

As a further reason that the statement simply of duties collected do not fairly express the extent of the import business of this port the fact must be mentioned that importations of foreign merchandise are made through this city in bond to western points, and when so made the duties are collected at the port of destination, and, of course, do not appear as part of the receipts of this office.

A comparative statement of the entries of merchandise affords a fairer and more flattering showing of the business of the port relating to importations.

Entries July 1, 1879 .....	4,538
Entries July 1, 1878 .....	4,158

Increase .....	380
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The next subject of this inquiry relates to tonnage traversing the harbor, and throughout the exhibit shows a very marked increase.

	1878.	1879.
Vessels arriving (foreign) of all nationalities .....	1,408	1,778
Vessels arriving coastwise .....	1,437	1,463

Total .....	2,845	3,241
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Increase of 1879 of 396 vessels.

Vessels clearing, foreign .....	1,475	1,729
Vessels clearing coastwise .....	1,794	1,871

Total .....	3,269	3,600
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Increase in 1879 of 331 vessels.

The gain in vessels, as respectively stated above, largely relates to those arriving from foreign ports and clearing thereto, and as such were vessels of heavy tonnage.

The above does not include a large class of vessels running coastwise that do not enter nor clear, but which class of vessels, nevertheless, sustain an important relation to this port both in its domestic and foreign interests.

Tonnage of the vessels entering and clearing, as above, for 1879 .....	4,946,318
Tonnage of the vessels entering and clearing, as above, for 1878 .....	4,285,276

Increase over 1878 .....	661,042
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Tonnage collected 1879 .....	\$130,153 30
Tonnage collected 1878 .....	107,450 80

Gain in 1879 .....	22,702 50
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The registered outstanding tonnage of this district amounts to 1,023 vessels, sail and steam, with a tonnage of 106,425.

Eight thousand six hundred and forty-five shippers' manifests were passed at the custom-house, as against 5,162 of last year.

The value of exports for the fiscal year just ended exhibits a most gratifying and encouraging showing of this branch of the commerce of Baltimore.

Exports, 1879 .....	\$57,563,905
Exports, 1878 .....	45,633,501

Increase for 1879 .....	11,930,404
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The excess for 1879 over the previous year is nearly as much in amount as a whole year's export less than a decade ago.

The growth of the export trade, as here shown, has been most extraordinary. Among the chief commodities exported may be mentioned grain in large quantities, flour, provisions, petroleum, tobacco, live stock, canned fruits, &c. From the exhibits thus afforded by the several departments of business conducted at this office, it is evident that the commerce of this port shows a steady growth and advancement, and in some of its branches exhibits a remarkable expansion. The enlargement yearly of its traversing tonnage is the salient feature which indicates its extent and prosperity, and which fact is to be accepted as indicating its vitality and vigor, which promises, if properly fostered, much greater expansion.

The several lines of steamships, coastwise and foreign, mentioned in former communications, are still vigorously maintained. The Allen Line during the winter increased the number of its steamships by adding to it some of the finest and largest in the service, and will probably continue that plan permanently. Besides which new lines have been inaugurated.

The Baltimore and Ohio and the Northern Central Railroad Company, respectively,

have a terminus at tide-water, which, together with their grain-elevators, constitute important features to the commerce and trade of this port. The largest shipping and a large share of the shipping of the port is docked at those places, both for discharge of cargo and the reception of freight.

The shipment of live stock can now be regarded as a feature of the commerce of Baltimore, and as soon as the restrictions abroad are removed, that feature will add largely to the trade of this district. The new system of tobacco inspections at Locust Point, on the property of the Baltimore and Ohio Railroad Company, has proved successful, and will require more enlarged accommodations. This interest bears an important relation to the commerce of this district.

Another important feature of prominence that may properly be mentioned, as internally associated with the subject of commerce, is the erection of a dry-dock on part of the Fort McHenry grounds adjoining the property of the Baltimore and Ohio Railroad Company at Locust Point. This enterprise is intended to be a work of great value and usefulness to commerce, locally and nationally.

The dock is to be constructed for the accommodation of steamships of large size. Because of its situation on the Atlantic seaboard, it will serve a most useful purpose to vessels, especially such as may be in southern latitudes needing repairs. It is now in rapid course of erection, and when completed will naturally add to the shipping of the district. Congress having given the grant of land upon which the dock is being erected, reserving therein the exercise of certain privileges in the work, the government, therefore, becomes more intimately and especially interested in the harbor of this district.

