of the produce, which usually came to their market. ...." Letter, George Washington to Thomas Jefferson, March 29, 1784, W.W. Abbot and Dorothy Twohig (eds.), The Papers of George Washington: Confederation Series, Volume 1, January 1784 - July 1784, (Charlottesville, Va.: University Press of Virginia, 1994), 238.

<sup>57</sup> Randolph W. Church, op. cit., 43-44, 46.

58 Washington wrote: "The local interest of that place (Baltimore) joined to the shortsighted politics, or contracted views of another part of the Assembly, gave Mr. Thomas Johnson who was a warm promoter of the Scheme, on the No. side of the River, a great deal of trouble. In this situation things were when I took command of the Army -- The War afterwards called Mens attention to different objects -- and all the money they could or would raise, was applied to other purposes, but with you, I am satisfied that not a moment ought to be lost in re-commencing this business...," Letter, George Washington to Thomas Jefferson, March 29, 1784. W.W. Abbot and Dorothy Twohig (eds.), The Papers..., op. cit., Volume 1, 238.

Washington wrote: "... First, because Acts of the Assemblies of Virginia & Maryland, must be obtained to incorporate private adventurers to undertake the business -- 2d, the Company must be formed before anything can be done -- 3d. an actual survey of the waters, by skilful Engineers, (or persons in that line) must take place & be approved before the points at which the navigation on different waters can be ascertained...," Letter, George Washington to Richard Claiborne, December 15, 1784, W.W. Abbot and Dorothy Twohig (eds.), The Papers..., op. cit., Volume 2, 184-185. 60 Letter, William Paca to Charles Beatty, Normand Bruce, August 1, 1783, Maryland Archives, Maryland State Papers, Series A. Washington had access to this report. His comments are reproduced in W.W. Abbot and Dorothy Twohig (eds.), The Papers ..., op. cit., Volume 2, 131-133. The bill passed the Virginia Assembly in October and the Maryland Assembly in November, 1784. Corra Bacon-Foster, op. cit. 44.

62 Ibid., 45.

<sup>63</sup> Letter. George Washington to Thomas Johnson, January 17, 1785, John C. Fitzpatrick, (ed.), The Writings..., op. cit., Volume 28, 31.

64 Letter, George Washington to the Marquis de Lafayette, July 25, 1785, Ibid., p. 207.

65 Edward B. Mathews and Wilbur A. Nelson, Report On the Location of the Boundary Line Along the Potomac River Between Virginia and Maryland In Accordance with The Award of 1877, (Baltimore, 1928), 3-4.

67 Ibid., 4.

68 Washington wrote: "The first dividend of the money was paid in on the 15th of this month; and the work is to be begun the first of next (i.e. August 1785), in those parts which require least skill; leaving the more difficult 'till an Engineer of abilities and practical knowledge can be obtained ...." Letter. George Washington to the Marquis de Lafayette, July 25, 1785, John C. Fitzpatrick, (ed.), The Writings..., op. cit., Volume 28, 207.

NA-RG79, Entry 160, Proceedings of the President and Directors, Potomac Company, 1785-1828, May 30, 1785, 1.

70 Ibid.

<sup>71</sup> Letter, George Washington to the Marquis de Lafayette, February 15, 1785, John C. Fitzpatrick,

(ed.), The Writings..., op. cit., Volume 28, 73.

<sup>72</sup> Letter, George Washington to George William Fairfax, June 30, 1775, John C. Fitzpatrick, (ed.),

The Writings..., op. cit., Volume 28, 184.

The Writings..., op. cit., Volume 28, 184.

Washington wrote the following note: "Vessels of 6, & not exceeding 10 Tons burthen, are recommended tho' the Canals should be made to suit larger Vessels & Rafts drawing 3 feet water & 60 feet long ...," W.W. Abbot and Dorothy Twohig (eds.), The Papers ..., op. cit., Volume 2, 133.

74 The advertisement read: "Ordered that Advertisements be inserted in the Alexandria, Baltimore and some one of the Philadelphia Papers giving Notice that this Board will meet at Alexandria on the first Day of July next to agree with a Skilful Person to conduct the opening and improving the Navigation of the Potowmack river from the Great Falls to Payne's and from the upper part of the Shanadoah to the highest place practicable on the North Branch, and also to agree with two Assistants and Overseers - Also that liberal wages will be given to any Number not exceeding one hundred good Hands with Provisions and a reasonable Quantity of Spirits; that a further Encouragement will be

given to such as are dextrious in boring and blowing Rocks in which Service a proportion of the Men will be employed and that the Conductor of the Work or some other Person authorized will attend at Seneca on the third Day of July next and at Shanadoah on the 14<sup>th</sup> Day of July to contract with the men who may offer for this Service ..., "NA-RG79, Entry 160, Proceedings ..., May 31, 1785. There is also some evidence that some preliminary work may have been undertaken in the autumn of 1784. George Gilpin wrote George Washington, on July 10, 1785: "I then crossed the river just above the falls [i.e. Seneca Falls] to the Maryland side and went down to where the huts was in which the people lived last fall and then to a Mr. Goldboroughs at whose house Johnson and Clapham lodged When they attended the works ...," Grace L. Nute, op. cit., 713.

Third

<sup>77</sup> Letter, George Washington to John Fitzgerald and George Gilpin, March 31, 1786, W.W. Abbot and Dorothy Twohig (eds.), <u>The Papers</u>..., op. cit., Volume 3, 615.

