Joshua Fisher’s “Chart of Delaware Bay and River”*

Though it appears upon the ordinary map as a broad and unimpeded waterway, the body of water known as Delaware Bay and River presents, from Atlantic Ocean to the Port of Philadelphia, difficult problems of seamanship and pilotage. Its “Shoals & dangers,” to be successfully avoided, require special local knowledge. The United States Coast Pilot, citing five charts, devotes forty-five pages to sailing directions for this body of water measuring 116 miles in length from its entrance between Cape May and Cape Henlopen to Trenton, the head of navigation on the River.

It is not known what charts were used to lessen the dangers of this navigation by the inhabitants of New Sweden, the first permanent European residents of the Delaware Basin. It may be that the Dutch explorers already had roughly charted the area, so that by the time the Swedes were established, the ships which came to them possessed usable manuscript charts. But neither in the printed maps of the time nor in such manuscript productions as are known is there evidence that a chart of real value or consequence developed from


1 United States Coast Pilot. Atlantic Coast Section C: Sandy Hook to Cape Henry (Washington, 1947), 100-144.

2 This statement of probability considers and excludes the so-called “Figurative Maps,” possibly the work of the Dutch explorer Cornelis Hendricksen, reproduced in E. B. O’Callaghan, ed., Documents relative to the Colonial History of the State of New York (Albany, 1855), I, facing pages 10 and 13. These would have been useless to the navigators of Delaware Bay and River.
any of these supposed productions. The general shape of the Bay and River is shown in Nicholas Visscher's *Novi Belgi Novaque Angliae nec non Partis Virginiae Tabula* of about the year 1651, but although this map indicated extensive shoals at the entrance of the Bay, it was a land map by intention and so small in scale as to be useless for pilotage. The large map drawn by the Swedish engineer Peter Mårtensson Lindeström, about 1654–1655, would have been of little practical use in navigation, even if it had got beyond manuscript form and attained general circulation before its first publication, greatly reduced, in 1696. The *Pascaarte Van Nieu Nederlandt*, a chart by Arnold Colom, first published in 1656, indicated roughly the existence of shoals in Delaware Bay, but included neither soundings nor suggested courses.

The earliest printed map in which a serious attempt was made to give actual guidance to the sailor in Delaware Bay may, indeed, have been the Augustine Herrman *Virginia and Maryland*, published in London in 1673. In Herrman's portrayal of the Bay many shoals are indicated and soundings are given as far north as a point some miles beyond Christina Creek. Whether this delineation was the result of Herrman's own survey or whether he had access to manuscript charts compiled by Swedish or Dutch pilots and surveyors, the result is the same—that is, a guide obviously intended to be useful to mariners, indicating by soundings the proper entrance to the Bay and a channel between the Shears and Brandy-wine Bank.

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6 P. Lee Phillips, *The Rare Map of Virginia and Maryland by Augustine Herrman* (Washington, 1911), and other references and notes on reproductions on envelope flap of *The Herrman Map . . . A Facsimile made from the Original in The John Carter Brown Library . . . 1948* (First edition, 1941). Known copies of the original map of 1673 are those in the British Museum and the John Carter Brown Library.
channel and the soundings are repeated in *A Mapp of New Jersey*, obviously influenced by Herrman, which appeared in 1675 in John Seller’s *Atlas Maritimus*. Two years later this map was enlarged in scope and reworked as *A Mapp of New Jersey in America* by John Seller and William Fisher. In that form it was adopted by William Penn, if not created at his behest, and issued with a printed text pasted along its bottom edge, bearing the title *The Description of the Province of West Jersey in America*. Here again the Herrman soundings of the Delaware Bay are shown with little alteration, but in the approaches to New York this revised and enlarged Seller map surpasses its predecessors, showing through copious notation the result of a special survey or of a long accretion of knowledge of depths and shallows in New York Bay and the Narrows. Undoubtedly, the makers of the Herrman map and its derivatives here described intended that their productions should be useful to navigators. The standard book, and the generally used book, of American coastal charts from 1689 through the eighteenth century was *The English Pilot. The Fourth Book*, the first edition of which was published in the year named. Delaware Bay found delineation in this work, certainly as early as 1706, in the form of a chart entitled *Virginia, Maryland, Pennsylvania, East & West Jersey*. This map was the production of John Thornton and William Fisher. Its numerous soundings differ somewhat from those upon the Herrman map of 1677. It made small advance, however, upon the information contained in the Herrman map and its derivatives. Until late in the eighteenth century, *The English Pilot* charts in successive editions continued to lack a satisfactory degree of detail for the Delaware Bay and River navigation.

