. Delano, April 2, 1936, ibid., Section 1.
100. Memorandum from T.J. Battle to Delano, December 29, 1937, ibid., Section 2.
101. Frank C. Wright to Harold L. Ickes, February 1, 1938, ibid., Section 2.
applied to its $80,000,000 debt to the Reconstruction Finance Corporation. After several months of negotiation the transfer was finally agreed upon for approximately $2,000,000. Ownership formally changed hands in September, 1938. After almost exactly one hundred years the United States again found itself in control of the canal.

The Future of the Canal

The federal government promptly set about to restore the waterway as a scenic natural recreation area. As an experiment, it planned first merely to reconstruct the twenty-two miles to Dam No. 2 at Seneca. Eventually it would continue to work on up the canal to Cumberland. A threat to the ultimate restoration of the entire canal was disclosed almost immediately. Some of the reservations which the Baltimore and Ohio had made in the contract of sale related to certain parcels of land at the Point of Rocks, which the railroad conceived to be essential to its future welfare as the site of additional tracks. The effect of these reservations would have been to exclude any practicable room for the canal and to render the complete reconstruction of the

102. Ibid. The debt of the Baltimore and Ohio to the Reconstruction Finance Corporation on December 29, 1937, was $79,842,923. The loan itself (secured in February, 1938) was for $8,233,000. See the memorandum from Settle to Delano, December 29, 1937.

waterway impossible. The matter is as yet unsettled, but for once it is the government and not the railroad that is employing the delaying tactics. 104

The dedication of the canal as a public park was celebrated on Washington's birthday, 1939, with appropriate ceremonies in which the leading participant was Wutt, a thirty-eight year old canal mule. 105

The canal was opened as far as Seneca in August, 1940. 106 As of old, the river rose to meet the challenge. In September it tested the scientifically-reconstructed canal during a minor flood that caused some damage. The engineers, highly satisfied with the strength of their work, quickly made the necessary repairs. In 1942, the Potomac rose again, and having felt its challenger out, smashed the canal back into the wrecked condition in which the government had found it.

Nothing further has been done to restore the waterway since 1942. Park officials insist that ultimately it can and will be done. But older and wiser canal and river people sadly shake their heads.

104. See National Capital Parks, File 1460, Sections 1 and 2, especially Pinch to Pinnan, February 21, 1939, Hartz to Demaray, July 2, 1940, Hartz to Ickes, September 14, 1940, Hartz to Demaray, January 14, 1941.

105. Memorandum from Demaray to the Secretary of the Interior, January 27, 1939; memorandum to Miss Ryan, February 24, 1939; ibid., Section 1.

106. Press release, August 9, 1940, ibid., Section 1.
CHAPTER XII

THE HISTORICAL SIGNIFICANCE OF THE CANAL

The Canal a Failure

The Chesapeake and Ohio Canal Company was the third and last organized effort to develop an all-water route to the west via the Potomac river.

By almost any measure it was a failure. It failed to achieve its purpose of a short cheap trade route to the Ohio. It never paid any return on the original investment of capital. It did not become a major transportation line. It was not even able to maintain itself in the face of the assaults of nature and of competitors. It is today merely a magnificent wreck, a historic relic, a quaint reminder of less sophisticated times — preserved for the amusement of the public.

It is not difficult to analyze the reasons for its failure. On the contrary, it is much more difficult to explain why the collapse did not occur sooner. At least six factors contributed to the ultimate failure of the canal company and its projected route.

In the first place, the company was grossly over-capitalized. Furthermore, it was hindered from the critical early years to the last hours of its independent existence by political interference in its affairs. Thirdly, it failed to solve the basic problems of technological improvement, and consequently became obsolescent. It was unable to survive the competition of other carriers, particularly the railroads. The heavy and increasing floods in the Potomac valley made its existence particularly expensive and eventually drove it into bankruptcy. Finally,
the Cumberland coal fields, the basis of its prosperity, became
exhausted -- depriving the canal of its only reason for existence.

As a result of an unexpectedly heavy cost of construction, the
Chesapeake and Ohio Canal Company was capitalized at an amount far
beyond the limits dictated by a reasonable expectation of return.
It was over-capitalized in terms of the probable revenue from trade
and, to a lesser extent, the real value of its physical properties
and improvements. Its fate was sealed by its failure to reach the
western waters and to develop thereby a large amount of through trade.
The Potomac valley itself was too poor in the beginning to warrant
the large expenditure for the canal, and its potentialities were too
doubtful to justify it. The canal did not produce in its two best
years an annual profit equal to more than 2 per cent of the actual cost
of construction (c. $14,000,000 excluding interest and repairs). Yet,
had the extra funds necessary to complete the waterway to the Ohio
been available, the company still would, in all probability have been
over-capitalized. The canal was not large enough, physically, to
accommodate a volume of trade sufficient to pay a satisfactory return
on the larger sum. In addition, there was little room for expansion
in the valley, an undertaking which in any case would only increase
the amount on which a profit would have to be earned. The final blow
to canal finances was the coincidence of the period of its greatest
indebtedness with an era of general deflationary tendency in the country,
in the 1870's and 1880's. The only solution for its financial troubles
would have been state maintenance and operation, as a public highway.
Although Maryland refused, at an early date, to assume responsibility for the waterway, political parties within the state repeatedly intervened in canal affairs at every stage of its existence, usually with disastrous consequences for the canal. This continuing interference of political influence in canal affairs was another factor in the ultimate failure of the canal. In the beginning, the state intervened, in the interest of the city of Baltimore and the Baltimore and Ohio railroad, over the question of the route to be adopted by the rival works. As a result of this intervention, the construction of the canal was delayed for three and one-half years. In the meantime, the rising cost of labor and materials made the construction of the waterway more expensive, when the company was able to resume operations. By the compromise of 1833, dictated by Maryland, the canal agreed to adopt a more expensive and exposed channel between the Point of Rocks and Harpers Ferry. Thus its expenses were increased at the same time that its future stability was endangered. Political parties and pressure groups working through the state continued to influence the conduct of canal affairs until 1845. Perhaps the most serious consequence of this interference was that it prevented the completion of the waterway before the frontier had moved further west and before the construction of rival transportation lines had cut into its probable share of the western trade. The canal had no head start to establish its route, pay the cost of construction, and to develop its own region of exploitation. As a result, the enterprise lost the confidence and support of capitalists, who began to doubt that it would ever be completed in the face of state interference or that its productive capacity would
Given way in turn to the all-thrift train system put in place by the

improvement initiated by the Boston Company, so the letter had

on the system of

one reason for the failure of these predecessors of the

service and the failure that had taken the Ohio Company and the Boston Company and had been

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the failure to provide technological improvements so as to reduce

years of the existence.

or stability and influence to the Chesapeake and Ohio during the letter

A "b" concern and the Democratic party in state that brought a difference

the continuance of postwar conditions continued to be used for party purposes, the continuance of

Great System was continued on the state in 1972, although the general

system was continued under the spoils system came to an end only when the Demo-

cratic party assumed control of the state. The rapid rotation of canals

was characterized by undue emphasis of the low water tone then

during the post-Civil War years, political direction of canal

improved, and lesser positions were awarded to the party faithful.