<sup>78</sup> Washington wrote: "It appears to me therefore, that of the cost of bringing from Europe a professional man of tried & acknowledged abilities is too heavy for one work; it might be good policy for several Companies to unite in it; contributing in proportion to the estimates & capital sums established by the several Acts. ..., "Letter, George Washington to William Moultrie, May 25, 1786, W.W. Abbot and Dorothy Twohig (eds.), The Papers ..., op. cit., Volume 4, 74.

Washington wrote: "... [I] had written both to England & France, to know on what terms a person of competent skill could be obtained—& have received the following answer from my friend the Marqs de la Fayette; 'There is no doubt but what a good Engineer may be found in this country to conduct the work. France in this point exceeds England; & will have I think every advantage but that of the language ... an intimation that you set a value on that measure, will ensure to us the choice of a good Engineer. They are different from the military ones, and are called Ingènieurs des ponts & chaussées ..., "Letter, George Washington to William Moultrie, May 25, 1786, W.W. Abbot and Dorothy Twohig (eds.), The Papers ..., op. cit., Volume 4, 74.

80 Washington wrote: "I have engaged him [Brindley] to call upon Colo. Gilpin on his rout back. Mr. Brindley and Mr. Harris<sup>80</sup> took the Great Falls in their way down, and both approve of the present line for our Canal. The first very much, conceiving that 9/10th of the expence which must have been incurred in the one first proposed, will be saved I the second—the work be altogether s secure—and the discharge into the river below, by no means unfavorable. He thinks however, that a good deal of attention and judgment is requisite to fix the Locks there; the height of which, he observes, must be adapted to the ground, there being no precise rule for their construction; Locks running, frequently, from 4 to 18 feet - & sometimes as high as 24 - The nature, & declension of the ground, according to him, is alone to be consulted, and where these will admit of it, he thinks the larger the locks are, the better, because more convenient," Letter, George Washington to John Fitzgerald and George Gilpin, March 31, 1786, W.W. Abbot and Dorothy Twohig (eds.), The Papers ..., op. cit., Volume 3, 615. 81 Washington wrote: "With respect to this part of the business [the siting, design and construction of the locks at Great Fallsl, I feel, and always have professed, an incompetency of judgment; nor do I think that theoretical knowledge alone, is adequate to the undertaking. Locks upon the best digested plan will certainly be expensive--& not properly constructed, & judiciously placed, may be altogether useless. It is for these reasons I have frequently suggested, though no decision has been had, the propriety of employing a professional man. Whether the expence of importing one has been deemed altogether unnecessary; or, that the advantages resulting therefrom are considered as unequal to the cost, I know not; but, as it is said no person in this Country has more practical knowledge than Mr. Brindley, I submit it for consideration, whether it is not advisable to engage him to take the Falls on his way home-examine-level--& digest a plan for locks at that place. ...," Letter, George Washington to John Fitzgerald and George Gilpin, March 31, 1786, W.W. Abbot and Dorothy Twohig (eds.), The Papers ..., op. cit., Volume 3, 615.

<sup>82</sup> Letter, George Washington to John Fitzgerald and George Gilpin, March 31, 1786, W.W. Abbot and Dorothy Twohig (eds.), <u>The Papers...</u>, op. cit., Volume 3, 616.

83 Rumsey wrote Washington: "This will be handed to you by Mr. Brindley, we have had the pleasure of his, and Mr. Harris's Company Since yesterday, and they Boath approve of what is Done and

<sup>&</sup>lt;sup>76</sup> Letter, George Washington to William Moultrie, May 25, 1786, W.W. Abbot and Dorothy Twohig (eds.), The Papers ..., op. cit., Volume 4, 73.

proposed Here .... "Letter, James Rumsey to George Washington, March 29, 1786, W.W. Abbot and Dorothy Twohig (eds.), The Papers..., op. cit., Volume 3, 611.

- 85 Washington wrote: "As I have imbibed a very favorable opinion of your mechanical abilities, and have no reason to distrust your fitness in other respects; I took the liberty of mentioning your name to the Directors, and I dare say if you are disposed to offer your services, they would be attended to under favorable circumstances...," Letter, George Washington to James Rumsey, July 2, 1785, John C. Fitznatrick, (ed.), The Writings... op. cit., Volume 28, 189.
- <sup>86</sup> Letter. George Washington to James Rumsey, June 5, 1785. John C. Fitzpatrick, (ed.), The Writings..., op. cit., Volume 28, 159. Fitzpatrick identifies Bath as being the present-day Warm Springs, Virginia, but this is incorrect. Bath would have been the present-day Berkeley Springs, West Virginia.
- 87 Letter. George Washington to James Rumsey, July 2, 1785, John C. Fitzpatrick, (ed.), The Writings..., op. cit., Volume 28, 189-190.
- NA-RG79, Entry 160, Proceedings ..., July 14, 1785, 5.