Charts, even full and exact charts, are not enough for large vessels sailing strange and narrow waters. Local pilots are essential. In a

7 P. Lee Phillips, *A List of Geographical Atlases . . .*, I, No. 487; Stokes, I, 213–215. Although the date of depiction of this map is given in this reference as c. 1664, its first publication is noted as in the text above—that is, in the Seller *Atlas Maritimus* of 1675. Inasmuch as Herrman’s map was designed in 1670 and published in 1673, it seems correct to regard it as the prototype of this group of maps.

8 The only copies recorded are those in the British Museum, the John Work Garrett Library, Evergreen House, Baltimore, and the John Carter Brown Library. See Elizabeth Baer, *Seventeenth Century Maryland* (Baltimore, 1949), No. 88.

letter later to be quoted, Joshua Fisher wrote that even with his
detailed Chart a pilot was necessary for the Delaware navigation.
Resident pilots were found on the Delaware Shore at Cape Henlopen
before the period of Fisher's Chart, upon which is shown Pilot's
Town at the situation of the present town of Lewes. The Pilot's
Association of Delaware Bay and River, today an active and essen-
tial aid to the navigation of those waters, boasts a long and con-
tinuously active institutional career. In that waterway, as in the
approaches to most of the great ports of the world, local pilots are the
interpreters of charts and sailing directions, beacons, range lights and
radio beams. Today the Delaware pilots go out between the Capes to
meet incoming vessels in power-driven craft. The sun on the white
sails of their cutters of fifty years ago is a memory retained by few,
but to these it remains a cherished and enlivening picture.

It was not until 1756 that a comprehensive and accurate survey of
the Bay was engraved and printed in the form of a chart of large
scale, practicable for use in actual navigation. It is this chart with
which the present discussion is chiefly concerned. Joshua Fisher's
Chart of Delaware Bay from the Sea-Coast to Reedy Island is said to
have retained its usefulness as a guide until the publication of a com-
prehensive chart by the United States Coast Survey in 1846. Cer-
tainly, it was without rival in the remaining years of the eighteenth
century. Between 1756 and 1800, it was published in ten editions and
issues of Philadelphia, London, and Paris. Suppressed by the Gover-
nor and Council of Pennsylvania upon its first publication in the
midst of the French and Indian War, it came into its own in the War
of the Revolution as a potential aid to the military operations of all
three contestants.

The Surveyor and Designer

Joshua Fisher was born in Delaware in 1707 and died in Phila-
delphia on January 31, 1783. In 1733 he married Sarah Rowland,
daughter of Thomas Rowland of Sussex County, Delaware. At the
time of his marriage he settled at Lewes, Delaware, where he carried
on his trade as a hatter. The natural relationship between the maker
of hats and the Indian trappers of the beaver and other small animals
led him in the course of time to the creation of an export trade in

10 The author has found nothing in print on the subject of the Delaware Bay pilots.
furs. His position in the community was of such a character that upon his removal to Philadelphia in 1746, he was described in a certificate signed by seven of his fellow townsmen as a quiet, peaceable neighbor, “a just Dealer, an upright Magistrate, and in Every Station he hath yet been Called to . . . a worthy Honest Man.” A certificate provided him at the same time by the Duck Creek Monthly Meeting described Joshua and his wife as “of sober and orderly lives and conversation.” In the course of his life in Delaware, Joshua Fisher occupied minor public offices, among them coroner of Sussex County and deputy-surveyor of Delaware, and there is evidence that at a later time he was esteemed among the merchants of Philadelphia, where he carried on the sale of general merchandise. In 1763 he was one of the Merchants and Traders of the city who signed an address of welcome to John Penn upon his arrival in the province as its Lieutenant Governor. A detailed account which has been preserved of his last days shows him to us as a good man of simple piety, anxious that all men should “live in love.” There is recorded of him nothing ungracious in character or conduct.