And directors of the company were chosen from among local party

and directors of the company were chosen from among local party

the most prominent to the operation of the work. The prominent

the canal company after 1850 brought rapid turn of events in personnel which

operation of the system. The application of the spoil system to

part in the political because their ability in the management and

after the canal was finally opened as far as commandeered, political

In view of the circumstances.

be supported after completion to ensure a return on the investment.
company. To avoid the same fate in the struggle with railroads, the Chesapeake and Ohio would have to improve its service and lower its charges. The successive canal administrations were aware of the problem, but were unable to do anything about solving it. Early boards were hampered by a lack of financial means and by a limited view of their own responsibility. On the other hand, local entrepreneurs seemed unwilling to take the necessary risks. Later boards were restricted in their efforts by the staggering burden of debt. The great efforts made in the 'seventies illustrate the acuteness of the problem by that time and the clarity of perception on the part of the company, but the program of improvements was adopted too late to prolong measurably the life of the old ditch. Canal revenues would not support the rapid execution of the extensive undertakings proposed. Meanwhile, of course, the winding river bed was filling up at the same time that the length and draft of river and coastal steamers was increasing. Thus the canal faced another threat to its continued profitable existence, one for which there seemed to be no satisfactory solution.

A fourth cause of the failure of the canal was the competition of other forms of transportation. Water transportation was much less expensive than overland travel in the turnpike and plank-road era. The ratio of costs was estimated to be as high as eight to one in favor of the former as late as 1822. The opening of the railroad however and the continual improvements in it made the iron horse a serious threat to the flesh-and-blood canal mule. In the wide spaces of the United States, the saving of time in rail transportation often more
than made up for the lower cost of canal and river transportation. In the case of the Chesapeake and Ohio, the rivalry was most intense with the Baltimore and Ohio railroad. The canal was an old, established form of transportation, inheriting its rights from its predecessor, the Potomac Company. The railroad, on the other hand, was a novelty in America, almost a freak. It faced the necessity of building its road and winning its spurs in competition with a powerful vested interest, with only the political and financial support of Maryland behind it. As it happened, after the end of federal assistance to the canal, the aid of the state became a decisive factor in the immediate welfare of the rival works.

The railroad and the canal fought each other constantly and on every point. The struggle over the control of the Potomac river route to the west was followed by another for the trade of the Shenandoah and upper Potomac at Harpers Ferry. Later it was the flour trade and, later still, the business of the coal mines over which they clashed. The improvements in railroad transportation and the stronger financial condition of the Baltimore and Ohio placed it in a more favorable position to endure the bitter rate wars of the late 1870's and the 1880's. Eventually the canal company was driven into bankruptcy by the combined effects of the rate war which reduced its revenues and the disastrous floods of 1877, 1886, and 1889, which greatly increased its expenses. The railroad company emerged as the victor over the canal, securing control of the waterway in the course of the bankruptcy proceedings, in 1890. The victory was complete, for the canal was never again a serious competitor of the railroad.
The fifth reason for the collapse of the canal was the recurrence of great floods which repeatedly wrecked the waterway. In fact, the forces of nature were continually at work tearing down the physical perfection of the old ditch. In the summer months, the drought in the Potomac valley would lower the volume of water in the river until navigation in the canal became hampered or even suspended. In the spring and fall of the year, freshets would wash quantities of soil from the banks, undermine culverts, and cause breaches in the walls. A heavy rain or a small freshet at any time was likely to wash sand bars into the waterway, cause land or rock slides, and fill the vital Rock creek basin. The canal company was never able to cope effectively with these natural occurrences. The most careful and expensive preparations would be undone in a few days by a freak storm, an abnormal rise in the river, or a weakness at an unexpected spot.

But the worst of all the destructive forces of nature were the periodic floods in the Potomac valley. As the area became deforested and more and more ground was cleared for cultivation, the run-off became greater and swifter. At the same time, the Potomac was filling up as a result of the deposits of silt in its bed. Meanwhile, the channel of the river was being encroached upon at many points by the canal and the railroads, particularly at the narrow passes of the river. As a result, the major floods in the valley became increasingly ferocious and destructive. Repairs and improvements to the canal based on the experience of earlier record flood crests proved insufficient to withstand the ever higher crests that swept down the river.
On top of everything else, the floods were completely irregular and unpredictable.

The great floods of the 'seventies and 'eighties occurred at a most inopportune time. The canal company was hard pressed financially; it was meeting the most severe competition in its history from the railroads; and it faced the necessity of undertaking an extensive program of improvements. The floods struck the old ditch a heavy blow on all three points. They reduced company income and increased expenses, rendered its transportation services highly irregular and unreliable, and forced the suspension of the program of improvements. The canal never recovered.

The last cause of the failure of the Chesapeake and Ohio canal was the exhaustion of the western Maryland coal fields. The failure of the canal to reach the western waters prevented it from developing a large amount of through trade. The railroad succeeded in winning the flour trade away from the canal. The de-forestation of the area threatened the ultimate decline of the lumber business. The canal was left totally dependent upon the coal trade for a profitable existence. In the early years of the waterway, the Cumberland fields had been spoken of as inexhaustible. After a half a century of exploitation, these fields had fallen in productivity until other mining regions could supply more coal at less expense. The western Maryland fields thus gave way to the newer areas, particularly in West Virginia. The canal was unable to follow the migration of the coal mining industry into the new fields. In view of its dependence on the coal trade, this factor would have been decisive in the long run. As it was, however,
it proved to be anti-climactic, for the most serious consequences
of the decline of the Cumberland coal region were felt after the
canal company had become bankrupt and after the waterway was no longer
a major factor in the transportation of coal.

The Historical Significance of the Canal

Having admitted that the canal was a failure and having analyzed
the causes for its collapse, we are still without a complete picture
of the historical significance of the canal. Its ultimate failure
was not the only or necessarily the most important fact to be gleaned
from the chronicle of its existence. Although the old ditch was not
able to maintain itself indefinitely as a transportation agency, it
was a going concern for almost a century. During that time it played
an important role in the history of the country and of the area. In
the early years the project of a connection between east and west
had a national significance. Even after the canal lost its national
significance, it remained important as an agency for the development
of its own region. It played a major part in the exploitation of the
Potomac valley and the growth of western Maryland, besides influencing
the rise of Georgetown and the course of Maryland politics.