- 90 Robert J. Kapsch, "The Potomac Canal: A Construction History," op. cit., footnotes 184 and 185, 227-228.
- <sup>91</sup> John C. Fitzpatrick (ed.), <u>The Diaries ...</u>, op. cit., Volume II, (Boston and New York: Houghton Mifflin Company, 1925), August 3, 1785, 395.
- 92 Washington wrote: "The Water through these Falls is of sufficient depth for good navigation; and as formidable as I had conceived them to be; but by no means impracticable. The principal difficulties lye in rocks which occasion a crooked passage. These once removed, renders the passage safe without the aid of Locks and may be effected for the Sum mentioned in Mr. Jno. Ballendine's estimate (the largest extant), but in a different Manner than that proposed by him. It appearing to me. and was so unanimously determined by the Board of Directors, that a channel through the bed of the River in a strait direction, and as much in the course of the current as may be, without a grt, increase of labour and expence, would be preferable to that through the Gut, which was the choice of Mr. Ballendine for a Canal with Locks. The last of which we thought unnecessary, and the first more expensive in the first instance, besides being liable to many inconveniences which the other is not; as it would probably be frequently choaked with drift wood, Ice, and other rubbish, which woul be thrown thereby through the several inlets already made by the rapidity of the currts. In freshes and others which probably would be made thereby; whereas a navigation through the bed of the River when once made will, in all probability, remain for ever, as the currt, here will rather clear, than contribute to choak the passage...," Ibid., 396.
- <sup>93</sup> Washington wrote: "Here we breakfasted (i.e. at Harper's Ferry); after which we set out to explore the Falls below, and having but one Canoe, Colo. Gilpin, Mr. Rumsey (who joined us according to appointment last Night) and myself, embarked in it, with intention to pass thro' what is called the Spout (less than half a Mile below the ferry). But when we came to it, the Company on the Shore, on acct. of the smallness, and low sides of the Vessel, dissuaded us from the attempt, least the roughness of the Water, occasioned by the Rocky bottom, should fill and involve us in danger. To avoid the danger therefore we passed through a narrow channel on the left, near the Maryland shore and continued in the Canoe to the lower end of Pain's fall distant, according to estimation, 3 Miles." John C. Fitzpatrick (ed.), The Diaries..., op. cit., Volume II, August 7, 1785, 400.
- 94 Washington wrote: "These falls [i.e. Payne's Falls] may be described as follow [i.e. beginning at Harper's Ferry and traversing the Spout]): From the Ferry for about 3 hundred yards, or more, the Water is deep with rocks here and there, near the Surface, then a Ripple; the Water betwn, which and the Spout, as before. The Spout takes its name from the rapidity of the Water, and its dashings, occasioned by a gradual, but pretty considerable fall, over a Rocky bottom which makes an uneven surface and considerable swell. The Water however, is of sufficient depth through it; but the Channel not being perfectly straight, skilful hands are necessary to navigate and conduct Vessels through this rapid. From hence, there is pretty smooth and even Water with loose stone, and some rocks, for the best part of a Mile; to a ridge of rocks which cross the river with Intervals, thro' which the Water passes in crooked directions; but the passage which seemed most likely to answer our purpose of Navigation was on the Maryland side, being freest from rocks but shallow. From hence to what are

called Pain's falls the Water is tolerably smooth, with Rocks here and there. These are best passed on the Maryland side. They are pretty swift, shallow, and foul at bottom, but the difficulties may be removed. From the bottom of these Falls, leaving an Island on the right, and the Maryland Shore on the left, the easy and good Navigation below is entered ...," Ibid., 400-401.

<sup>95</sup> Washington wrote: "At the foot of these falls (i.e. Payne's Falls) the Directors and myself (Govr. Lee having joined us the Evening before) held a meeting. At which it was determined, as we conceived the Navigation could be made through these (commonly called the Shannondoah) Falls without the aid of Locks, and by opening them would give eclat to the undertaking and great ease to the upper Inhabitants, as Water transportation would be immediately had to the Great Falls from Fort Cumberland, to employ the upper hands in this work instead of removing the obstructions above, and gave Mr. Rumsey directions to do so accordingly, with general Instructions for his Governmt. ...," Ibid., 401.

The company <u>Proceedings</u> stated: "The President and all the Directors having yesterday viewed and examined the Shanadoah Falls from the flat water above to that below were unanimously of Opinion that the Navigation may be carried through the falls without a Lock and that the purpose of the Incorporation would be best promoted by the speedied removal of the Obstructions within the above described space. ...," NA-RG79, Entry 160, <u>Proceedings ...</u>, August 8, 1785, 8.

<sup>97</sup> The company <u>Proceedings</u> stated: "It is therefore ordered, that the Party directed by the former Order to be employed above the Shanadoah Falls be immediately employed in clearing and improving the River for Navigation from Payne's upwards through the Shanadoah Falls. ...," Ibid.

The Long Canal, on the Maryland shore opposite Harper's Ferry, was obliterated by Chesapeake and Ohio Canal construction in 1832-1833. The new Chesapeake and Ohio Canal was constructed in the sluice of the Patowmack Canal for nearly two miles. Letter, Thomas F. Purcell, Civil Engineer, to Edward Colston, January 27, 1835, <u>Document No.1, Virginia Senate Journal, 1834-1835</u>, 1.
 Letter, George Washington to William Grayson, August 22, 1785, John C. Fitzpatrick, (ed.), <u>The</u>

Writings..., op. cit., Volume 28, 234.