During the year there arrived at and departed from this port 447 steamships of an average capacity each of 2,000 tons. In some instances the tonnage capacity reached beyond 4,000 tons. Many of these vessels require much depth of water, more in some cases than the depth of the channel affords. The necessity, therefore, of depth of channel to accommodate that class of shipping is obvious and indispensable.

The width of the channel is equally important, so that vessels of such character may pass each other without grounding. In some cases, and perhaps in far too many, vessels of that class meeting each other at some points in the channel have not been able to pass without one or the other going to anchor in the mud. This sometimes occurs with vessels taking their first departure from the harbor, and in such instances militates against the commerce of the port, for the reason that a first experience of that character will deter a second attempt.

While these statistics show the strength and expansion of the merchant marine of this port to a remarkable degree, they also show inferentially that Baltimore, as a port, possesses advantages that are becoming patent to other localities.

These accretions to the tonnage of this port are not wholly the result of local expansion; shipping interests from other cities and some foreign places have located their interests in this city and ordered their ships to this place instead of elsewhere, as formerly, to receive freights. It will, therefore, appear from these statistics, and the subjects incidentally mentioned to which they relate, that the works of river and harbor improvements in this district and those adjacent to it are of great value and prime importance, indisputably, both locally and nationally, and that their value obviously would be promoted by such expenditures as are necessary to perfect their facilities for the purposes of commerce.

I remain, your obedient servant,

JOHN L. THOMAS, Jr.,  
Collector.

Col. W. P. CRAIGHILL,  
Major, Corps of Engineers.

#### PIER AND BULKHEAD LINES OF BALTIMORE HARBOR, MARYLAND.

WASHINGTON, D. C., February 11, 1878.

SIR: I have the honor to send, by the hands of the junior member of the board, the report of the advisory board relative to the bulkhead and pier lines of Baltimore harbor.

Very respectfully, your obedient servant,

A. A. HUMPHREYS,  
Brigadier-General, Chief of Engineers, U. S. A., &c., &c., &c.

HON. JOHN LEE CARROLL,  
Governor of Maryland.

## REPORT OF THE ADVISORY BOARD.

JANUARY 31, 1878.

SIR: On the 30th of March, 1876, an act of the legislature of Maryland, recited below, was approved by the executive:

## CHAPTER 195.

AN ACT authorizing his excellency the governor to apply to the President of the United States for appointment of a board of three commissioners to be detailed for the survey of the harbor of Baltimore City and the adjacent waters, and the establishment of the pier and bulkhead lines thereof, and appropriating \$5,000 to pay the expense of said board.

Whereas it has been represented to this general assembly that the harbor of the city of Baltimore has been, and is, unnecessarily obstructed, encroached upon, and injured by the erection of wharves, piers, and bulkheads, and that the area and channel thereof are likely to be further narrowed by privileges granted by the mayor and city council, without sufficient information and inquiry as to the extent of the injury to be inflicted thereby: with the view, therefore, of obtaining such information as may enable the general assembly to control such works and to prevent such injury in the future—

SECTION 1. *Be it enacted by the General Assembly of Maryland,* That the governor be, and he is hereby, authorized and requested to apply to the President of the United States for the appointment of a board, consisting of three commissioners, to be detailed from the Corps of Engineers of the Army and from the officers employed in the Coast Survey, who shall have power—

1. To cause the harbor and the adjacent waters, lands, wharves, and docks to be surveyed, in order to ascertain the present condition and lines of the said harbor and of the Patapsco River adjacent thereto, and whether the navigation thereof is improperly obstructed, and whether any further extensions of piers, wharves, bulkheads, or other structures into said harbor ought to be allowed, and to what extent, and whether any grants, licenses, or privileges already given by the mayor and city council of Baltimore for the extension of such works will, if executed, impair, obstruct, or encroach upon the navigation of said harbor, or the free and beneficial general use thereof.

2. To report the results of the surveys and examinations thus made to the governor of Maryland with all convenient dispatch.

3. To recommend to the next general assembly the establishment and definition of the outer water-lines of said harbor, beyond which no erection or permanent obstruction of any kind shall be permitted, and to submit such provisions as they may deem wise and necessary in respect to the enlarging or filling up of the basin, docks, coves, and recesses, or any part thereof; the size, position, and extent of piers, wharves, and bulkheads within the outer water-lines of said harbor, and to present such other recommendations as in their judgment may be calculated to preserve forever the free navigation and general beneficial use of said harbor and river.

