

League Island that were known to be in most pressing need of examination.

These were:

- 1st. From League Island to Marcus Hook, including Mifflin Bar, Chester Island, Marcus Hook Bar, and Schooner Ledge.
- 2d. The Cherry Island Flats.
- 3d. The vicinity of Reedy Island Ice Harbor.
- 4th. The Dan Baker Shoals below Reedy Island.
- 5th. The wreck of the Addie Walton above Cross Ledge Light.

A survey of the Cherry Island Flats by Mr. Junken of the Coast Survey in August and September, 1878, for and at the expense of the Light-House Establishment, abbreviated our work to that extent.

Special examinations were made of Schooner Ledge and the Addie Walton, and reports submitted which are hereunto appended for incorporation.

Local surveys were also made of Mifflin Bar and Bulkhead Shoals in connection with the improvement of these localities.

The city of Philadelphia has had in progress, under charge of the Coast Survey, a survey of the river from Bridesburg to League Island, about 13½ miles. It is understood that this survey is completed, although the charts are not yet available.

A survey to connect this with the light-house survey from Old Man's Point to Deep Water Point, 9½ miles, was desirable, the existing charts dating from 1843.

A base-line of 2 miles was therefore measured on the New Jersey shore below Marcus Hook and the triangulation carried up to include the Schuylkill Ranges and the Red Bank Hotel, a distance of about 15 miles.

The shore topography and the hydrography followed the angulation. This work was done in April and May, 1879, and has been plotted on one sheet on a scale of $\frac{1}{100000}$.

The three surveys (when that of the city shall have been obtained) will together cover the river from Bridesburg to below Deep Water Point, a distance of 38 miles, and constitute a chart invaluable to the commerce of the river and indispensable to its future improvement.

During the ensuing year it is proposed, with the approval of the department, to complete the work already projected, viz: The surveys at Reedy Island Harbor and Dan Baker Shoals, and, if possible, to connect these with the lower limit of the light-house survey at Deep Water Point.

This would have the effect of charting an additional 20 miles of river covering Bulkhead and Dan Baker Shoals and the Reedy Island Ice Harbor.

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APPENDIX F.

ANNUAL REPORT OF MAJOR WILLIAM P. CRAIGHILL, CORPS OF ENGINEERS, FOR THE FISCAL YEAR END- ING JUNE 30, 1879.

UNITED STATES ENGINEER OFFICE,
Baltimore, Md., July 12, 1879.

GENERAL: I have the honor to forward herewith the annual report for the year ending June 30, 1879, for works of improvement of rivers and harbors, and of surveys which have been in my charge.

Efforts have been made to procure full statistics as to the commerce of each improvement, as required by instructions from the Chief of Engineers and in compliance with law. These efforts have not been entirely successful.

Very respectfully, your obedient servant,

WM. P. CRAIGHILL,

Major of Engineers, Bvt. Lieut. Col., U. S. A.

Brig. Gen. H. G. WRIGHT,

Chief of Engineers, U. S. A.

F 1.

IMPROVEMENT OF SUSQUEHANNA RIVER, NEAR HAVRE DE GRACE, MARY- LAND.

At the request of Prof. S. F. Baird, made to the Secretary of War, May 23, 1879, some dredging was done in the latter part of May and the early part of June, near Spesutic Island, to aid the movement of boats engaged in the business of the United States Commission of Fish and Fisheries. The funds for the work, \$500, were derived from the general appropriation for examinations and surveys and contingencies of rivers and harbors for which no specific appropriation had been made. The assistant commissioner states that more work is necessary. It is recommended that a specific appropriation of \$5,000 be made for this purpose.

Money statement.

July 1, 1879, amount expended during fiscal year.....	\$500 00
Amount (estimated) required for completion of existing project	5,000 00
Amount that can be profitably expended in fiscal year ending June 30, 1881..	5,000 00

F 2.

IMPROVEMENT OF HARBOR OF QUEENSTOWN, MARYLAND.

Queenstown is situated in Queen Anne's County, on Queenstown Creek, a tributary of the Chester River, about 10 miles from the mouth of the latter. It is almost directly opposite to Baltimore across Chesapeake Bay, being about 36 miles distant from that city.