Washington wrote: "With respect to this part of the business [i.e. concerning locks and bypass canals] I feel, and always have confessed an entire incompetency: nor do I conceive that theoretical knowledge alone is adequate to the undertaking. Locks, upon the most judicious plan, will certainly be expensive; and if not properly constructed and judiciously placed, may be altogether useless. It is for these reasons therefore that I have frequently suggested (though no decision has been had) the propriety of employing a professional man. ...,"Letter, George Washington to John Fitzgerald and George Gilpin, March 31, 1786, John C. Fitzpatrick, (ed.), The Writings..., op. cit., Volume 28, 397-

101 Some sources say four locks.

102 Replaced by masonry locks in 1818.

103 NA-RG79, Entry 179, Payroll for April 28 to July 28, 1792, Little Falls.

The resolution stated: "Resolved that a number not exceeding two hundred Negro slaves be hired at a price not exceeding Sixty dollars per year. The time to commence the first day of January Next, the hire to be paid half yearly.—The owners of the Slaves to provide good cloathing and a good Blanket for each. In case of Sickness or Elopement, Such time to be discounted out of the hire or made good by labour...," NA-RG79, Entry 160, <a href="Proceedings...">Proceedings...</a>, November 5, 1792, 42.

<sup>106</sup>NA-RG79, Entry 179, "Number of Yearly Negroes in the Potowmac Companys Employ: their Owners Names and the Time they Commenced," October 1794.

<sup>107</sup> NA-RG79, Entry 160, <u>Proceedings...</u>, December 27, 1794, 49.

Leonard Harbaugh was born in 1749 in Pennsylvania and died 1822 in Washington, D.C. He moved to Baltimore sometime before 1773 and again to Washington, D.C. in the early 1790s.
Leonard Harbaugh, A Journal, Of Accounts, Etc. Thomas Harbaugh, with the Potomac Company and Others, from 1803 to 1833, Unpublished manuscript, copy at Western Maryland Room Hagerstown (Maryland) Library, 71.

Thomas Harbaugh was born in 1777 in Baltimore and died 1857 in Baltimore. He was the third son of 12 sons and 1 daughter of Leonard Harbaugh and Rebecca Rinehart. Ibid.

<sup>110</sup> Robert J. Kapsch, <u>The Labor History of the Construction and Reconstruction of the White House</u>, <u>1793-1817</u>. (Unpublished Ph.D. dissertation, University of Maryland, 1983), 381.

<sup>111</sup> Board of Directors member Doddridge wrote" "I am informed that the Potomac Company had formerly employed an European Engineer to lay out and construct their works. These were found insufficient and perishable, and they are now in the course of being replaced, with the happiest prospects by others of Mr. Thompson's construction [Thompson, at this time, had been rebuilding the Little Falls locks in masonry]. ...," Letter, P. Doddridge to W.C. Nicholas, Board of Public Works, Virginia, April 16, 1816. <u>Annual Report of the President and Directors of the Board of Public Works to the Legislature of Virginia</u>, December 1816,21.

Ralph E. Ehrenberg, "Nicholas King: First Surveyor of the City of Washington, 1803-1812,"
 Records of the Columbia Historical Society of Washington, D.C. 1969-1970, Francis Coleman
 Rosenberger (ed.), Volumes 69-70, (Washington, D.C.: Columbia Historical Society, 1971), 39.
 NA-RG79, Entry 160, Proceedings ..., July 14, 1794, 48.

A.W. Skempton, et al., A Biographical Dictionary of Civil Engineers in Great Britain and Ireland,
 Volume 1: 1500-1830, (London: Thomas Telford for the Institution of Civil Engineers, 2002), 773.
 Letter, George Washington to Thomas Johnson, December 28, 1786, W.W. Abbot and Dorothy Twohig (eds.), The Papers..., op. cit., Volume 4, 487.

116 Letter, George Washington to Tobias Lear, December 12, 1794, John C. Fitzpatrick, (ed.), The Writings..., op. cit., Volume 34, 54.

117 Letter, George Washington to Tobias Lear, December 21, 1794, John C. Fitzpatrick, (ed.), The Writings..., op. cit., Volume 34, 66.

118 Washington wrote: "The plan of Mr. Claiborne Engineer, as far as I understand it, is to avoid locks altogether. The vessels are received into a basket or cradle, and let down by means of a laver and pullies; and raised again by weights at the hinder extremity of the laver, which works on an axis at the top of a substantial post fixed about the centre of the laver...," Ibid, 66-67. This is an early reference to the use of inclined planes and boat cradles for moving boats over land elevations, such as was later used on the Morris Canal and the Pennsylvania Main Line. An inclined plane was built at Great Falls but this was a ramp for rolling barrels down to waiting vessels below Great Falls. Claiborn is Richard Claiborne who was awarded 3,555 acres of bounty land in Ohio for his service during the Revolutionary War. He was closely associated with James Rumsey in Rumsey's efforts to develop steam propulsion for vessels and was interested in portage sites between the Potomac and Ohio basins. See footnotes, Letter, George Washington to Richard Claiborne, December 15, 1784, Abbot and Dorothy Twohig (eds.), The Papers..., op. cit., Volume 2, 185. "Claiborn's engineer," is not identified.

119 Letter, George Washington to Tobias Lear, January 12, 1795, John C. Fitzpatrick, (ed.), <u>The Writings...</u>, op. cit., Volume 34, 85.

<sup>120</sup> Letter, George Washington to Tobias Lear, March 5, 1795, John C. Fitzpatrick, (ed.), <u>The Writings...</u>, op. cit., Volume 34, 132.