The early years of the canal were fraught with matters of national
significance. In this period the company was primarily concerned with
the proposed connection with the western waters. This was still a
great national object even after the completion of the Erie canal, and
it would have had far-reaching consequences for the country if the
central route could have been opened. That the company had this
objective in view indicates that as late as 1828, there was still an opportunity to capture a large share of the western trade, by means of a canal via the Potomac route. The sources of support for the project, local and national at first but later entirely local, provide a good illustration of the general character of internal improvement projects. The incentive and main support came from the eastern merchants who were reaching out for the western trade, rather than from western producers seeking eastern markets.

The relationship between the canal and national movements was especially close. The early support of the Chesapeake and Ohio by the United States again brought up the question of the relationship between the federal government and internal improvement projects. This in turn raised related questions of the relations between the government and private companies, of the promotion of public utility monopolies, and of the creation of federally-sponsored, powerful vested interests. In the Jacksonian era these were all solved by the simple expedient of withdrawing federal aid or control from all companies in which it was interested or in which its assistance was requested. Even after the canal was reduced to a purely local status, however, it continued to mirror in its history the general course of national development. It experienced the inflation of wars, the depression of bad harvests and business cycles, and the prosperity of the coal trade during the tremendous expansion of industry after the Civil War.

For most of its history the canal was admittedly a local transportation line; thus its greatest influence was upon the development of the Potomac region. In this role, it did play an important part in
the general economic development of the valley. It sought to stimulate agriculture by special low rates on manure and other fertilizers. It encouraged the development of small industries by the judicious disposal of water power from the river through the canal. It promoted the establishment and growth of commercial entrepots as the focal points of the local trade. Finally, the existence of the canal gave ample opportunity for the creation of small businesses in related activities.

Its relationship to the growth of western Maryland and the District of Columbia was largely economic and social. Therefore many of the generalizations about its influence on the valley as a whole apply with particular force to these regions. The canal meant prosperity and prestige to certain sections and certain persons within these areas. For the farmers it meant increased wealth through heavy land damages and enhanced real estate values. It also provided the opportunity for the expansion of this wealth by affording a cheap route of trade to the local markets. To the mine owners and the large shippers the canal was important primarily as a channel for trade. To the merchants of Washington it meant a cheap supply of raw materials, food (and consequently low wages) and power. The canal was also responsible for the growth of towns along its line, and for much of the local prosperity which its trade and boatmen brought to the town merchants. It sponsored marked industrial activity at Williamsport, Hagerstown and Georgetown, providing a cheap source of power for the mills and factories.
Canal affairs had a great influence on the history of Maryland. Perhaps the most significant in the long run was the relationship between the canal and the growth of western Maryland. The canal also caused repercussions in state finances, for the major burden of the cost of construction fell upon Maryland. It almost wrecked the latter's credit, for the canal company never paid a direct return on most of the assistance granted by the state. Indirectly the canal became an influence on state politics. The financial position of Maryland became so acute in the 'thirties and 'forties that a candidate's stand on the question of state credit and the related question of the future of the canal often meant the difference between his success or failure. Then too, the company began to take active part in state affairs in self-defense, to offset the influence of the Baltimore and Ohio railroad. Finally, the canal itself became a political issue, dividing both the state and the parties.

After its completion the relationship between canal and the state became more intimate. The company, with its large number of employees, was incorporated into the state spoils system. Thereafter, its positions were filled by party followers as reward for their services. It was used to train many state leaders, the most famous of whom was A.P. Gorman. All canal presidents after 1860 achieved prominence in state political circles, if only because of the tremendous patronage they controlled.

Almost as important in the development of the region as the canal itself were the related activities. These provided a subsistence (and often a profitable one) to many more persons than those immediately
connected with the waterway. The most important of those subsidiary occupations was boat-building and repair. Later, feed stores became a large and prosperous calling for other inhabitants. Merchants in the canal towns benefited from the trade of the boatmen and travelers as well as that of the canal employees. Warehouse and wharf facilities owners also shared in the prosperity created by the existence of the canal and its trade.

The picture, however, is even yet incomplete. The canal meant still more to the local inhabitants. It had become a part of the every-day life of the valley. It was more than just a way to make a living, although that was important. For many of the valley folk, it was the only means of communication with the outside world. Road networks were keyed to it, just as they were elsewhere to the turnpikes and the railroads. The canal also provided companionship and rivalry for the farmers and canallers, performing to an even greater extent the function of the country road and crossroads store. It was the setting of all the drama associated with the workaday occurrences in the old ditch. It became, in fact, part of the "folklore and legend of the valley, celebrated in song and story."
Index to Appendices

I. Presidents of the Potomac Company, 1787-1826
II. Presidents of the Chesapeake and Ohio Canal Company, 1828-1893
III. Potomac Company Trade, 1820-1828
IV. Chesapeake and Ohio Canal Trade, 1829-1834
V. Receipts and Expenditures, 1834-1856
VI. Potomac Company Tolls
VII. Chesapeake and Ohio Canal Tolls
VIII. Potomac Company Finances
IX. Chesapeake and Ohio Canal Finances
X. Map
### Table I

**Presidents of the Potomac Company**

<table>
<thead>
<tr>
<th></th>
<th>President</th>
<th>Elected to Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>George Washington</td>
<td>May, 1765</td>
</tr>
<tr>
<td>2</td>
<td>Thomas Johnson</td>
<td>August, 1769</td>
</tr>
<tr>
<td>3</td>
<td>John Fitzgerald</td>
<td>September, 1795</td>
</tr>
<tr>
<td>4</td>
<td>Tobias Lear</td>
<td>August, 1797</td>
</tr>
<tr>
<td>5</td>
<td>James Keith</td>
<td>August, 1798</td>
</tr>
<tr>
<td>6</td>
<td>Charles Sims (Sims, Sumner)</td>
<td>August, 1807</td>
</tr>
<tr>
<td>7</td>
<td>Elie Williams</td>
<td>August, 1815</td>
</tr>
<tr>
<td>8</td>
<td>John Mason</td>
<td>August, 1817</td>
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*Source - Proceedings of the Stockholders of the Potomac Company*
# TABLE II