4. To be caused to be prepared and submitted with their report maps of the said harbor and its adjacent waters, exhibiting the outer water-lines of existing piers, wharves, and bulkheads, accompanied with such field-notes, measurements, and elucidations as they may consider necessary to a full exposition and understanding of the subject.

SEC. 2. *And be it further enacted,* That the sum of five thousand dollars is hereby appropriated to pay the expenses of the said commissioners, out of any money in the treasury not otherwise appropriated.

SEC. 3. *And be it enacted,* That in case the said commissioners shall in writing represent to the governor that any piers, wharves, or other works in progress under any ordinances or other authority of the mayor and city council will, if completed, interfere with the establishment of such outer water-lines as they may deem proper to recommend, it shall be the duty of the governor to cause all works thereon to be suspended until the general assembly shall authorize the further prosecution thereof or direct their removal, as, in its wisdom, the general assembly may deem most advisable.

SEC. 4. *And be it further enacted,* That the outer water-lines of the harbor and river, which shall be defined and recommended by the said commissioners as hereinbefore provided, shall be thenceforward recognized and observed as the permanent line, beyond which no structures shall be built, and no change of the port warden's-line of the harbor of the city of Baltimore shall hereafter be made without the consent of the general assembly.

SEC. 5. *And be it enacted,* That this act shall take effect from its passage.

Approved, March 30, 1876.

A board was organized by virtue of the following order:

SPECIAL ORDERS }  
No. 105. }

HEADQUARTERS OF THE ARMY,  
ADJUTANT-GENERAL'S OFFICE,  
Washington, May 29, 1876.

The following order has been received from the War Department:

By direction of the President, Brig. Gen. A. A. Humphreys, Chief of Engineers; Mr. Carlile P. Patterson, superintendent of the Coast Survey; Maj. Wm. P. Craighill, Corps of Engineers, are hereby constituted a board for the survey of the harbor of Baltimore City and the adjacent waters, and the establishment of the river and bulkhead lines thereof. The board will convene at the earliest practicable date, and will report to the governor of the State of Maryland before entering upon their duties.

ALPHONZO TAFT,  
Secretary of War.

By command of General Sherman:

E. D. TOWNSEND,  
Adjutant-General.

Official:

L. H. PELOUZE,  
Assistant Adjutant-General.

The required survey was made by a party detailed by the Superintendent of the United States Coast Survey, under the personal supervision of Mr. I. W. Down, assistant United States Coast Survey.

The map in five sheets accompanies this report. Upon this map are drawn a bulkhead and a pier-head line. In the opinion of the board it is allowable to fill in continuously as far out as the bulkhead line; between that line and the pier-head line projecting piers with intervening slips may be constructed, but no structure or filling of any kind should be permitted outside the pier-head line.

It is unnecessary to describe these lines in detail, as they are clearly shown upon the maps, of which the position of any point may always be verified from the records of the United States Coast Survey.

The board has not entered into the subject of the size, position, and extent of piers, wharves, and bulkheads, as it is the opinion of the board that these must be determined from time to time by the special requirements of commerce. It has been considered desirable to show upon the map the original shore line, as far as its position can now be determined with accuracy.

A comparison of this line with the lines of the existing wharves will show a very extensive encroachment upon the original area of the fine harbor and basin of Baltimore, which are still so well adapted to the convenient accommodation of a great commerce. This encroachment has at some points been decidedly injudicious. It has recently been to a limited extent compensated for by the extensive dredging done to increase the depth of water with a consequent increase of capacity of the tidal reservoir. A more important aspect of these encroachments is that due to the interference of the objectionable structures with convenient navigation.

It is proper to observe that the lines considered allowable by the board are those which seem the best under existing circumstances, and by no means those which would have been recommended had the work of building wharves and piers been less extensively carried on.

The location of the lines is the result of the avoidance of either of two extremes, of which the one would lead to too much limitation of, and encroachment upon, the space needed for vessels at anchor, and passing to and fro; and the other would prevent the erection of the wharves and piers required for the proper accommodation of vessels loading and unloading, and for the various store-houses and other arrangements necessary for the convenient transaction of the shipping business of a great port.