Tobias Lear wrote: "At the last annual meeting the Company directed that Mr. Weston, the person who has the direction of the Susquehannah & Schuylkill Canal should be requested to take a View of the Great Falls and give his opinion as to the most eligible way of conducting those Locks from the foot of the Canal to the River - the application to him was immediately made but his presence could not be procured till the middle of March, during which time every kind of work at the Great Falls was necessarily Suspended. Upon examination of the Ground & River Mr. Weston recommended it to the President & Directors to relinquish the place where considerable progress had been made in sinking some of the Lock seats & to conduct the Locks to that part of the river which had been originally marked out for that purpose but given up upon the Representation of Mr. Smith the Conductor of the work at that time, from the view of Saving the expence of one of the Locks - at the same time Mr. Weston took a view of the several pieces of work done upon the river from the Shanandoah Falls to tide water especially the Locks at the Little Falls all of which as far as executed met with his warmest approbation - he also took a view of those parts of the River Shanandoah where the principal impediment to that navigation are to be encountered. His observations upon different parts were put into writing which are ready to be produced to the Company - No time was lost after Mr. Weston's View of the Great Falls in taking the necessary measures to carry his recommendations into effect... ," NA-RG79, Entry 160, Proceedings..., August 6, 1795, 60-61. Weston's report has not been located and has apparently not survived.

122 Corra Bacon-Foster, op. cit., 90.

125 Robert J. Kapsch, The Labor History of the Construction and Reconstruction of the White House,

1793-1817, op. cit., 104.

126 Committee on History and Heritage, American Society of Civil Engineers, A Biographical Dictionary of American Civil Engineers, (New York: American Society of Civil Engineers, 1972). Volume 1, 101. Don Postle, "An Early American Civil Engineer: Isaac Roberdeau, Canal History and Technology Proceedings, (Easton, PA: Canal History and Technology Press, 1999), Volume XVIII, 173-200. Richard Shelton Kirby, "William Weston and His Contribution to Early American Engineering, Transactions, The Newcomen Society, Volume XVI 1935-1936, 1-17.

127 Isaac Roberdeau, "Mathematics and Treatise on Canals," manuscript, 1796. Manuscripts Division, Library of Congress.

<sup>128</sup> NA-RG79. Entry 160, Proceedings..., June 12, 1795, 52.

129 Ibid., 52.

130 Ibid., 54.

131 The order read: "Ordered that Advertizement be published in the Alexandria, George Town, Shepherd Town & Frederick Papers that the Directors will purchase Three thousand Cubic feet of Lime stone to be delivered at the lower end of the Canal at the Great Falls before the 15th Mar, 1st April & 15th May next and each piece of Stone to be not less than two feet by four, not less than four inches thick and a Quantity not less than Six thousand Bushels of good unslacked Lime to be delivered at the same place...."NA-RG79, Entry 160, Proceedings..., December 22, 1795, 65. 132 The record stated: "That a Quantity of 3 Inch Rope not less than two Coils, be procured and fixed in the Ringbolts below the Great Falls, for the purpose of hauling Boats up the River...," NA-RG79, Entry 160, Proceedings..., February 5, 1796, 68.

133 Osgood R. Smith, "Present Reminders of Early Commerce on the Potomac River above

Washington," Pamphlet, 1983, 8 pages.

<sup>134</sup> NA-RG79, Entry 160, Proceedings..., December 22, 1795, 65.

<sup>135</sup> Washington wrote: "If the directors are in want of such a character, as the enclosed letter describes, it may be well to intimate it as soon as possible; as it is not likely that Mr. Myers will remain long unemployed, as lock navigation is contemplated in many parts of this country. I have not seen the Gentleman myself, but understand from others that his testimonials are full and ample; and that he is a stout, healthy man. ...,"Letter, George Washington to Tobias Lear, November 30, 1795, John C. Fitzpatrick, (ed.), The Writings..., op. cit., Volume 34, 381.

136 Washington wrote to Lear: "I mention this because the letter of Mr. Myers seems to imply more, and as much depends upon the skill, industry and other qualifications of an Engineer, or Person employed in such a work, that you may examine him critically yourselves; for it is proper I should observe that I have no other knowledge of Mr. Myerss fitness than is derived from his own Acct, and some papers which he has shewn, but which I had not leisure to examine correctly. ...,"Letter, George Washington to Tobias Lear, December 25, 1795, John C. Fitzpatrick, (ed.), The Writings..., op. cit., Volume 34, 411.

NA-RG79, Entry 160, Proceedings..., January 4, 1796, 67.

138 Ibid, 66.

139 Ibid., February 1, 1796, 71.

140 The resolution stated: "Resolved, that measures be taken immediately to complete the House already begun on the lot belonging to the Potomak Company at the Great Falls and to erect such other works as may be necessary for the accommodation of those people who may be employed by the Potomak Company at that place in the cheapest manner that will answer the purpose: And that to effect these objects, twelve thousand feet of Inch Plank be purchased and sent to Great Falls by the best and most expeditious means. The dimensions of the Building contemplated for the accommodation of the people, are 79 ft long, 18 Ft wide and 7 ft high in the Clears to be covered with Plank. ...," Ibid., February 5, 1796, 68.

<sup>123</sup> A.W. Skempton, et. al., A Biographical Dictionary of Civil Engineers in Great Britain and Ireland. Volume 1: 1500-1830, (London: Thomas Telford for the Institution of Civil Engineers, 2002), 774. Letter, Benjamin Henry Latrobe to John Spear Smith, April 25, 1816, as published in Annual Report of the President and Directors of the Board of Public Works to the Legislature of Virginia, December, 1816, 26.