## PRESIDENTS OF THE CHESAPEAKE AND OHIO CANAL COMPANY TO 1890

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
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<tbody>
<tr>
<td>1.</td>
<td>Charles Fenton Mercer</td>
<td>June, 1829</td>
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<tr>
<td>2.</td>
<td>John H. Eaton</td>
<td>June, 1833</td>
</tr>
<tr>
<td>3.</td>
<td>George C. Washington</td>
<td>June, 1854</td>
</tr>
<tr>
<td>4.</td>
<td>Francis Thomas, Jr.</td>
<td>June, 1859</td>
</tr>
<tr>
<td>5.</td>
<td>Michael C. Sprigg</td>
<td>April, 1841</td>
</tr>
<tr>
<td>6.</td>
<td>William Gibbs McNeill</td>
<td>December, 1848</td>
</tr>
<tr>
<td>7.</td>
<td>James M. Coale</td>
<td>August, 1843</td>
</tr>
<tr>
<td>8.</td>
<td>Samuel Sprigg</td>
<td>February, 1851</td>
</tr>
<tr>
<td>9.</td>
<td>William Greason</td>
<td>June, 1852</td>
</tr>
<tr>
<td>10.</td>
<td>Samuel Hambleton</td>
<td>June, 1854</td>
</tr>
<tr>
<td>11.</td>
<td>William P. Maultsby</td>
<td>June, 1856</td>
</tr>
<tr>
<td>12.</td>
<td>Lawrence J. Bemgle</td>
<td>March, 1858</td>
</tr>
<tr>
<td>13.</td>
<td>James Fitzpatrick</td>
<td>May, 1860</td>
</tr>
<tr>
<td>14.</td>
<td>Alfred Spates</td>
<td>January, 1861</td>
</tr>
<tr>
<td>15.</td>
<td>Jacob Saively</td>
<td>June, 1865</td>
</tr>
<tr>
<td>16.</td>
<td>Alfred Spates</td>
<td>August, 1867</td>
</tr>
<tr>
<td>17.</td>
<td>Josiah Gordon</td>
<td>June, 1869</td>
</tr>
<tr>
<td>18.</td>
<td>James G. Clarke</td>
<td>June, 1870</td>
</tr>
<tr>
<td>19.</td>
<td>Arthur F. Corman</td>
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</tr>
<tr>
<td>20.</td>
<td>Lewis C. Smith</td>
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</tr>
<tr>
<td>21.</td>
<td>L. Victor Boughman</td>
<td>December, 1894</td>
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<td>22.</td>
<td>Stephen Canbrill</td>
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<table>
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<th>Volume</th>
<th>Date</th>
<th>Price</th>
<th>Volume</th>
<th>Date</th>
<th>Price</th>
<th>Volume</th>
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<td>12/17/68</td>
<td>780</td>
<td>0.00</td>
<td>12/24/68</td>
<td>850</td>
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<tr>
<td>12/4/66</td>
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<td>0.00</td>
<td>12/18/68</td>
<td>800</td>
<td>0.00</td>
<td>12/26/68</td>
<td>890</td>
<td>0.00</td>
</tr>
<tr>
<td>12/7/66</td>
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<td>850</td>
<td>0.00</td>
<td>12/27/68</td>
<td>910</td>
<td>0.00</td>
</tr>
<tr>
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<td>0.00</td>
<td>12/22/68</td>
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<td>0.00</td>
<td>12/28/68</td>
<td>950</td>
<td>0.00</td>
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<tr>
<td>12/13/66</td>
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<td>950</td>
<td>0.00</td>
<td>12/29/68</td>
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**FORECAST COMPANY SHARE**

**TABLE IX**

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<th>Date</th>
<th>Price</th>
<th>Volume</th>
<th>Date</th>
<th>Price</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/1/66</td>
<td>585</td>
<td>0.00</td>
<td>12/17/68</td>
<td>780</td>
<td>0.00</td>
<td>12/24/68</td>
<td>850</td>
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</tr>
<tr>
<td>12/4/66</td>
<td>550</td>
<td>0.00</td>
<td>12/18/68</td>
<td>800</td>
<td>0.00</td>
<td>12/26/68</td>
<td>890</td>
<td>0.00</td>
</tr>
<tr>
<td>12/7/66</td>
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<td>0.00</td>
<td>12/19/68</td>
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<td>12/27/68</td>
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<td>0.00</td>
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<td>900</td>
<td>0.00</td>
<td>12/28/68</td>
<td>950</td>
<td>0.00</td>
</tr>
<tr>
<td>12/13/66</td>
<td>440</td>
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<td>12/23/68</td>
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<td>0.00</td>
<td>12/29/68</td>
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</table>

**FORECAST COMPANY SHARE**

**TABLE IX**
<table>
<thead>
<tr>
<th>Year</th>
<th>Bales</th>
<th>Bales</th>
<th>Bales</th>
<th>Tons</th>
<th>Value</th>
<th>Value</th>
<th>Total Estimated Value</th>
<th>Tons</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>1820</td>
<td>917</td>
<td>16,506</td>
<td>75,272</td>
<td>1,215</td>
<td>14</td>
<td>227½</td>
<td>$14,687.95</td>
<td>$12,250.00</td>
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<td>780</td>
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<td>67,557</td>
<td>1,391</td>
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<td>115</td>
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<td>10,927.00</td>
<td>518,610.00</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1823</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6,252.65</td>
</tr>
<tr>
<td>1824</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>9,851.14</td>
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<tr>
<td>1825</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>1826</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11,503.35</td>
</tr>
<tr>
<td>1827</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10,821.78</td>
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<tr>
<td>1828</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11,595.24</td>
</tr>
</tbody>
</table>

Year: August 1 - July 31.


Amount of tolls, 1800-1829: Special Report on the Completion of the Canal (February, 1851), Table 6, p. 148.
I