The first survey of this locality on which an appropriation for its improvement was based was made in November, 1870. A report thereon may be found in the Annual Report of the Chief of Engineers for 1871, pages 613 and 614. A full description of the harbor was there given. The following quotations are made, to indicate the conditions of affairs at that time, before anything had been done by the United States toward the improvement of the navigation:

The mail is brought from and carried to Baltimore by a line of steamers, which arrive from the city every alternate day and return the next. These steamers carry also a considerable number of passengers and some freight. The freight consists principally of oysters, fish, fowl, cattle, and country produce generally; peaches and grain are said to form another considerable item of export. In ordinary cases the steamers land at Mitchell's Wharf, but in cases of rather low tide the passengers, &c., have to be brought ashore in a small boat. Heavy parcels cannot of course be transported in such a conveyance; and it often occurs that large boxes of merchandise make the trip to and from Baltimore several times before an opportunity offers for getting them ashore. The harbor itself is a fine one, having an area large enough to offer a dozen large schooners secure and comfortable anchorage. Its mean depth is 9 feet 6 inches at mean low-water. The channel leading to it is narrow, crooked, and shallow, having an average depth of only 6 feet. The proposed improvement consists of a channel 100 feet wide at bottom, 8 feet deep at mean low-water, following the existing channel as far as compatible with the necessary straightness. Two curves occur in it, one near the center and one at the inner end of the channel.

The estimated cost of the improvement deemed necessary at that time was \$9,500. If the whole amount had been appropriated in one sum, the work would have been completed within the original estimate. The first appropriation was of \$5,000, made March 3, 1871. The appropriation was exhausted and the work brought to a close July 25, 1871, one cut 25 feet wide having been dredged out to a depth of 8 feet at mean low-water, and a second cut of 25 feet carried nearly through. The work was suspended for want of funds and left in this unfinished and unsatisfactory condition until September 18, 1872, more than a year, when operations were resumed, the necessary funds being supplied by an appropriation of \$6,000, made June 10, 1872. The dredging was finished December 3, 1872, the channel having been widened to 100 feet.

The town and its trade have improved decidedly under the influence of the expenditure made upon the channel to the harbor. At the last regular session of Congress, those interested made such representations as to secure a new appropriation of \$3,000, as experience showed that the channel needed more straightening, and some repairs, as is to be expected in all artificial waterways, as well as railways, common roads, &c. This appropriation was made March 3, 1879.

Under instructions dated April 7, a project of expenditure was submitted April 23, 1879, which was approved May 9; but authority to commence work was not given. This project contemplated regaining the depth of 8 feet at mean low-water (which had been lost at some points of the channel from deposition), and taking off some of the angles so as to make the channel more nearly straight and easier for navigators, the width to be about 100 feet at the narrowest points. Straightness in a narrow channel is specially important.

Queenstown has lately come more prominently into notice as the western terminus of the Queenstown route for the proposed ship-canal to connect the waters of Chesapeake and Delaware Bays, which is the straight route to Delaware Bay at the breakwater for vessels leaving Baltimore.

Queenstown is in the collection-district of Baltimore. The nearest light-house is that at Love Point.

Money statement.

Amount appropriated by act approved March 3, 1879	\$3,000 00
July 1, 1879, amount available	3,000 00

F 3.

IMPROVEMENT OF CHESTER RIVER, AT KENT ISLAND NARROWS, MARYLAND.

This locality is on the eastern shore of the Chesapeake Bay, nearly opposite the mouth of the Patapsco River. A survey of it was made in October, 1872. The following extracts are made from the report of that year and appended papers:

Kent Island Narrows formerly connected Eastern Bay with Chester River, and separated Kent Island from the main land. Some fifty years ago, however, a causeway was constructed at the narrowest part, under the authority of the State of Maryland, thus connecting the island with the main land, and cutting the narrows into two parts.

This causeway doubtless contributed to the deterioration of the waterway on either side, by preventing the tidal flow.