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<sup>141</sup> NA-RG79, Entry 160, Proceedings..., March 21,1796, 73.
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WILL be given to a few men who are acquainted with the quarrying of freestone. Apply to Thomas Paxton, or John Delahunty, at the Seneca quarries; within ten miles of the Great Falls. ... " <u>Washington Gazette</u>, June 22, 1796, 3.

151 Ibid., January 6, 1797, 90.

<sup>142</sup> NA-RG79, Entry 160, Proceedings..., 1796.

<sup>144</sup> The Board's order read: "Ordered that the Engineer Capt. Myers do go to Baltimore and endeavour to buy any number of Irish Labourers not exceeding Thirty as he may approve of at a credit of Sixty or ninety days and convey them to the Great Falls. .. ," Ibid., September 13, 1796, 83.

<sup>145</sup> The order read: "Ordered that Capt. Myers the Engineer be allowed Twenty Four hundred Dollars p ann, for this year and the next and the further sum of Five Thousand dollars if he compleats the Locks at the Great Falls so that loaded boats can pass in twelve months or Two Thousand five hundred if in Fifteen Months or in Proportion for any time above twelve and under Fifteen Months, from the first Day of the Present month and that the same be communicated to him by letter ... ," Ibid.

NA-RG79, Entry 164, "Contract With John Henry," October 1, 1796.
 NA-RG79, Entry 190, "The Petition of George Pointer to the President and Directors of the Chesapeake and Ohio Canal," September 5, 1829, published in Appendix, to Robert J. Kapsch, "The Potomac Canal: A Construction History, op. cit., 216-219.

<sup>&</sup>lt;sup>148</sup> NA-RG79, Entry 164, "Contract With John Henry," October 1, 1796. <sup>149</sup> NA-RG79, Entry 159, <u>Proceedings...</u>, January 13, 1801.

<sup>150</sup> One advertisement read: "LIBERAL WAGES

<sup>152</sup> NA-RG79, Entry 160, Proceedings..., November 2, 1796, 87.

<sup>153</sup> NA-RG79, Entry 160, January 6, 1797, 90.

<sup>154</sup> Ibid., January 12, 1797, 91.

<sup>155</sup> Ibid., January 13, 1797, 92.

<sup>156</sup> Ibid., January 14, 1797, 92.

<sup>157</sup> Ibid., January 14, 1797, 92-93.

<sup>158</sup> Ibid., January 14, 1797, 93.

<sup>159</sup> The record stated: "Two other Houses under one Roof similar to those described, excepting the ground story have been built on a lot belonging to Capt Myers, one occupied by the low gate maker the other now used as an Office for the Clerks. ...," Ibid.

<sup>160</sup> The record stated: "The House intended to be built for the Potomak Company Lay (on) the Ground story and part of the first Story run up. The joists of the lower Floor are laid. Flooring and other Plank are on the spot for it but the Board have ordered that nothing more be done on it at present. ..."

<sup>161</sup> The record stated: "The Engineer having ordered to have the Accomodations at the Great Falls built in the cheapest manner that the nature of the Thing would admit of, the Measurement and Value of the Work is the only means now left to show if this order has been complied with or not. ... "Ibid.

<sup>&</sup>lt;sup>163</sup> NA-RG79. Entry 179, "Account of the Several artificers and Labourers, in the Potomac Company Service, employed by ther Engineer at his house... 1th of July to the 31th December 1796."

<sup>164</sup> Myers wrote: "The reason why I employed for my own use any of the Companys hands, was my not having been able to hire any servants in the whole country; chiefly owing to the advanced period of the season when I settled at the Great Falls. It therefore became a matter of necessity and not of choice. I have now provided myself with people to do all my own work, independent of any assistance from the companys people. ...," Ibid., Letter, To the Board of Directors, From Capt. Christopher Myers, January 21, 1797.

<sup>&</sup>lt;sup>165</sup> NA-RG79, Entry 160, <u>Proceedings...</u>, January 17, 1797, 95.

<sup>166</sup> The record stated: "Resolved that the Engineer Capt. Christopher Myers be immediately dismissed from the service of the Potomack Company for the following reasons.

<sup>1</sup>st. Because he refuses proper and reasonable Communications with the Directors, and to deliver plans which are already made, as well as to furnish others called for.

- 2d. Because he so often absents himself and gives so little of his time to the works of the Company that they have suffered very Materially in consequence.
- 3d. Because he has not furnished, when applied to, proper working plans to the different Artificers, and thence they have been either impeded in the progress of their business, or done it in such a manner as to make it necessary to pull it to pieces again, to the great Loss and Detriment of the Company.
- 4th. Because, he has not furnished, when called on by the Directors, Bills of Materials proper to be employed.
- 5th. Because he has neglected to inspect, or suffered to be passed, materials prepared for the Potomack Company's use by Contract, until the Directors driven to the necessity, or withdrawing their Confidence, employed an Inspector, when the several months after such materials were begun to be prepared and a proportion was condemned by the Inspector appointed, he at length makes a Report and acknowledges that a part of them are unfit for service. -- Instance the Cutt Stone. ... "NA-RG79, Entry 160, Proceedings..., May 2, 1797. 100-101.

<sup>167</sup> Ibid., May 2, 1797, 101.