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S


<table>
<thead>
<tr>
<th>Year</th>
<th>Tonsage</th>
<th>Coal</th>
<th>Flour</th>
<th>Sheet</th>
<th>Lumber</th>
<th>Corn</th>
<th>Tons</th>
</tr>
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<tbody>
<tr>
<td>1847</td>
<td>60,460</td>
<td>2,170</td>
<td>176,799 bbls.</td>
<td>235,212 bu.</td>
<td>1,585,600 bd. ft.</td>
<td>233,816 bu.</td>
<td>$62,440.55</td>
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<tr>
<td>1848</td>
<td>85,386</td>
<td>5,284</td>
<td>217,112</td>
<td>220,025</td>
<td>2,080,600</td>
<td>144,103</td>
<td>54,146.21</td>
</tr>
<tr>
<td>1849</td>
<td>102,041</td>
<td>5,224</td>
<td>266,820</td>
<td>240,078</td>
<td>1,580,956</td>
<td>244,251</td>
<td>61,925.17</td>
</tr>
<tr>
<td>1850</td>
<td>101,980</td>
<td>7,955</td>
<td>27,120 tons</td>
<td>5,518 tons</td>
<td>2,755 tons</td>
<td>1,726 tons</td>
<td>64,442.02</td>
</tr>
<tr>
<td>1851</td>
<td>203,595</td>
<td>82,690</td>
<td>25,761</td>
<td>6,261</td>
<td>2,755</td>
<td>5,785</td>
<td>110,504.43</td>
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<tr>
<td>1852</td>
<td>167,595</td>
<td>65,299</td>
<td>26,765</td>
<td>9,805</td>
<td>2,640</td>
<td>4,755</td>
<td>92,246.80</td>
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<tr>
<td>1853</td>
<td>270,705</td>
<td>151,959</td>
<td>25,802</td>
<td>9,266</td>
<td>5,606</td>
<td>8,327</td>
<td>145,100.54</td>
</tr>
<tr>
<td>1854</td>
<td>235,925</td>
<td>145,519</td>
<td>15,645</td>
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<td>2,018</td>
<td>119,956.05</td>
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<tr>
<td>1855</td>
<td>283,252</td>
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<td>14,240</td>
<td>6,986</td>
<td>3,051</td>
<td>626</td>
<td>156,675.64</td>
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<tr>
<td>1856</td>
<td>237,918</td>
<td>205,568</td>
<td>14,655</td>
<td>9,017</td>
<td>5,209</td>
<td>6,925</td>
<td>93,802.57</td>
</tr>
<tr>
<td>1857</td>
<td>196,526</td>
<td>128,536</td>
<td>10,967</td>
<td>7,750</td>
<td>1,847</td>
<td>5,592</td>
<td>115,085.97</td>
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<tr>
<td>1858</td>
<td>254,984</td>
<td>254,984</td>
<td>12,108</td>
<td>5,551</td>
<td>4,981</td>
<td>2,810</td>
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<tr>
<td>1859</td>
<td>359,716</td>
<td>300,743</td>
<td>12,108</td>
<td>5,551</td>
<td>4,981</td>
<td>2,810</td>
<td>199,154.67</td>
</tr>
<tr>
<td>1860</td>
<td>544,952</td>
<td>293,529</td>
<td>11,067</td>
<td>5,482</td>
<td>2,595</td>
<td>5,048</td>
<td>192,743.28</td>
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<tr>
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<td>140,814</td>
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<td>7,067</td>
<td>4,298</td>
<td>1,994</td>
<td>1,941</td>
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<tr>
<td>1862</td>
<td>125,795</td>
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<td>6,840</td>
<td>1,695</td>
<td>1,027</td>
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</tr>
<tr>
<td>1863</td>
<td>285,847</td>
<td>229,416</td>
<td>8,568</td>
<td>9,014</td>
<td>1,402</td>
<td>1,739</td>
<td>154,928.26</td>
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<tr>
<td>1864</td>
<td>290,772</td>
<td>260,368</td>
<td>5,922</td>
<td>6,186</td>
<td>1,248</td>
<td>1,814</td>
<td>225,979.54</td>
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<tr>
<td>1865</td>
<td>372,085</td>
<td>340,726</td>
<td>5,648</td>
<td>5,700</td>
<td>1,215</td>
<td>775</td>
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<tr>
<td>1866</td>
<td>385,009</td>
<td>344,180</td>
<td>2,620</td>
<td>4,946</td>
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<td>6,507</td>
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<tr>
<td>1867</td>
<td>521,422</td>
<td>456,009</td>
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<td>9,510</td>
<td>3,061</td>
<td>10,794</td>
<td>574,932.75</td>
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<tr>
<td>1869</td>
<td>552,637</td>
<td>484,949</td>
<td>2,120</td>
<td>9,164</td>
<td>2,936</td>
<td>3,582</td>
<td>278,978.72</td>
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<tr>
<td>1868</td>
<td>725,958</td>
<td>661,628</td>
<td>2,229</td>
<td>19,147</td>
<td>1,977</td>
<td>2,359</td>
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<td>1870</td>
<td>661,177</td>
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<td>11,710</td>
<td>948</td>
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<td>2,410</td>
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<tr>
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<td>990</td>
<td>9,416</td>
<td>1,781</td>
<td>5,854</td>
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(Continued on next page)
<table>
<thead>
<tr>
<th>TABLE XIV  (Continued)</th>
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</table>