At the present day [1872], there is found a good, although somewhat crooked channel, affording from 7 to 18 feet of water, running a distance of 6,000 feet between Kent Island and the main land, obstructed only by the causeway referred to. At the north, on Chester River side, this channel terminates about 4,000 feet from the deep water of the river; at the south, or Eastern Bay side, a bar 1,200 feet long separates it from the deep water of the bay.

It is desired [1872] to obtain a continuous navigable channel of 7 feet in depth from the Chester River to Eastern Bay. This can be accomplished by dredging through the above-mentioned bars, making a gap through the existing causeway, and straightening the most crooked part of the channel just south of the causeway.

The whole country, bordering on the Eastern Bay and its tributaries, and especially the thriving town of Easton, is interested in it. Navigation from all those places is now tedious and sometimes dangerous. Their chief and almost only market is Baltimore. The opening of Kent Island Narrows will shorten the route to Baltimore from 2 to 18 miles from various points of departure. The value of the trade interested will probably not fall short of \$1,000,000 a year.

Less than sixty years ago vessels with a draft of 7 or 8 feet were in the habit of passing through these narrows. This fact is deemed important to be stated, for the removal of the obstructions to navigation that have been formed since that time would be the opening of a natural channel, which would be likely to remain permanently open.

The proposed improvement was to make a channel 7 feet deep at mean low-water, 100 feet wide, at a cost of \$23,000. The removal of the causeway was also necessary, and its replacement by a bridge and draw.

An appropriation of \$15,000 was made March 3, 1873, but some legal question having arisen as to the right of the United States, in the progress of the work, to remove the causeway which had been standing more than 50 years, across the channel, under the authority of the State of Maryland. The Secretary of War decided, after consulting the Attorney-General of the United States, to defer operations until the laws of the State relating to the subject should be repealed or properly modified. By an act approved April 11, 1874, the State of Maryland consented to the removal of the causeway, but with the proviso that "before said causeway shall be cut or opened, there shall be built a bridge" with a draw of not less than 60 feet in width. In consideration of this proviso, the Secretary of War decided further that the improvement by the United States would not be begun until the bridge was built.

A further appropriation of \$5,000 was made by the act of June 23, 1874. The dredging was assigned, under the law, to the lowest bidder, and was commenced in May, 1875. The contractor proved to be very inefficient, but he could not be gotten rid of without more trouble and expense than to retain him. The work dragged along heavily, owing to the cause mentioned above, and to delays due to ice and high winds.

The counties of Queen Anne and Talbot having complied with the

requirements of the legislature of Maryland in erecting a drawbridge at the causeway, a passage through the latter was commenced by the contractor in May, 1875. The passage was completed May 24 to a width of 60 feet and a depth of 7½ feet at mean low-water.

On the 7th July, 1876, the funds for the work were exhausted. On the Eastern Bay side of the causeway the channel had been completed, the width, however, having been reduced to 80 feet. On the Chester River side the channel had been dredged to 80 feet in width over the entire distance, and about ¾ of it made 100 feet wide. On the completion of the operations a survey of the entire channel was made, indicating a depth of fully 7 feet at ordinary low-water. At the passage through the causeway under the draw, a remarkable erosion was discovered, a depth of nearly 20 feet being found. The current through the passage was also very strong after high-water on the Eastern Bay side, indicating the necessity of giving a greater vent to the water.

An appropriation of \$5,000 was made August 14, 1876, but of this amount only \$1,000 became available for expenditure, notification of which was received September 15, 1876. It was proposed with this amount to give at once an additional vent through the causeway, by cutting out from under the counterpoise of the draw, and to give further relief to navigation by driving piles to form wings on either side of the passageway through the draw, but the severe storm of September 17-18, 1876, so completely broke up the entire causeway that no expenditure on the part of the United States seemed to be justified, until the authorities of the counties interested should repair the causeway and bridge. On the 31st of March, 1877, the remaining \$4,000 of the appropriation of August, 1876, became available, but the condition of the causeway continued such that no expenditure on the part of the United States could be undertaken. Repairs were, however, in progress under the direction of the county authorities.