168 The advertisement read:

"CAUTION

The public is requested to suspend any opinion, that may arise from certain C A LUMNIES in circulation, tending to injure my character, made on the force of a difference that has taken place between the directors of the Potomac Company and myself:

## WE HAVING MUTUALLY AGREED

## TO LEAVE THE BUSINESS TO ARBITRATION.

Therefore invidious and improbably tales, I have the confidence to think, will not obtain any degree of credit in the public mind; to whom, in a little time, I shall present a statement of the several causes that have induced me to resign the situation of Engineer to the Potomac Company.

Matildaville

Great Falls of Potomac 1 C MYERS

May 24, 1797"

Alexandria Advertiser, August 4, 1797, 1.

NA-RG79, Entry 190, "Petition of Captain George Pointer to the President and Directors of the Chesapeake and Ohio Canal," September 5, 1829, published in Appendix, to Robert J. Kapsch, "The Potomac Canal: A Construction History, op. cit., 216-219. 170 Ibid., June 6, 1797, 105.

<sup>171</sup> Ralph E. Ehrenberg, "Nicholas King: First Surveyor of the City of Washington, 1803-1812," Francis Coleman Rosenberger (ed.), Records of the Columbia Historical Society, 1969-1970, (Washington, D.C.: Waverly Press for the Columbia Historical Society, 1971), 31-65. Silvio A. Bedini, "The Kings of Washington, D.C. (1796-1818): Cartographers and Surveyors," With Compass and Chain: Early American Surveyors and Their Instruments, (Frederick, Maryland: Professional Surveyors Publishing Company, Inc., 2001), 571-579.

172 NPS, Letter, Nicholas King to Mr. Lear and Templeman, dated May 12, 1797, Records of the Potomac Company, Chesapeake and Ohio Canal National Historical Park, Acc. # 2498 (86); [269]. 

173 Footnote 30, Ralph E. Ehrenberg, op. cit. Ehrenberg incorrectly lists King's payment as \$13.13. King was paid £13-13s, Virginia Currency, approximately three times \$13.13. NA-RG79, Entry 160, Potomac Company "Waste Book, 1785-1800," 326.

174 Ralph E. Ehrenberg, op. cit., Footnote 49.

- <sup>175</sup> NA-RG79, Entry 179, "Note of New employes in the Service of the Potomac Company, Great Falls from an estimate made Sept. Sth 1797," <u>Records of the Potomac Company</u>. Included were 4 masons; 8 stone cutters; 8 carpenters and sawyers; 14 white laborers with 2 white servants; 4 blacksmiths; 16 black laborers; 2 female cooks; 2 female Company servants; 3 children; and a number of other men, probably also laborers.
- <sup>176</sup> There were some free blacks working as laborers. For example, "Negro Dick Free," NA-RG79, Entry 167, Potomac Company, Wastebook: 1785-1800, 321.
- 177 NA-RG79, Entry 179, "Names of the People in the employ of the Potomack Company, Great Falls, Oct. 3d '97."
- 178 Ibid.
- <sup>179</sup> The Potomac Company paid Peters £100 per year Virginia currency (£80 Maryland currency) for the use of his quarry, NA-RG79, Entry 167, 323.
- 180 Ibid., June 8, 1787, 325.
- <sup>181</sup> Ibid., June 7, 1787, 325.
- <sup>182</sup> NA-RG79, Entry 168, Ledger (1796), 1. Gridley was also working for the Commissioners of Public Buildings and would, a year later, have his contract abruptly terminated by the Commissioners on suspicion that he was "too Saucy..." and the author of a pamphlet which ridiculed the Commissioners. See Robert J. Kapsch, <u>The Labor History of the Construction and Reconstruction of the White House</u>, 1793-1817, op. cit., 285-292.
- <sup>183</sup> NA-RG79, Entry 160, Proceedings..., August 7, 1797, 113.
- 184 Ibid.
- 185 Ibid., October 4, 1797, 123.
- <sup>186</sup> NPS, Monthly payroll, January 1798, <u>Records of the Potomac Company</u>, Chesapeake and Ohio Canal National Historical Park, Acc. 2498, Number 292.
- <sup>187</sup> NPS, Monthly payroll, February 1798, <u>Records of the Potomac Company</u>, Chesapeake and Ohio Canal National Historical Park, Acc. 2498, Number 293.
- <sup>189</sup> NPS, Monthly payroll, March 1798, <u>Records of the Potomac Company</u>, Chesapeake and Ohio Canal National Historical Park, Acc. 2498, Number 294.
- <sup>190</sup> NPS, Monthly payrolls April, June, July, August, September, November, 1798, Records of the Potomac Company, Chesapeake and Ohio Canal National Historical Park, Acc. 2498, Numbers 297, 299, 300, 301, 302, 304. In July 1798, for example, workers included: Edward Sweeney, Stone Mason; Dominick Burns, Alexander Wallace, Charles Gough, Enoch Lovely and Patrick O'Hara, laborers. Some of these employees were long time Company employees. O'Hara, for example, had worked for the Company since 1786.
- <sup>191</sup> NA-RG79, Entry 160, <u>Proceedings...</u>, June 5, 1798, 133-134.
- <sup>192</sup> Ibid., 134-135.
- <sup>193</sup> Ibid., 148.
- <sup>194</sup> Ibid.
- <sup>195</sup> Ibid., 153-154
- <sup>196</sup> NA-RG79, Entry 160, Proceedings..., January 20, 1800, 181.
- <sup>197</sup> Ibid., August 4, 1800, 200.
- <sup>198</sup> Ibid., August 3, 1801, 219.
- <sup>199</sup> Ibid., August 4, 1800, 201.
- <sup>200</sup> Ibid., August 4, 1800, 200.
- <sup>201</sup> Ibid., August 3, 1801, 219.
- <sup>202</sup> Ibid., August 4, 1800, 201.
- <sup>203</sup> Ibid.
- Robert Wisely was injured: "... by the explosion of a rock charged with powder he had his face much wounded, and his Eyes so injured that he has not since recovered his sight. Altho from the best information obtained on the Subject it appears that the accident happened thro' the man's own imprudence by meddling with the blasting business not committed to him, and with which he was unacquainted. Yet as the intention was probably good and as the poor man's Situation was a deplorable one The Directors thought it but right to have the necessary care taken of him until except as to his eyesight he was restored to health; and since to contribute so far to his support as to