<table>
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<th>Item 1950</th>
<th>Item 1954</th>
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</thead>
<tbody>
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<td>924</td>
</tr>
<tr>
<td>81.599.26</td>
<td>925</td>
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<td>921</td>
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<tr>
<td>60.407.28</td>
<td>920</td>
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<tr>
<td>62.102.28</td>
<td>919</td>
</tr>
<tr>
<td>97.546.86</td>
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</tr>
<tr>
<td>71.440.42</td>
<td>917</td>
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<tr>
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<td>916</td>
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<tr>
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<td>914</td>
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<tr>
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<td>908</td>
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<tr>
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<td>907</td>
</tr>
<tr>
<td>69.920.15</td>
<td>906</td>
</tr>
<tr>
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<td>62.500.10</td>
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Note: No figures in column were kept after 1925.
<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues (all sources)</th>
<th>Expenditures (excluding interest on 1844 bonds)</th>
</tr>
</thead>
<tbody>
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<td>$ 76,767.74</td>
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<td>60,670.65</td>
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<tr>
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<td>85,089.75</td>
<td>66,770.28</td>
</tr>
<tr>
<td>1848</td>
<td>87,088.13</td>
<td>97,024.45</td>
</tr>
<tr>
<td>1849</td>
<td>66,437.15</td>
<td>88,510.00</td>
</tr>
<tr>
<td>1850</td>
<td></td>
<td>160,128.46</td>
</tr>
<tr>
<td>1851</td>
<td>155,829.83</td>
<td>241,794.71</td>
</tr>
<tr>
<td>1852</td>
<td>176,770.84</td>
<td>325,652.88</td>
</tr>
<tr>
<td>1853</td>
<td>150,091.30</td>
<td>103,062.71</td>
</tr>
<tr>
<td>1854</td>
<td>148,106.02</td>
<td>129,045.68</td>
</tr>
<tr>
<td>1855</td>
<td>145,122.57</td>
<td>255,957.10</td>
</tr>
<tr>
<td>1856</td>
<td>150,255.48</td>
<td>232,716.75</td>
</tr>
<tr>
<td>1857</td>
<td>99,590.68</td>
<td>235,772.24</td>
</tr>
<tr>
<td>1858</td>
<td>No figures available</td>
<td>No figures available</td>
</tr>
<tr>
<td>1859</td>
<td>195,328.43</td>
<td>242,689.88</td>
</tr>
<tr>
<td>1860</td>
<td>191,390.20</td>
<td>359,620.15</td>
</tr>
<tr>
<td>1861</td>
<td>75,741.90</td>
<td>255,237.52</td>
</tr>
<tr>
<td>1862</td>
<td>12,624.85</td>
<td>221,711.66</td>
</tr>
<tr>
<td>1863</td>
<td>161,024.10</td>
<td>230,209.52</td>
</tr>
<tr>
<td>1864</td>
<td>224,598.95</td>
<td>227,772.00</td>
</tr>
<tr>
<td>1865</td>
<td>589,754.86</td>
<td>203,567.86</td>
</tr>
<tr>
<td>1866</td>
<td>366,846.86</td>
<td>222,288.56</td>
</tr>
<tr>
<td>1867</td>
<td>385,054.83</td>
<td>210,772.98</td>
</tr>
<tr>
<td>1868</td>
<td>287,565.90</td>
<td>277,015.56</td>
</tr>
<tr>
<td>1869</td>
<td>288,594.10</td>
<td>277,015.56</td>
</tr>
<tr>
<td>1870</td>
<td>587,940.82</td>
<td>255,170.94</td>
</tr>
<tr>
<td>1871</td>
<td>485,454.08</td>
<td>248,749.19</td>
</tr>
<tr>
<td>1872</td>
<td>478,275.62</td>
<td>215,806.36</td>
</tr>
<tr>
<td>1873</td>
<td>507,660.52</td>
<td>222,655.15</td>
</tr>
<tr>
<td>1874</td>
<td>517,412.22</td>
<td>277,015.56</td>
</tr>
<tr>
<td>1875</td>
<td>475,216.40</td>
<td>227,204.65</td>
</tr>
<tr>
<td>1876</td>
<td>504,121.20</td>
<td>236,770.04</td>
</tr>
<tr>
<td>1877</td>
<td>201,505.87</td>
<td>236,770.04</td>
</tr>
<tr>
<td>1878</td>
<td>283,016.17</td>
<td>279,484.61</td>
</tr>
<tr>
<td>1879</td>
<td>283,567.87</td>
<td>395,722.57</td>
</tr>
<tr>
<td>1880</td>
<td>272,516.07</td>
<td>294,606.69</td>
</tr>
<tr>
<td>1881</td>
<td>552,098.62</td>
<td>297,094.76</td>
</tr>
<tr>
<td>1882</td>
<td>169,922.67</td>
<td>262,491.22</td>
</tr>
<tr>
<td>1883</td>
<td>529,557.07</td>
<td>213,167.66</td>
</tr>
<tr>
<td>1884</td>
<td>161,518.40</td>
<td>262,536.12</td>
</tr>
</tbody>
</table>

(Continued on next page)
**Secretary General Reports and Reports of Progress**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>20.10</td>
<td>33.59</td>
<td>60.35</td>
<td>40.20</td>
<td>80.00</td>
<td>30.00</td>
<td>20.00</td>
<td>10.00</td>
<td>50.00</td>
</tr>
<tr>
<td>1977</td>
<td>15.00</td>
<td>25.00</td>
<td>50.00</td>
<td>30.00</td>
<td>60.00</td>
<td>20.00</td>
<td>10.00</td>
<td>5.00</td>
<td>20.00</td>
</tr>
<tr>
<td>1976</td>
<td>10.00</td>
<td>15.00</td>
<td>25.00</td>
<td>15.00</td>
<td>30.00</td>
<td>10.00</td>
<td>5.00</td>
<td>2.50</td>
<td>10.00</td>
</tr>
<tr>
<td>1975</td>
<td>5.00</td>
<td>10.00</td>
<td>15.00</td>
<td>7.50</td>
<td>15.00</td>
<td>5.00</td>
<td>2.50</td>
<td>1.25</td>
<td>5.00</td>
</tr>
<tr>
<td>1974</td>
<td>2.50</td>
<td>5.00</td>
<td>10.00</td>
<td>2.50</td>
<td>5.00</td>
<td>2.50</td>
<td>1.25</td>
<td>0.625</td>
<td>2.50</td>
</tr>
<tr>
<td>1973</td>
<td>1.25</td>
<td>2.50</td>
<td>5.00</td>
<td>1.25</td>
<td>2.50</td>
<td>1.25</td>
<td>0.625</td>
<td>0.3125</td>
<td>1.25</td>
</tr>
<tr>
<td>1972</td>
<td>0.625</td>
<td>1.25</td>
<td>2.50</td>
<td>0.625</td>
<td>1.25</td>
<td>0.625</td>
<td>0.3125</td>
<td>0.15625</td>
<td>0.625</td>
</tr>
</tbody>
</table>
### TABLE VI

**FOTOMAC COMPANY TOLLS***

<table>
<thead>
<tr>
<th>Article</th>
<th>Unit</th>
<th>Toll</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Spirits</td>
<td>hogshead</td>
<td>1/6</td>
</tr>
<tr>
<td>Tobacco</td>
<td>*</td>
<td>1/0</td>
</tr>
<tr>
<td>Linseed Oil</td>
<td>barrel</td>
<td>0/4</td>
</tr>
<tr>
<td>Wheat, peas, beans, flax seed</td>
<td>bushel</td>
<td>0/4</td>
</tr>
<tr>
<td>Corn</td>
<td>*</td>
<td>0/4</td>
</tr>
<tr>
<td>Flour</td>
<td>barrel</td>
<td>0/3</td>
</tr>
<tr>
<td>Beef</td>
<td>*</td>
<td>0/4</td>
</tr>
<tr>
<td>Fork</td>
<td>*</td>
<td>0/5</td>
</tr>
<tr>
<td>Hemp, flax, potash</td>
<td>ton</td>
<td>2/6</td>
</tr>
<tr>
<td>Mfd. Iron, copper,</td>
<td>ton</td>
<td>2/0</td>
</tr>
<tr>
<td>lead, etc. (ores)</td>
<td>*</td>
<td>0/3</td>
</tr>
<tr>
<td>Iron ores and stone</td>
<td>bushel</td>
<td>1/3</td>
</tr>
<tr>
<td>Coal</td>
<td>children</td>
<td>0/6</td>
</tr>
<tr>
<td>Staves (hhds and bbls)</td>
<td>hundred</td>
<td>0/2</td>
</tr>
<tr>
<td>Flank</td>
<td>hundred feet</td>
<td>0/10</td>
</tr>
<tr>
<td>Timber</td>
<td>*</td>
<td>0/5</td>
</tr>
<tr>
<td>Packaged Goods</td>
<td>hundredweight</td>
<td>0/1</td>
</tr>
<tr>
<td>Boats</td>
<td>each (except empties returning)</td>
<td>2/6</td>
</tr>
</tbody>
</table>

These tolls were collected at three points on the river, the mouth of South Branch, Payne's Falls (above Harpers Ferry), and Great Falls. At the latter place, double tolls were collected. Hence the total charges for navigating the entire river were four times the above rates.