In April, 1877, an examination of the entire channel was made. It was found in good condition both as to width and depth. Some changes seemed to be taking place on the Eastern Bay side near the causeway, where it had been cut through. In May, 1877, a special examination was made at that point. It appeared to be quite evident that the water passing through the causeway was endeavoring to cut a new and more direct channel across the flat immediately below (Eastern Bay side) the causeway, a new and deep pocket being found extending in that direction from the passage. An examination of the causeway in June showed it to have been put in better condition than before, and on the 4th of June, 1877, the Chief of Engineers was asked for authority to proceed with the work. The request was granted.

The plan contemplated the expenditure of about \$1,000 in cutting through the causeway under the counterpoise of the draw, in riprapping at the central pier and the counterpoise abutment, in driving piles to form wings at the passage through the draw, and in marking the side of the channel with piles (to serve as guides) instead of buoys; and to devote the remaining \$4,000 to cutting off several sharp turns in the channel, particularly in the immediate vicinity of the bridge on the Eastern Bay side, all the materials to be purchased and the machinery to be hired in open market.

June 11, 1877, operations under this plan were commenced. During the month 18 guide-piles were driven on the port side of the channel, marking thoroughly its entire length from Eastern Bay to Chester River. These piles were stripped of bark and painted black. Forty-two piles were driven at the passage through the causeway, forming 4 wings,

each 60 feet in length, and located, respectively, at each corner of the passage. These piles were planked up, for a distance of 5 feet above high-water mark, with 3-inch plank, to protect the guards of passing steamers. The causeway was cut out by hand to below low-water mark, and about 100 perches of stone were used as riprapping at the central pier and at the counterpoise abutment.

At the close of this work in the latter part of June, 1877, a dredge and two scows were chartered by the day for dredging at the sharp turns spoken of above. Later, it was found necessary to charter a small tug, as much time was lost in moving the scows by hand. Dredging was commenced July 7, 1877, at the bend on the Eastern Bay side of the causeway and continued until September 8, when the channel across the point was completed. It was 600 feet long, 75 feet wide, and 7 feet deep at ordinary low-water. An old unfinished cut, on the Chester River side, was then completed, 120 yards long, and two sharp points, at the abrupt turn from the narrows into Chester River, were trimmed off. Operations were suspended September 26, 1877, the appropriation having become exhausted.

In December, 1877, an examination was made of the new cut across the point near the causeway. It was ascertained that the channel had stood well, not less than 7 feet at ordinary low-water being found.

During the month of June, 1878, another examination was made of this cut and the vicinity of the drawbridge. It was found that some shoaling had taken place in the new cut across the flats and that not over 6 feet could be carried at low-water. The soundings as low as 6 feet extended, however, over not more than one-sixth the entire length of the cut; the depth for the other five-sixths remained good. This shoaling appears to be due to the large amount of scour at the draw. The water at the draw had deepened to 24 feet, and under the counterpoise of the draw a depth of over 12 feet was found. When the scour ceases, as it will when a sufficient area of cross-section for the flow of the water has been attained, the cut below the draw will probably remain permanent.

The passage through Kent Island Narrows is now used to a considerable extent by sailing vessels, and is of great benefit to traders between Eastern Bay and Baltimore and other points on the northern portion of the Chesapeake. It is to be regretted, however, that the channel is rarely used by steamers. It is believed that sufficient width and depth already exist for the class of steamers that were expected to pass through the channel, and it is supposed steamers will use it when it becomes better known.

An appropriation of \$3,000 was made June 18, 1878, but it has not yet been spent. An examination of the whole channel will be made soon, when a better judgment can be formed of the best mode of using the funds to advantage.

This place is in the collection-district of Baltimore. The nearest light-house is that at Love Point.

Money statement.

July 1, 1878, amount available.....	\$3,004 83
July 1, 1879, amount available.....	3,004 83

F 4.

IMPROVEMENT OF THE PATAPSCO RIVER, BALTIMORE, MARYLAND.