It was doubtless in the course of his residence at Lewes that Fisher became interested in the problems of pilotage presented by Delaware Bay and River. Then or soon after his removal to Philadelphia, he undertook with the assistance, it has been said, of Samuel Rowland, his brother-in-law, to make a survey of the waters in question. He seems to have been self-taught in matters of mathematics and surveying, but the event proved that he had been well taught.

Joshua Fisher’s studious habit seems to have been formed early in life and to have been early applied to practical problems. Thomas Godfrey of Philadelphia was the rival claimant with James Hadley of London for the honor of inventing the reflecting quadrant, an instrument of celestial observation which, since about 1734, has gone by the name of the English mathematician. A persistent tradition which may go back to Fisher’s contemporary, James Logan, informs us that

11 Anna Wharton Smith, Genealogy of the Fisher Family, 1682-1896 (Philadelphia, 1896), 22-31. Photostat prints of the pertinent pages of this book and of other interesting material were kindly sent me by Mr. Charles L. Petze, Jr., of Newcastle, Del.
13 [Hannah Logan Smith], Memorials and Reminiscences in Private Life (1839), 256-257, American Manuscripts File, HSP.
when Godfrey had completed his first successful instrument, probably about 1730, he turned it over to Joshua Fisher, then of Lewes, for trial in the waters of Delaware Bay. On the Fisher Chart of 1756, about to be described, there appears at the point of land he calls "Cape James," actually Cape Henlopen, a statement of the latitude of the place and, beneath it, the words "Observ'd by the Author & T. Godfrey." An exact date in connection with this assertion would have been an appropriate and much appreciated addition to knowledge. In the absence of it, we may fall back upon the assumption that this statement connecting Fisher and Godfrey in an observation of latitude at the entrance of Delaware Bay was a memory on Fisher's part of that first testing of Godfrey's quadrant with which he has been credited. Or, equally well, it seems, this recording on the map of an event which occurred sometime before 1756, could itself have been the source and origin of the tradition that it was Fisher who about 1730 carried through the first practical tests of the Godfrey quadrant. In either case the association in important activities of these two self-taught geniuses of Philadelphia is clearly attested by the legend which Fisher placed upon his Chart.

The Chart

The story of Fisher's achievement as cartographer may be advanced at this point by the quotation in full of certain documents from the archives of the Province of Pennsylvania. These include a letter from Governor Robert Hunter Morris to Fisher, "approved in Council, 4 March, 1756," and a reply to the Governor addressed by Fisher to Richard Peters, endorsed "reced 5th March, 1755, day after the Gov'r. Lre." This interchange of letters constitutes one of the most interesting incidents in the history of cartography in the United States.

Gov. Morris to Joshua Fisher, 1756

Sir:

Being informed yea you are ab* publishing a Chart of ye Bay of Delaware, with all ye Sounds & Bearings, & such full Directions ye Strangers to ye Navigation of ye Bay, may, by ye help of your Draft, bring Ships into the River with out a Pilot; Tho'

14 John F. Watson, Annals of Philadelphia (Philadelphia, 1857), I, 529, where the quoted words presumably are from a letter written by Logan.
15 Pennsylvania Archives, First Series, II (1853), 592–594.
this is a very useful & comendable work, yet, as at this critical juncture, when from the state of affairs in Europe, we are in daily expectation of a French War, there is y\textsuperscript{t} reason to fear; if your map of the Bay should be published, some Copy of it may fall into y\textsuperscript{e} Enemys Hands. I have therefore thought fit, by the advice of the Councils, to order, as I hereby do, that the Publication of that Map or Chart be postponed till a more proper time; when y\textsuperscript{e} Danger of the Enemys paying us a visit from Sea, may be over, or this city & Province in a better condition to repel an Invasion.

Philad\textsuperscript{a}, 4\textsuperscript{th} March, 1756.

To Joshua Fisher.

*Indorsed—*

Draught Lre. to Joshua Fisher, approved in Council, 4 March, 1756.

*Joshua Fisher to R. Peters, 1756*

Philadelphia.