For the purposes of collecting tolls, the following values were assigned to coins circulating in the colonies, in terms of £'s sterling.

<table>
<thead>
<tr>
<th>Coin</th>
<th>Weight</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish pieces of eight, or dollars</td>
<td>4/6</td>
<td>£ 5 s. d.</td>
</tr>
<tr>
<td>Silver coins, per ounce</td>
<td>5/1 5/4</td>
<td></td>
</tr>
<tr>
<td>English or French Crowns</td>
<td>5/0</td>
<td></td>
</tr>
<tr>
<td>Johnnies, 13 pennyweight</td>
<td>3/12/0</td>
<td></td>
</tr>
<tr>
<td>Half-Johnnies, 9 pennyweight</td>
<td>1/16/0</td>
<td></td>
</tr>
<tr>
<td>Moidores, 6 pennyweight</td>
<td>1/ 7/0</td>
<td></td>
</tr>
<tr>
<td>English Guinea, 5 pennyweight, 6 grains</td>
<td>1/ 1/0</td>
<td></td>
</tr>
<tr>
<td>French Guinea, 5 pennyweight, 5 grains</td>
<td>1/ 0/10</td>
<td></td>
</tr>
<tr>
<td>Doubloons, 17 pennyweight</td>
<td>5/ 6/0</td>
<td></td>
</tr>
<tr>
<td>Spanish pistoles, 4 pennyweight</td>
<td>16/6</td>
<td></td>
</tr>
<tr>
<td>French pistoles, 4 pennyweight, 4 grains</td>
<td>16/4</td>
<td></td>
</tr>
<tr>
<td>Arabian chequins, 2 pennyweight, 5 grains</td>
<td>8/8</td>
<td></td>
</tr>
<tr>
<td>Other gold coins (except German), per pennyweight</td>
<td>4/0</td>
<td></td>
</tr>
</tbody>
</table>

*Act of Virginia, October, 1784; Act of Maryland, Nov. Sess., 1784. See Documents Relating to Chesapeake and Ohio Canal, July 11, 1840, loc. cit., pp. 80-81, 105-106.*
## TABLE VII (Continued)

<table>
<thead>
<tr>
<th>Articles</th>
<th>1884</th>
<th>1885</th>
<th>1886**</th>
<th>1891</th>
<th>1890</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire brick</td>
<td>1</td>
<td>1</td>
<td></td>
<td>1*</td>
<td>1*</td>
</tr>
<tr>
<td>Bricks, tile, slates</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Rough stone</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Freight stone</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lime</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Limestone</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Plasters, fertilizers</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Charcoal</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Coke</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Coal</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Iron, other ores</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pig, scrap iron</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Scraped, rolled iron</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Steel, lead, other metals</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Packet boats</td>
<td>10</td>
<td>8</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Freight boats</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>French burrs</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Bricks, ice</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Railroad iron, castings</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sand, gravel, earth, clay</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Notes**

The rates given are those per ton per mile. The unit of measurement is the ton or its equivalent in bushels, barrels, barrels, cubic feet. The exceptions were some types of lumber which were measured in cord, and steve, for which perches were the standard form of measure. Livestock was counted at 5 cattle, 15 hogs, or 50 sheep to the ton, and 2 carts, 1 wagon, 10 plows, 2 two-wheeled carriages or 1 four-wheeled carriage (with two horses) equaled a ton. Other values (subject to some variation) included:

- Tobacco - 2 or 3 bbls;
- Salt - 45 bu, fine, 52 bu, coarse;
- Hogs - 28 bu;
- Flour - 10 or 10½ bbls;
- Charcoal - 50 bu;
- Glass: 2000 feet;盛大 - 50 bbls;
- Wheat, barley, buckwheat, rye, corn, cornmeal, potatoes, turnips, flaxseed - 40 bu;
- Will sorrels - 100 bu;
- Apples and peaches - 40 to 45 bu;
- Wine - tun, 250 gallons; whiskey, cider, beer, ale - 6 to 8 bbls;
- Stone and limestone - 15 to 25 cu. ft.;
- Fish - 5 bbls or 500 shad or 4000 herring;
- Oysters - 25 bbls of 4000; Firewood and bark - 125 cu. ft. (cord);
- Lumber - 1000 board feet;
- Timber - 70 cu ft;
- 3000 shingles, 5000 laths, 1000 staves and heads (barrels), 500 staves and heads (hogsheads), 100 fence rails or posts;
- 750 or 1000 wood poles.

(Continued on next page)
TABLE VII (CONTINUED)

**Notes (Continued)**

The rate on lumber products in rafts was double the charges listed above.

Columns 1 and 2 for 1834, 1835 and 1841 are for the first 15 miles and for any distance thereafter, respectively. For 1831 and 1840, they are for the first 20 miles and for any distance thereafter respectively.

**The rates established in 1841 were repealed in 1843, and the charges listed under 1855 were “generally” restored.**

Charges marked with an asterisk (*) in 1860 were established on February 28, 1851.

Charges marked with an asterisk (**) in 1860 were established on January 8, 1857.

The dates of the adoption of the general toll lists were:
- April 4, 1834;
- April 25, 1835;
- March 15, 1841;
- May 5, 1843;
- June 2, 1851;
- August 15, 1860.

May 17, 1878 – Toll on flour and grains reduced to 5/4₀ per ton per mile from points between Williamsport and Weverton to Washington.

After 1860 the important revisions were those in the toll on coal, the major article of trade. The rate of 1/4₀ per ton per mile in 1851 was equal to about 46₀ for the 184₀ miles from Cumberland to Rock creek.