A full description of this improvement up to June, 1874, was given in the report of June 26, 1874, printed in the Annual Report of the Chief of Engineers for 1874, beginning on page 18, Part II. Originally not more than 16 feet at low-water could be carried to Baltimore. The first step in the improvement was commenced in October, 1853, under the superintendence of (then) Capt. Henry Brewerton (lately deceased as colonel of engineers, brevet brigadier-general United States Army).

The object was to give a channel 150 feet wide, 22 feet deep at low-water, a great advance beyond 16. This work was incomplete when the civil war began, which caused its interruption. After the war it became evident that these dimensions were insufficient for the growing commerce of Baltimore. In 1872 the city of Baltimore provided \$200,000 in addition to the appropriation by the United States, which was expended under the direction of the United States engineer in charge of the work. An appropriation of nearly as much was made by the city in 1873. The result in June, 1874, was a channel with not less than 24 feet of depth at mean low-water. This channel was in three divisions:

1st. From Fort McHenry to the angle below Hawkins Point, 250 feet wide; 2d, thence to angle near 7-foot knoll (Brewerton Channel), 250 feet wide; 3d, thence due south towards Sandy Point, 250 feet wide through softer portions, and 400 feet wide through oyster-beds and hard lumps (Craighill Channel).

The object of the improvement, as stated in 1874, has been "to permit the approach to Baltimore at mean low-water of vessels drawing from 22½ to 23 feet, and at ordinary high-water of vessels drawing 24 or 24½ feet. The following extracts are also made from the report of 1874, already referred to:

A width of 250 feet has been given where the material on the edges is not of sufficient hardness to injure a vessel touching it. This is the case throughout, from Fort McHenry down through the Brewerton Channel and about 2 miles of the lower or Craighill Channel. This, however, is regarded as a *minimum* width, as the sides are likely to be occasionally struck by large vessels, especially steamers, whose lengths are much greater than the width of the channel, and which may not be kept exactly in the line of the channel. Where the sides are thus struck masses of material are thrown into the channel.

It is not to be forgotten that this channel is an *artificial* road or highway of the same general character in that respect as a railway or canal or ordinary wagon-road. It did not exist by nature. It was *made*, and to be kept in good condition it requires *care in its use and annual repairs*.

It was also stated, and experience has shown the propriety of the statement, that it must be expected that about \$50,000 per annum would be required for repairs, which should be *regularly provided and judiciously and economically applied*.

The appropriations since 1874 have been as follows:

March 3, 1875, \$75,000

August 14, 1876, \$75,000.

June 18, 1878, \$75,000.

March 3, 1879, \$160,000.

The last appropriation has not yet been touched.

The total of the appropriations for 1875, 1876, 1877, and 1878 was \$225,000. Deducting \$50,000 for each of those four years, or \$200,000 in all, would give only the sum of \$25,000 for increase of width and other improvements.

The price of dredging has fortunately been very low, much lower than the original estimate, and enabled much more to be done than was expected.

In 1875 and 1876 the Craighill Channel was widened to 330 feet at those portions where it had a less width. Nothing has been done to that channel in 1877, 1878, and up to June 30, 1879. Since 1874 the other main operations have been the following: Improving the upper entrance to the Fort McHenry Channel, enlarging the space for turning at the angles, where the Brewerton Channel at its upper and lower ends joins the Fort McHenry and Craighill Channels, and giving greater width to the Brewerton Channel. At the date of this report, June 30, 1879, the least width at any point of the Fort McHenry Channel is 250 feet, and of the Craighill Channel 330 feet.

The operations of the fiscal year ending June 30, 1879, have been the removal of 481,416 cubic yards of material from the Brewerton Channel, at 9½ cents per cubic yard, under a contract dated August 10, 1878, with the American Dredging Company, of Philadelphia. The contract expired June 30, 1879.