Friend 

Richard Peters

In Conformity to the Governor's Orders of yesterday, I thought it a point of duty to inform the Governor what is subjoin'd Concerning the Chart of Delaware Bay, just publish\textsuperscript{d}, which, if thou wilt please to Communicate to him to know his further Pleasure, shall take it as a singular favour.

When I undertook many years ago to take a survey of Delaware Bay, in order to draw a Chart thereof, being encouraged thereto by sundry persons, among whom was our Proprietary Thomas Penn, to whom I was recommended by the Magistrates for a D. Surveyor, & so being furnish'd with Materials about two years ago, was again apply'd to by sundry persons, Merchants & others, to get the work perfected; with whom I consented to do it, provided I could get Subscriptions to defray only the Charge of Engraving & printing them, & agreeing with a Workman to accomplish. It amounted to near a hundred Pounds Cur\textsuperscript{y}, for which Subscriptions were then taken of the Gentlemen of this City to the said Am\textsuperscript{t}, & as the Expence as well as my own great pains & trouble in the above; the latter I am very easy about, only therefore request, as the Plates are Engraved, & a quantity of Coppies struck oft, that I may have the liberty to deliver to the Gentlemen who have subscribed to defray the Charge of £100 as above, otherwise it will be very oppressive to bear so great an Expence, besides my own time & trouble, when the motive for doing it was at the repeated Solicitation of many Considerable Men, & also, in point of humanity, for the saving Mens Lives & Estates, having been eye witness of many vessels & cargoes lost, & the people sometimes with them, for want of knowledge, in the Bay; & as I had observed that Correct Charts were publish\textsuperscript{d} of many Harbours in North America, where I had been, especially those places where Men of War come, as they generally have Artists qualified for such purposes; all which Motives I thought both laudable & Warrantable, & justly deserved the Countenance of all well wishers to this Province, & here I beg leave to add my Sentiments concerns an Enemy making use of said Chart, I have sent one for the Governor's perusal.

First, then, there is in the season for Navigation, above three Score Pilots, that Constantly Cruise off the Capes, that always the Enemy's Vessels never wanted a Pilot when on the Coast, & the Accidents hinted at before, of losing our Vessels, has
been generally in the winter Season, when the Pilots Boats are hailed ashore, &
cannot attend.

Secondly, as the Chart has layd in it all the Shoals & dangers, I apprehend there
are much more dreaded danger to adventure, unless forc'd to it, than any person
would conceive without the Chart, so that I am well satisfied it would be rather a
Terror than an encouragement to adventure such an Errand without a Pilot, which
as is before observ'd can always be readily got.

Thirdly, this Chart is only calculated to bring Ships out of danger from Sea, &
shows them but about 20 miles in the River, & the remaining part very intricate,
 tho' not dangerous, is another strong inducment no Enemy will attempt coming up
so dangerous a Bay & a long difficult River without good Pilots, which hope may
never happen.

All which is humbly offer'd to Consideration.

I subscribe thy oblig'd. Friend,

JOSA. FISHER.

N. B. Some few have been deliver'd. before notice, as also some few sent to
England.

Direction.
To Richard Peters, Esquire, Philadelphia.

Indorsed,
Joshua Fisher, reced 5th March, 1755, day after the Govrs. Lre. 16

The question remains as to whether Fisher's plea that the Chart be
allowed publication for its maker's sake, for the sake of his under-
writers, and because of the general good to be achieved through its
use, was given favorable consideration by the Governor and Council.
The records are silent on that point, but the fact that there have been
identified only two copies of this first issue of the map suggests that
its suppression for the sake of the public safety was effective. None-
theless, a few copies came into circulation. In his nota bene to the
letter quoted above, the cartographer informs the Governor that
"Some few have been deliver'd. before notice, as also some few sent to
England." A year before the publication of the map, Thomas Penn
had written Richard Peters, asking that half a dozen copies of

16 The Mar. 4, 1756, date of the Governor's letter, its endorsement of that date, the position
of the letters in the Council Proceedings of that date, the presence of the date Feb. 28, 1756,
upon the printed map itself—all form a sum of evidence against the acceptance of the endorse-
ment on Fisher's letter to Richard Peters, i.e., "reced 5th March, 1755, day after the Govrs.
Lre." Another slight element of confusion enters when we read in a letter of Feb. 21, 1755, a
request from Thomas Penn to Richard Peters for half a dozen copies of the Fisher Chart, but
this was simply, it seems clear from the context, in anticipation of its eventual publication.
Fisher's Chart be sent him. These copies may have been sent when, a year later, the Chart was finished. In that case, they provide an explanation for Fisher's phrase "some few sent to England."