<table>
<thead>
<tr>
<th>Date</th>
<th>Rate</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 10, 1865</td>
<td>5/16₉</td>
<td>per ton per mile</td>
</tr>
<tr>
<td>April 15, 1864</td>
<td>5/6₉</td>
<td>per ton per mile</td>
</tr>
<tr>
<td>June 28, 1864</td>
<td>1/2₉</td>
<td>per ton per mile</td>
</tr>
<tr>
<td>September 5, 1865</td>
<td>4 miles</td>
<td></td>
</tr>
<tr>
<td>March 28, 1866</td>
<td>1/4₉</td>
<td></td>
</tr>
<tr>
<td>February 13, 1875</td>
<td>51₉</td>
<td></td>
</tr>
<tr>
<td><em>January 15, 1875</em></td>
<td>46₉</td>
<td>Cumberland to Rock creek</td>
</tr>
<tr>
<td><em>April 15, 1876</em></td>
<td>41₉</td>
<td></td>
</tr>
<tr>
<td><em>April 10, 1877</em></td>
<td>35₉</td>
<td></td>
</tr>
<tr>
<td>August 21, 1877</td>
<td>22₉</td>
<td></td>
</tr>
<tr>
<td><em>April 10, 1880</em></td>
<td>51₉</td>
<td></td>
</tr>
<tr>
<td><em>February 8, 1885</em></td>
<td>22₉</td>
<td></td>
</tr>
<tr>
<td><em>March 4, 1887</em></td>
<td>56₉</td>
<td></td>
</tr>
<tr>
<td><em>April 10, 1888</em></td>
<td>55₉</td>
<td></td>
</tr>
<tr>
<td><em>February 14, 1888</em></td>
<td>40₉</td>
<td></td>
</tr>
<tr>
<td><em>April 8, 1891</em>*</td>
<td>40₉</td>
<td></td>
</tr>
</tbody>
</table>

*Less rebate of from 5 to 10₉ per ton to large shippers.*

**Less rebate of 6₉ in 1887, and 10₉ in 1895 ff on coal shipped coastwise from Georgetown.**

### TABLE VIII

**FOTOMAC COMPANY FINANCES**

**Capital Stock:**

<table>
<thead>
<tr>
<th>Shares &amp; $</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>700 shares @ $ 100 (5444.44) each</td>
<td>$311,555.55</td>
</tr>
<tr>
<td>280 - Maryland</td>
<td></td>
</tr>
<tr>
<td>120 - Virginia</td>
<td></td>
</tr>
<tr>
<td>581 - Individuals</td>
<td></td>
</tr>
</tbody>
</table>

Original subscription: 500 shares @ $ 100 each, 1794
Second subscription: 100 shares @ $ 150 each, 1796
Third subscription: 150 shares @ $ 150 each, 1798

**Indebtedness:** August 1, 1821 - $174,580.12

<table>
<thead>
<tr>
<th>Debit</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Banks in District of Columbia</td>
<td>$102,675.22</td>
</tr>
<tr>
<td>To the State of Maryland</td>
<td>$56,250.00</td>
</tr>
<tr>
<td>To sundry persons near: Cumberland</td>
<td>$7,904.31</td>
</tr>
<tr>
<td></td>
<td>Antietam</td>
</tr>
<tr>
<td></td>
<td>Shenandoah</td>
</tr>
<tr>
<td></td>
<td>Monocacy</td>
</tr>
<tr>
<td>To sundry individuals</td>
<td>$1,000.00</td>
</tr>
</tbody>
</table>

**Indebtedness:** May 18, 1825 (date of Potomac Company's assent to the charter of the Chesapeake and Ohio Canal Company): $176,400.00

**Sources:** 17th Congress, 1st Session, House of Representatives, Reports, No. 111. Appendix B1 and B(h), pp. 11 and 15. Proceedings of Directors of Potomac Company, p. 128.
TABLE IX
FINANCES OF CHESAPEAKE AND OHIO CANAL COMPANY

Statement of Debts of the Company, December 31, 1933 (excluding interest)

<table>
<thead>
<tr>
<th>Capital Stock</th>
<th>$3,877,593.87</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td>$2,490,000.00</td>
</tr>
<tr>
<td>(Includes $380,000 by United States, $1,000,000 by Washington, $280,000 by Georgetown, $250,000 by Alexandria)</td>
<td></td>
</tr>
<tr>
<td>State of Maryland</td>
<td>825,000.00</td>
</tr>
<tr>
<td>State of Virginia</td>
<td>250,000.00</td>
</tr>
<tr>
<td>City of Shepherdstown, Va.</td>
<td>75,000.00</td>
</tr>
<tr>
<td>Baltimore and Ohio Railroad</td>
<td>200,000.00</td>
</tr>
<tr>
<td>Individuals</td>
<td>208,505.87</td>
</tr>
</tbody>
</table>

1824 Loan (State of Maryland) | $2,000,000.00 |
Preferred Stock (State of Maryland) | $4,375,000.00 |
Preferred Construction Bonds (1844 Act) | $1,693,000.00 |
Repair Bonds of 1878 | 500,000.00 |
Potomac Company claims and interest | 75,947.35 |
Claims | $56,896.42 |
Interest | $19,050.93 |
Potomac Company – unclaimed dividend | 216.45 |
Post Notes (interest bearing) | $3,494,955.90 |
1834 | $500.00 |
1837 | 350.00 |
1839 | 5,180.00 |
1840 | 2,980.00 |
Post Notes Reissued | 6,544.00 |
Bonds issued for the payment of Post Notes | 5,758.00 |
Bonds issued to Contractors | 303,745.60 |
Acceptances issued to Contractors | 122,139.52 |
Certificates for Repairs prior to 1845 | 1,275.59 |
Certificates to Creditors of Hunter, Harris | 44,450.82 |
Certificates for funded coupons and interest | 140,240.44 |
Certificates for tolls, 1860 | 153.30 |
Balances due Contractors, prior to 1881 | 84,463.87 |
Registered Debt and Interest | 321,166.37 |
Debts | $187,216.15 |
Interest | 137,244.22 |
Pay Rolls, 1855-1859 | 109,971.35 |
1835 | $1,429.33 |
1836 | 2,775.03 |
1838 | 7,750.00 |
1837 | 16,387.43 |
1838 | 57,064.23 |
1839 | 45,305.20 |

The total debts of the company in 1882 were listed as "over $26,500,000" including interest. Of this total, the claims of Maryland, then held by the Baltimore and Ohio Railroad, amounted to $18,747,245.

Vita

Walter S. Sanderlin

3436 Mt. Pleasant Street, Washington, D.C.

Ph.D. 1945

March 6, 1939

Baltimore, Maryland

Central High School, Washington, D.C.

American University, 1936-1940, B.A. 1940

Johns Hopkins University, 1940-1942

University of Maryland, 1942-1944, M.A. 1943, Ph.D. 1945

Assistant in History, Johns Hopkins University, 1942

Fellow and Assistant in History, University of Maryland, 1942-1944

Lecturer in History, National University, 1942-1944

Instructor in History, National University, 1944-1945

Assistant Professor of History, Bowling Green (Ohio) State University, 1945 -