The absence of strong tidal and fluvial movements, owing to the small ordinary rise and fall of the tide, and the circumstance that the current of no large stream is passing through the anchorage grounds and passage ways, simplifies very much the problem of fixing the limiting lines of construction.

The board abstain from expressing an opinion as to the width or direction to be given to Jones's Falls, except to say that the width of the outlet, as shown on the map, nearly 300 feet, seems ample, and that it would be an improvement to remove the bridge through which vessels must now pass to enter the city dock. If this bridge were placed over Jones's Falls, on the prolongation of Lancaster street, the present city dock might be made a much more important part of the harbor.

It would be a great improvement if portions of the wharves of Stickney & Co., and the Light-house wharf, opposite Fort McHenry, and of the wharf at Fort McHenry could be removed. They should never have been built with their existing dimensions and positions, as they are in the very throat of the harbor, and are an obstruction to vessels entering.

If the bridge leading from Ferry Point were removed, the point itself should be cut off to the line shown on the map.

The board submit that the amount of five thousand dollars appropriated for the expenses of the survey was sufficient for that purpose, but did not quite include the cost of completing the drawings, upon which account there is yet a balance due to the draughtsman.

It is respectfully requested that an appropriation of three hundred dollars may be made to meet this payment.

A. A. HUMPHREYS,  
*Brig. Gen., Chief of Engineers, Major-General, &c., &c., &c.*  
 C. P. PATTERSON,  
*Superintendent Coast Survey.*  
 WM. P. CRAIGHILL,  
*Major of Engineers, &c.*

HON. JOHN LEE CARROLL,  
*Governor of Maryland.*

F 5.

IMPROVEMENT OF HARBOR OF CAMBRIDGE, MARYLAND.

The town of Cambridge, the county seat of Dorchester County, is situated about 18 miles from the mouth of the Choptank River, on the eastern shore of the Chesapeake Bay, about 70 miles from the city of Baltimore, its communication with Baltimore is maintained by two lines of steamboats. It is also the terminus of the Dorchester and Delaware Railroad, which connects it with the railroad system of Delaware and brings the town into direct communication by rail with the principal Atlantic cities.

The Choptank is a fine river; 25 feet water can easily be carried for a considerable distance above Cambridge. Its banks and back country are in a high state of cultivation. Large quantities of peaches, grain, ship-timber, and other timber are transported on it, being the product of the adjacent country.

Cambridge has considerable advantages for ship-building, and has engaged to some extent in that business. Oyster packing is also a business of importance there.

The original survey of the harbor was made in October, 1870. A copy

of the map is furnished to show its condition previous to the operations conducted with funds appropriated by the United States. A comparison of this map with that made recently (copy herewith) will give a better idea of the improvement effected than any words. The first appropriation of \$10,000 by Congress was made March 3, 1871.

Previously the citizens had endeavored to improve the harbor themselves, but they had not sufficient funds, and what they did amounted to little in the way of permanent improvement.

The idea of the improvement has been to make a channel from the deep water of the Choptank to the railroad wharf in the inner harbor, and to increase the dimensions of that harbor, the outer channel to be not less than 100 feet wide, and the depth of all the dredging to be 8 feet at mean low-water.

The second appropriation of \$10,000 was made June 10, 1872; the third, of \$5,000, March 3, 1873, and the operations were brought to a close in August, 1873. The improvement of the town itself and its business has been very marked. The pressure for still more enlargement of the inner harbor, and for increased width of the channel leading to it, became so strong that another appropriation of \$5,000 was made June 18, 1878, without an estimate from the Engineer Department, more than five years having elapsed since the last one. The work was completed March 26, 1879. The map made immediately thereafter shows the extent of the operations under the appropriation of 1878. The business and importance of the place continued so to improve that Congress made an additional appropriation of \$2,500 March 3, 1879. This money has not yet been made available for expenditure.

The western terminus of a very favorable route for the proposed ship-canal between Chesapeake and Delaware Bays is on Ferry Creek, a tributary of the Choptank, very near Cambridge.

Should the canal be constructed on that route the importance of Cambridge would be vastly increased.

Cambridge is in the collection-district of Baltimore. The nearest light-house is the Choptank River light.

Money statement.