This statement, however, does not constitute the final word on the distribution of the Chart nor on the degree to which the order of suppression was observed. There remains in the possession of The Historical Society of Pennsylvania, catalogued under the name of Joshua Fisher, the following bill, a brief document of particular pertinence in connection with the questions of suppression and distribution:

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Benjamin Franklin to Joshua Fisher

Dr

1756

April 6th 2 Ch [obliterated] Bay

£1 4

May 28th 2

£2 8

[Endorsed]: B. Franklin

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Clearly the four copies of the Chart sold Franklin at 12s each, from a month to nearly three months after suppression, could hardly have been in that group Fisher had in mind when, on March 5, he wrote Richard Peters, "Some few have been delivered." Either Fisher was selling the Chart surreptitiously after the suppression, or the strictness of the Council's order had been relaxed somewhat as the result of his appeal to Mr. Peters. One prefers the second of these possibilities. It seems unlikely that Franklin, member of Assembly, Assembly printer, and leader in many aspects of local life, would have ignored the order of the Pennsylvania Council and made clandestine purchases of the Chart even if Joshua Fisher, the reputable Quaker, had been willing to disobey the order of suppression.

The questions that arise are these: If Franklin could buy Fisher's Chart, could anyone else do the same? or, was Franklin given a special privilege because of his prominence in the defense plans of the Colony? The answers are not readily ascertainable.

17 See preceding note. I am indebted to Dr. William E. Lingelbach, Librarian of the American Philosophical Society, for calling my attention to this passage in Lawrence H. Gipson's Lewis Evans (Philadelphia, 1939), 61.

18 My attention was called to the existence of this document by my generous correspondent, Mr. James Clements Wheat, of Bay City, Mich. A transcript of the entry was sent me through the courtesy of The Historical Society of Pennsylvania.
A full description of the Fisher Chart of 1756 follows:

FIRST EDITION

[Within a decorative cartouche with Penn arms arising from upper right corner]: To the / Merchants & Insurers / Of the City of Philadelphia / This Chart of / Delaware Bay / From the Sea-Coast to Reedy-Island. / Containing a full and exact Description of the Shores, / Creeks, Harbours, Soundings, Shoals, Sands, and Bearings / of the most considerable Land-Marks with a Tide-Table / from the Capes to Philadelphia, and the Set of the Tide / on the several Quarters of the Flood and Ebb. / Is dedicated / By a Friend to Trade and Navigation / Joshua Fisher

[Within a decorative cartouche at bottom center]: A / Tide Table. / . . . [arranged in two columns of ten lines each]. A Scale of English Miles, 69 to a Degree. / [numbered 0 to 14].

[Within a decorative cartouche at lower left]: We the Subscribers having perused the annex'd Draught / of Delaware Bay do recommend it as a very exact Performance / and will greatly contribute to the safe Navigation in the said Bay / as the several Draughts heretofore made are very imperfect and no / Dependance to be had on them / [in two columns]: Pilots / . . . [twenty-two names] Masters of Vessels / . . . [twenty names].

[Beneath cartouche at lower left, within neat line]: Published according to Act of Parliament, by Joshua Fisher, Feb: 28. 1756. / [at left and right of central cartouche within neat line]: Engraved by Ja* Turner, and [cartouche] Printed by John Davis, for, and sold by the Author in Front-Street Philadelphia.

Map measures 23 3/4 x 45 1/2 inches. Orientation: South-North line runs from upper left of map to lower right. Extreme southern points: “Cape Hinlopen” and “Fenwick’s Island.” Extreme northern point: “St. Georges Cr.” Printed on three sheets joined. Watermark in all three sheets: crowned shield, charged with a fleur-de-lis, and, beneath the shield, 4 and initials L U G; countermark, IV.