allow him a ration per day estimated at fifteen pence Maryland Currency. ...,"NA-RG79, Entry 160, Proceedings..., August 3, 1801, 222-223. The last payment was made to Robert Wiley in October 1804. Wiley sent a series of letters to Company Paymaster Joseph Carleton asking for further financial support. NPS, Records of the Potomac Company, Chesapeake and Ohio Canal National Historical Park: Acc. #2498 (81) [264]; #2498 (52) [235]; and # 2498 (53) [236], July 30, 1805, January 11, 1806, January 23, 1806.

<sup>205</sup> The record stated: "Agreed with George Jacobs to quarry at Senica and deliver along side the boats 3000 feet of Freestone of the White kind...," Ibid., January 12, 1801, 209.

<sup>206</sup> The record stated: "Resolved, that the following alterations be made, viz., Lock No. 1 instead of rising eighteen feet shall rise Twenty one feet. No. 2. instead of rising fifteen feet shall rise eighteen feet. Lock No. 3, instead of rising Twelve feet shall rise only Ten feet eight inches and that the width of said Lock No. 3 be so increased as when filled to admit two Boats of the usual size. Lock No. 4. shall be (indistinct) as is Lock but be completed as is correct to communicate between Locks No. 3 and 5. Lock No. 5 instead of rising twelve feet shall rise sixteen feet so that with the rise of eleven feet (indistinct) by the locks already finished the whole rise of seventy six feet eight inches shall be absorbed by the said Locks and that said Lock No. 5 if necessary be enlarged in its Contents by adding either in the length or Breadth ...," Ibid., May 4, 1801, 212. <sup>207</sup> Ibid., January 6, 1802, 224.

<sup>208</sup> Harbaugh wrote: "The Locks at the Great Falls of Potomac are Six in number, situated 14 miles above Georgetown, a greater part of them are blown out of the solid rock, a work of much labour & expence. A Further Discription of the size etc. of the Locks are—From Gate No. 1 of Lock No. 1, at the Bason-to gate No. 2 is 390 feet in length 25 feet wide and 6 feet deep - from Gate No. 2 to Gate No. 3 is 112 feet in length 15 feet wide and 14 feet deep, called Lock No. 2, thence from gate No. 3 to gate No. 4 is a small Bason 400 (feet) in length 30 feet wide and 5 feet Deep, thence from gate No. 4 to gate No. 5 is Lock No. 3 is 97 feet long 12 feet wide and 19 feet deep walls made of red free stone, cut thence from Gate No. 5 to a large apron is 97 feet in length 20 feet wide and 4 feet deep. thence from the apron to gate No. 6 is Lock No. 4 - 100 feet in length 12 feet wide and 16 feet deep, one side and the bottom in solid rock, thence from Gate No. 6 to Gate No. 7 is Lock No. 5 - 95 feet Long 12 feet wide and cut down in the rock about 25 feet in Depth - making both sides and Bottom all solid rock, thence from gate No. 7 to Gate No. 8 - is Lock No. 6 - is 84 feet long 12 feet wide and 24 feet Deep with 1-1/2 Sides and all the Bottom solid rock --- part of this Lock has been cut down through the rock 43 feet in Depth - the River rises in the Lock in high water 53 feet in height. The whole length from upper to lower gate is 1375 feet.

## Fall of Water

From Lock No. 1 into Lock No. 2 is 9 feet

From Lock No. 2 into Lock No. 3 is 15 feet

From Lock No. 3 into Lock No. 4 is 11 feet

From Lock No. 4 into Lock No. 5 is 18 feet

From Lock No. 5 into Lock No. 6 is 20 feet

73 feet ...," Ibid. Harbaugh's terminology is a bit skewed. What Total Fall is he refers to as Lock Number One was the 390 foot long canal entrance to what is usually known as Lock Number One. Hence there are five locks at Great Falls and not six. Harbaugh was not the only one to count the locks as six in number. Manaseh Cutler visited the Great Falls locks on January 30. 1802 and reported six locks. Corra Bacon-Foster, op. cit., 104.

<sup>&</sup>lt;sup>209</sup> NA-RG79, Entry 160. Proceedings..., January 6, 1802, 232.

<sup>&</sup>lt;sup>210</sup> NA-RG79, Entry 160, 235-238.

<sup>&</sup>lt;sup>211</sup> The Report to the Stockholders read: "Upon this event (opening the locks at Great Falls) it was generally expected that the Stock of the Company would immediately become productive to the holders and we had no doubt of being able to lay before you at this meeting such a State of the Tolls as would afford a handsome dividend - We are however sorry to say that notwithstanding in common years the River is now navigable from George's Creek to tide-water without interruption during a