July 1, 1878, amount available.....	\$5,000 00
Amount appropriated by act approved March 3, 1879.....	2,500 00
	\$7,500 00
July 1, 1879, amount expended during fiscal year .....	4,480 97
	3,019 03

Proposals for dredging Cambridge Harbor, Maryland, opened at 12.5 p. m., September 24, 1878.

No.	Name.	Residence.	Time.		Price per cubic yard.	Remarks.
			Commence—	Complete—		
1	Morris & Cumings Dredging Company.	New York ....	1 week from date of contract.	Nov. 30, 1878	\$0 17	
2	Daniel Constantine.	Baltimore.....	Oct. 15, 1878	Jan. 1, 1879	14 1/2	Measured in scows. Thrown behind bulkheads.
3	G. H. Ferris.....	do .....	Nov. 15, 1878	July 1, 1879	13 1/2	
4	Henry D. B. Norris..	Salem, Va.....	Nov. 1, 1878	Jan. 1, 1879	30 25	Measured in scows. Thrown behind bulkheads.

Contractor, G. H. Ferris, at 13 1/2 and 10 cents.

## F 6.

## IMPROVEMENT OF WICOMICO RIVER, BELOW SALISBURY, MARYLAND.

Salisbury is about 20 miles from the mouth of the river, and is the most important town in Wicomico County. It is a very thriving place. A survey of about 2 miles of the river below Salisbury was made in March, 1871. It was found that only about feet could be carried to the town at low-water. The improvement proposed was to dredge a channel 75 feet wide and 7 feet deep at mean low-water, and to build dikes to contract the water-way. Much of the material in the shoals was found to consist of sawdust coming down from the mills above and in the town. The citizens agreed to build the dikes which were necessary for the contraction of the water-way. It was estimated that the cost of the dredging would be \$17,000, with an annual expenditure of \$2,500 to keep the channel open.

The first appropriation of \$5,000 was made June 10, 1872. With this money dredging was begun in August, 1872, and continued until November 11, of the same year, when the appropriation was exhausted. A channel about 25 feet wide and four-fifths of a mile long had been made, extending from the bridge at Salisbury through the shoalest part of the river. For about one-fifth of a mile this channel had a depth of 5 feet at mean low-water; the remainder had 7.

Congress appropriated \$5,000 March 3, 1873. An examination of the channel was made in March of that year, which showed a great shoaling; due to the failure of the property-owners to execute their agreement to build the necessary dikes to stop the inflow of sawdust from the mills.

Another appropriation of \$5,000 was made June 23, 1874, but nothing in the way of dredging was done in 1873 or 1874, because it was useless until the dikes should be built and the inflow of sawdust stopped. In 1874 the citizens constructed about 2,700 of the 9,000 feet of dike proposed by the original plan. A contract was made in the latter part of October, 1874, for a channel 50 feet wide and 5 feet deep at mean low-water. The work was to begin December 1, 1874. Delay was occasioned by the failure of the plan of the contractor, who expected to pump the material directly from the place of excavation. Late in December, 1874, the better plan was adopted of using a dredge to deposit the material in a high chute floated on one or more scows, and washing the same, by means of a large pump, through the chute, over the dike. Ice and bad weather prevented anything being really done until the middle of April, 1875. Another appropriation of \$5,000 was made March 3, 1875. The contractor continued his work until January 7, 1876, when the funds were exhausted and the work was suspended. The United States also assisted in the extension of the dikes until July 16, 1875.

In addition to the channel described a turning-basin near the town was also dredged. This channel, extending about 7,000 feet from the bridge at Salisbury to deep water below, was to enable vessels drawing  $7\frac{1}{2}$  or 8 feet to reach the town at ordinary high-water; whereas, previously, all vessels drawing more than 4 feet were obliged to receive and discharge their cargoes below, by the use of lighters, at a large expense, often amounting to a prohibition of water-carriage.

The channel was completed as stated except for a short portion, which could be made only 38 feet in width, owing to the lack of funds.

Another appropriation of \$5,000 was made August 14, 1876, which did not, however, become available until March 31, 1877. A re-examination of the entire channel and dikes was made in May, 1877, when it was found that the channel had stood quite well, both as to width and depth, from the deep water below to the wharves near the town, a depth of fully 5 feet at ordinary low-water being found over the entire distance. Along the wharves and at the turning-basin near the iron bridge, it had filled in very badly, a depth of only 2 feet at ordinary low-water being found at some places. This filling seemed due in great measure to the inflow of sawdust from the mills above. The dikes were found to have remained in very good condition. It was arranged to increase the width of the channel to 70 feet, to maintain the depth of 5 feet at mean low-water, and to restore the depth in the turning-basin.