Maryland Historical Society copy has been divided into sections and mounted on linen.


The Engraver and Printer

A special interest attaches to this map as the work of James Turner, well-remembered as the engraver the year before of the Lewis Evans Map of the Middle British Colonies, another distinguished addition of Philadelphia origin to the cartography of English North America. Turner seems to have been a protégé of Franklin. There is reason to believe that he was the Boston artist employed by Franklin in 1744 to engrave Lewis Evans's designs for the Fireplace Book; and it is certain that it was he who engraved the three maps for another work with which Franklin was associated, namely, A Bill in the Chancery of New-Jersey, published jointly in 1747 by James Parker of New York and Benjamin Franklin of Philadelphia. Turner engraved in Boston about 1750 the admirable Chart of the Coasts of Nova Scotia. It may be that it was Franklin who soon after this persuaded him to move from Boston to Philadelphia, where he was located in 1754. “My Map,” wrote Lewis Evans, “was begun engraving in November 1754, and finished towards the end of June 1755.” In all probability, Turner had hardly completed the Evans map when he was called upon to prepare new plates for another major cartographical production in the form of the Fisher Chart. Turner was an excellent engraver, experienced in the rendering of maps from original drawings; Fisher and his supporters were indeed fortunate in his presence in Philadelphia at the time of their need. Turner added to his distinction in the history of American engraving by the rendering in 1759 of Nicholas Scull’s Map of the Improved Part of Pennsylvania. This was the last important task of an excellent and enterprising craftsman. In the Pennsylvania Gazette of December 13, 1759, is found a notice of the sale of the household effects of “James Turner, Engraver, deceased.”


20 Lewis Evans, Geographical Essays (Philadelphia, 1756), No. II, 25.
Little is known of John Davis, who in 1756 printed the first edition of the Fisher Chart. Because his name does not appear as a regular letterpress printer or in any other connection than as the printer of two maps, one assumes that he was a specialized copperplate printer. The second of the maps which bear his name was Nicholas Scull’s *Map of the Improved Part of Pennsylvania*, in the production of which he again acted as printer for the engraver, James Turner. Although his Philadelphia career, from what we know of it, may hardly be thought of as one of great activity, it certainly was not undistinguished.\(^{21}\)

**The Political Aspect of the Fisher Chart**

There is a political aspect of the Fisher map that should not be overlooked. Upon the Visscher map (1651?) and certain of its Dutch successors, Cape Henlopen had been located fifteen miles below the position now universally accorded it on the Delaware shore at the entrance to the Bay. In 1685 a royal order was issued to the effect that a line should be drawn westward from Cape Henlopen to the Chesapeake, and that halfway along that line a perpendicular should be erected. All to the east of the perpendicular, virtually the present state of Delaware, was to be considered as belonging to the Penn grant, and all to the west as part of Maryland. No great degree of mathematical genius was required to realize that the farther south the position of Cape Henlopen appeared on the map employed in the negotiations, the greater would be the area awarded to Pennsylvania. Penn and his advisers held to the Visscher map as the basis upon which the boundary settlement should be made, and, apparently, the Calverts acceded.\(^{22}\) Clearly, the Calverts were not what we call "map

\(^{21}\) Charles Evans, *American Bibliography, 1639–1820* (Chicago, 1903–1934), No. 8489. Evans seems to have recorded no other work by Davis except this Scull map and the Fisher Chart which he enters as No. 7647. No additional information concerning him is found in H. Glenn Brown and Maude O. Brown, “A Directory of the Book-Arts and Book Trade in Philadelphia to 1820 including Painters and Engravers” (begun in the *Bulletin of The New York Public Library*, May, 1949).