The width of the Brewerton Channel at its narrowest point is 210 feet. The following statement shows the width of the channel throughout its length, beginning at the lower end:

	Feet.
Section 1, 12,600 feet long, average width.....	350
Section 2, 4,700 feet long, average width.....	300
Section 3, 9,300 feet long, average width.....	260
Section 4, 4,000 feet long, average width.....	210
Section 5, 1,400 feet long, average width.....	310

The material removed by the dredging-machines was required by the contract to be deposited in water from 5 to 11 feet in depth, but in every case the scows were to discharge their loads in the shoalest portion of the dumping areas which they could reach, all the excavated material to be deposited at least 1 mile east of the Craighill Channel and 1 mile south of the Brewerton Channel. These conditions prevented the return to the channels of any of the dredged material. The low-water channel to Baltimore is now equal in depth to that of New York at the shoalest points of each, which is the ruling depth of each. As previously stated, some shoaling may be always expected, but the small vertical movement of the tide in the Patapsco, the breadth of the expanse of the sheets of water through which the channel has been excavated, the great freedom from the influence of freshets, and the consequent feebleness of the currents, as well as the small amount of sedimentary matter, are circumstances more than usually favorable to the stability and permanence of this excavated channel. Its use by heavy ships will assist in keeping it open with their propellers, but at the same time they sometimes slice off large masses from the sides with their sharp prows, and these are thrown down into the channel, diminishing its depth. It might be supposed by some that use should be made, in connection with the dredging, of those well-known structures, dikes or jetties, but they would be such a hinderance as to be intolerable in the navigation of the Lower Patapsco and Susquehanna by the numerous vessels of light draught which cover them.

Since the capacity of the channel to Baltimore has been better known at home and abroad, there has been a great increase in the number of large vessels of heavy draught coming to this port; and to the same cause is due another remarkable feature of commercial development, the erection, by the great railways terminating here, of vast wharves, storehouses, grain-elevators, &c. A dry-dock of the best capacity is now

being built on a portion of the site of Fort McHenry, granted by Congress to a company organized for that purpose.

Another important work in which Baltimore and its dependencies are greatly interested is the ship-canal proposed to connect the waters of the Delaware and Chesapeake Bays. A preliminary report on this subject was made February 7, 1879, which is printed elsewhere in this volume. A further report will be made before the end of 1879.

On the 30th of March, 1876, an act of the legislature of Maryland was approved by the governor, requesting the President of the United States to appoint a board of three commissioners to survey the harbor of Baltimore City and the adjacent waters, and to establish pier and bulkhead lines therefor. The President appointed as the commissioners the Chief of the Corps of Engineers U. S. Army, the Superintendent of the U. S. Coast Survey, and the officer of the Corps of Engineers in charge of the improvement of the harbor of Baltimore. A copy of their report, dated January 31, 1878, is appended hereto.

Money statement.

July 1, 1878, amount available.....	\$76,410 50	
Amount appropriated by act approved March 3, 1879.....	160,000 00	
		\$236,410 50
July 1, 1879, amount expended during fiscal year.....	58,818 90	
		177,591 60
Amount (estimated) required for completion of existing project.....	100,000 00	
Amount that can be profitably expended in fiscal year ending June 30, 1881.	100,000 00	

Abstract of bids for dredging in Patapsco River, Maryland, opened at 12.5 p. m., August 5, 1878.

No.	Name.	Residence.	Time.		Price per cubic yard.
			Commence—	Complete—	
1	George C. Fobes & Co.....	Baltimore.....	July 1, 1879	\$0 11
2	F. B. Cotton.....	Philadelphia.....	Sept. 15, 1878	June 30, 1879	10
3	Morris & Cumings Dredging Co.....	New York.....	Aug. 15, 1878	June 30, 1879	10½
4	American Dredging Company.....	Philadelphia.....	Aug. 10, 1878	June 30, 1879	9½

Contractor, American Dredging Company, at 9½ cents.

COMMERCIAL STATISTICS.

CUSTOM-HOUSE, COLLECTOR'S OFFICE,
Baltimore, Md., July 10, 1879.

COLONEL: I very respectfully acknowledge the receipt of your communication of June 23, 1879, relating to the value of the work of river and harbor improvements in the collection district of Baltimore, and indicating therein that certain information, similar to that furnished you at former periods by this office, would be of advantage in indicating to Congress the importance of that work.

Permit me to thank you for the terms in which you convey your appreciation of the information hertofore received.