The contractor did not commence work until August 30, 1877. By the 5th of January, 1878, when the funds were exhausted, the work was done. Some slight repairs were made to the dikes in June, 1877.

June 18, 1878, another appropriation of \$5,000 was made. The project for its expenditure contemplated increasing the depth of the channel from 5 to 7 feet at mean low-water and to give a width of about 50 feet, which was as much as the funds would allow. The work began August 26, 1878, at a point about  $1\frac{1}{2}$  miles below the town. The work dragged heavily up to the end of 1878, owing to the difficulty of disposing of the dredged material from the scows. Mr. G. H. Ferris was contractor. A suspension took place in January and February, 1879, owing to ice and stormy weather.

Operations were resumed the middle of March, 1879, with the use of the machinery of Mr. G. W. Parsons, which has been previously referred to. The material was dumped from the dipper of the dredge into a hopper, into which was poured at the same time a strong stream of water, and the material, thus mixed with the water, readily passed off down an inclined spout, supported by floats, to any reasonable distance from the dredge, say from 100 to 175 feet. For material thus removed, measured in place, the United States paid 22 cents per cubic yard, or  $17\frac{1}{2}$  cents measured in scows. The material excavated was placed partly behind the dikes, which were built to regulate the water-way, and to afford a place for such deposition. The remainder of the material has been placed either upon the flats, whence it was not likely to return to the channel, and at the same time elevating them in places into new and better banks for the stream, or in secondary channels with the object of diverting the flow into the dredged channel. The dredged channel was made 50 feet wide to a point about 1 mile below the bridge at Salisbury, and 40 feet wide to a point  $\frac{2}{5}$  of a mile below the bridge. The work was concluded April 17, 1879. Some small repairs were made to the dikes in March, 1879. Under instructions of April 7, a project was submitted April 17, for expending the last appropriation of \$3,000, made March 3, 1879.

It was recommended that the work be continued by widening the channel to 65 feet, maintaining the same depth as before, 7 feet at mean low-water. Authority to proceed has not been received at the close of the fiscal year.

It will be observed that the work on the Wicomico has much exceeded the original estimate. This is due to several causes. In the first place, a portion of the expense of the dikes was borne by the United States, which it was expected the citizens would pay. In the next place, much was lost at each suspension of the work between succes-

sive small appropriations. This will always happen in such cases. Mention has been made of a fruitful source of deposition in the dredged channel—the flow of sawdust from the mills above. This great cause of rapid filling has now disappeared, as the mill-owners have arranged to prevent their sawdust from escaping into the river. It may be expected that a very much greater degree of permanency will now characterize what has been recently done, and what yet remains to be done.

The maps herewith show the condition of the river before anything was done by the United States, and its condition at the close of the operations of the fiscal year terminating June 30, 1878.

It is stated on good authority that—

The channel constructed by the government has been our greatest improvement of late years. Lumber dealers are unanimous that their business at present low prices would stop if it had to be conducted by the slow and expensive system of lighterage of former years. Grain merchants are again bringing back to the town this trade which had left our markets. Cheapening of freights enables them to buy upon margins of 5 to 7 cents where formerly 13 to 17 cents were required. Notwithstanding the advantages already accrued from improved navigation, the full value of the channel will not have been reached until made deep enough for the navigation by steamers suitable for transporting rapidly the perishable, though profitable, produce now raised by farmers to the exclusion almost of the cereals formerly raised.

The Wicomico is in the collection-district of Crisfield. The nearest light is that of Watt's Island.

*Money statement.*

July 1, 1878, amount available .....	\$5,035 00	
Amount appropriated by act approved March 3, 1879 .....	3,000 00	
July 1, 1879, amount expended during fiscal year .....		\$8,035 00
		5,034 95
July 1, 1879, amount available .....		3,000 05
Amount (estimated) required for completion of existing project .....	\$7,000 00	
Amount that can be profitably expended in fiscal year ending June 30, 1881 .....	7,000 00	

*Abstract of bids for dredging in Wicomico River, Maryland, opened at 12.5 p. m., August 8, 1878.*

No.	Name.	Residence.	Time.		Price per cubic yard.	Remarks.
			Commence—	Complete—		
1	American Dredging Company.	Philadelphia.	Oct. 1, 1878.	Jan. 1, 1879	\$0 22	Measured in dipper.
2	G. W. Parsons .....	Salisbury, Md.	Aug. 20, 1878	Dec. 31, 1878	22	Measured in place. If material can be thrown over dike without rehandling, 15 cents per cubic yard.
3	G. H. Ferris .....	Baltimore.....	.....	June 30, 1879	17½	

Contractor, G. H. Ferris, at 17½ cents.

COMMERCIAL STATISTICS.

SALISBURY, MD., June 24, 1879.

COLONEL: During the past year the lumber and grain trade of Salisbury has increased considerably. I append a statement of the commerce of the town near as I could obtain it.

Sixteen schooners, registering 953 tons, and 56 sloops and smaller craft trade from the town. Shipments have been, 11,300,000 feet of rough lumber, 3,500,000 feet of dressed flooring, 436,000 packing cases, 600,000 peach crates, 5,400 berry crates, 12,000 finished hubs, 4,000 cords of cordwood, 3,700 cords manufactured kindling wood, 2,500

railroad ties, 96,000 bushels grain, 12,800 bushels corn-meal, 2,100 barrels flour, 13,600 pounds wool. The value of the berry crop for the season just ended is over \$34,000. Other farm products shipped have been, 20,000 melons, 4,500 barrels vegetables, 3,400 crates peaches.

For the present season the above quantity of melons will be doubled and of peaches quadrupled. Of oysters, 36,000 bushels are sold at our wharves, with 63,000 bushels of shells for agricultural purposes, and 256 tons of fertilizers. Sales of general merchandise amount to \$923,000, and of coal to 2,130 tons.

Among the improvements in the town are a new court-house and sixteen new buildings; 1,100 linear feet of wharf front have been built, dredged in front of, and filled in; a new iron foot-bridge is in course of construction to take the place of a stationary structure, and a stationary iron bridge is also being erected in place of a former wood bridge.

The channel constructed by the government has been our greatest improvement of late years. Lumber dealers are unanimous that their business at present low prices would stop if it had to be conducted by the slow and expensive system of lighterage of former years. Grain merchants are again diverting to the town this trade which had left our markets. Cheapening of freights enables them to buy upon margins of 5 to 7 cents, where formerly 13 to 17 cents was required.

Notwithstanding the advantages already accrued from the improved navigation, the full value of the channel will not have been reached until made deep enough for the navigation of steamers suitable for transporting rapidly the perishable, though profitable, produce now raised by farmers to the exclusion almost of the cereals formerly raised.

Very respectfully,

GEO. W. PARSONS.

Col. WM. P. CRAIGHILL,  
Major, Corps of Engineers.

F 7.

REMOVING OBSTRUCTIONS IN THE POCOMOKE RIVER, MARYLAND.

An appropriation of \$10,000 was made for this work June 18, 1878. No survey having been previously made of this river, and a map being an essential prerequisite to an intelligent and economical expenditure of the appropriation, Mr. G. W. Parsons, a civil engineer of Salisbury, Wicomico County, Maryland, was engaged to make the survey and map. The survey was satisfactorily made in August, 1878. A copy of the report of Mr. Parsons, dated October 3, 1878, is appended hereto. In the latter part of October, 1878, a personal examination of the portion of the river requiring improvement was made by the superintending engineer, whereupon Mr. Parsons was requested to make some additional investigations, and a supplemental report. A copy of the latter, dated November 8, 1878, is appended hereto. The report of Mr. Parsons gives a description of the river, the difficulties of its navigation, &c.

The portion of the river which most needed improvement was found to be that below Snow Hill, for a distance of 5 or 6 miles. It was ascertained that the chief troubles with navigators were the very sharp bends and the narrowness of the channel at certain points. Some stumps also required removal. On the 19th of November, 1878, it was proposed to the Chief of Engineers to do certain work as described in the following copy of the specifications:

SPECIFICATIONS FOR EXCAVATING A CHANNEL IN POCOMOKE RIVER.

The portion of the river to be improved extends from the wharf at Snow Hill to about 4 miles below the town.

1. It is proposed to deepen and widen the existing channel for 1,300 feet below the wharves, to a width of about 120 feet.
2. To remove the point at stations 11 and 13.