In accordance with the order of your inquiries, the following summary of statistics is respectfully submitted, together with a reference to such kindred subjects as seemed to relate to the object contemplated.

The harbor of Queenstown, situated on Chester River, 8 miles from its mouth, a very important point, being the chief outlet for the produce and travel of a very large district of fertile land, embracing a portion of the counties of Queen Anne and

Caroline, Kent Island Narrows on the same river, the harbor of Cambridge, and the Patapsco River are all embraced within the collection district of Baltimore, the port of entry of which district is the city of Baltimore.

The revenues arising from any and all of these sources named are collected at the Baltimore custom-house. Those of them outside of the Patapsco River and its branches, upon which this port is situated, yield no revenue in the way of duties on imports. Any moneys payable into the Treasury here from those sources arise from fees in the issuance of licenses and enrolments to vessels belonging to those places. It would not be altogether practicable to furnish a statement of the amount of revenue yielded by each of these localities, nor does it appear that any substantial end thereby would be served for the purposes intended, as they are comprised within this collection-district, and are important adjuncts to the maritime and commercial interests of this port, and they therefore sustain a relative and proportionate value thereto.

It would be as well to state that those outlying harbors within this district constitute outlets for grain, fish, fruit, vegetables, and oysters, which commodities find their way here and elsewhere, and are shipped both domestic and foreign.

Fruit-growing in those sections is a valuable and expanding interest. Packers receive their supplies from the inland country of which those places are the harbors, and fruit, vegetables, and oysters in their seasons, packed in cans, constitute a large and important western and foreign trade.

It being shown within what districts these several works of improvement are embraced, their relation in point of locality to ports of entry, &c., may be readily determined.

The Wicomico and the Pocomoke Rivers, Maryland, are within the district of Eastern Maryland, Crisfield being the port of entry.

The revenues derivable from those places for the fiscal year ending June 30, 1879, with other interesting matter, have been obtained through the courtesy of Thomas S. Hodson, esq., the collector at Crisfield.

Herewith is subjoined letter from this office, and his reply thereto. [Not received.]

The harbor of Onancock, Va., is in the district of Cherrystone, Va., port of entry being Eastville. The revenues yielded therefrom have been kindly furnished by George Toy, esq., deputy collector at Eastville. Herewith, also, is subjoined letter from this office, and reply thereto. [Not received.]

Statistics in relation to the port of Baltimore for the fiscal year ending June 30, 1879.

Duties collected in coin.....	\$1,899,058 04
Receipts in currency, licenses, tonnage, fees, &c.....	211,650 95
Value of merchandise imported.....	14,147,155 00

The bare statement of duties collected is not to be taken as an index to determine the commercial capabilities of this port. Apart from the general and incidental causes which have diminished foreign importations, special causes have operated seriously here to reduce both importations and revenues. The special causes are peculiar to this port, and relate to the article of sugar. Formerly that commodity comprised a very large share of foreign importations; now the quantity imported, comparatively, is quite inconsiderable, and the sugar trade is practically in abeyance.

The embargo, as it may be termed, upon this trade is mainly attributable to the causes referred to in my communication to you of last year.

These causes, however, can have but a passing effect upon the commerce of this port, as its capabilities are too inherent and recuperative to be more than temporarily affected by incidental causes, and, therefore, the sugar interest doubtless will assume its normal relations. Recently heavy importations of that article in bond have been made through this port to western cities. In this case the duties are paid at place of delivery, and do not show among the receipts here. The other operating cause against importations is one of a general character. Our people throughout the country are producing from the soil and the factory nearly every article needed for the use, comfort, or luxury of mankind. Articles which but a few years ago were imported are now produced here and exported to the very markets from which similar products were purchased. Importations, therefore, consist mainly of articles not produced here, such as tin, chemicals, crude materials, &c., and fabrics and commodities of luxury. In the line of this class of merchandise the importations here have increased during the half of the year 1879 that has passed.

A comparison of values of importations June, 1878, and June, 1879, shows an improvement in this particular.

For June, 1879.....	\$1,604,939
For June, 1878.....	1,283,250
Increase.....	321,659