\(^{22}\) The actual copy of the Visscher map used in the hearings before the Privy Council and its Board of Trade and Plantations is one of the distinguished possessions of the library of the late John Work Garrett, Evergreen House, Baltimore, now by Mr. Garrett’s legacy the property of Johns Hopkins University. See Baer, No. 36. It is endorsed in the hand of William Penn: “The Map by which the privy council 1685 settled the Bounds between the Lord Baltimore & I, & Maryland & Pennsylvania & Territoyra or annexed Countys. W. P.” For discussion of this phase of the long dispute, see E. B. Mathews, ed., *Report on the Resurvey of the Maryland-Pennsylvania Boundary*, Maryland Geological Survey (Baltimore, 1908), 140–145; 219, under date 1655/6; and 259 under date Nov. 7 and 13.
men." They neither collected maps nor studied them. Twelve years before this order of 1685, the Augustine Herrman map had appeared with Cape Henlopen located in its present position. The second Lord Baltimore had subsidized this map, and William Penn had previously thought so well of it for general purposes that he used maps based upon it for both his New Jersey and Pennsylvania colonization ventures. In 1676, indeed, he and his associates in the West Jersey project recommended that "one Agustin" in Maryland, "an able surveyor," be engaged to sound the rivers and creeks and to lay out a town for the expected colonists.\(^{23}\)

That, of course, was not the end of it. Forty-seven years later the fifth Lord Baltimore, in the course of the negotiations which led to the crucial agreement of 1732, submitted as the basis of action a map which came to be called "Lord Baltimore's own Plan." This, too, showed Cape Henlopen in its southerly position, at a point where no cape actually exists. When in 1750 Lord Hardwicke delivered his memorable decree in Chancery, he affirmed that "Cape Henlopen ought to be deemed and taken to be situated at the place where the same is laid down and described in the Map or Plan annexed" to the Articles of Agreement.

But the fifth Lord Baltimore died in 1751, and the complete execution of the decree in Chancery was postponed for the period of minority of his son. In the meantime, an official survey of 1750, undertaken in obedience to the Hardwicke order, resulted in the running of a line westward from the presumed Cape Henlopen to the Chesapeake, thus establishing a southern boundary for Penn on the peninsula. Actually, when Joshua Fisher's map was issued in 1756, the whole matter was once more in the English courts on a basis which made the position of Cape Henlopen important in the issue. In this crisis Fisher asserted the Pennsylvania contention by placing

\(^{23}\) John Thornton and John Seller, *A Map of Some of the South and east bounds of Pennsylvania in America* (London, [1681]), issued by Penn with printed text pasted along lower border. A facsimile in black and white without printed text was issued in 1923, under the editorship of Albert Cook Myers, by The Historical Society of Pennsylvania. A facsimile in color with printed text, made from the John Carter Brown Library copy, was issued by the Library in 1943. The New Jersey map concerned has been previously mentioned in the text above and in note 8, as Seller and Fisher's *A Mapp of New Jersey in America*, with printed text pasted on entitled: *The Description of the Province of West Jersey in America, 1677*. For Penn's references to the Maryland surveyor, "Agustin," see Samuel Smith, *The History of the Colony Nova-Caesaria, or New-Jersey* (Burlington, 1765), 83-87.
Cape Henlopen on his Chart at the place where the Visscher map said it was and where Lord Hardwicke’s decision had said it should be deemed to lie. Furthermore, he engraved at this point the beginning of a dotted, westward running line and labelled it, in accord with the survey of 1750, “Penn’s Southern Bounds.”

In his assertion of the Penn claim as confirmed by the Chancery decree of 1750, Fisher designated the Delaware cape at the entrance of the Bay, “Cape James,” disregarding the “Cape Henlopen” of current usage and restoring the name given that point of land (by William Penn’s preference) in 1682 in the Act of Union with the Delaware counties. Whatever its origin may have been, Lewis Evans in his Geographical Essays of 1755 wrote concerning the name “Cape James” that it “is scarce known at this day.” Obviously, there had been in the immediately preceding years a good deal of local discussion and difference of opinion with regard to the name and correct location of Cape Henlopen. In his Map of Pennsylvania, New Jersey, New York, etc. of 1749, Lewis Evans had located Cape Henlopen in the northern position at the entrance of the Bay, but in his 1752 issue of the same map he had shown awareness of the prevailing difference in points of view. Leaving the position of the name “Cape Henlopen” unchanged, he had nevertheless placed to the southward of it the legend “Fenwick’s I. or the Old Cape Hinlopen.” A few years later, however, we find him scorning that compromise. In his Map of the Middle British Colonies of 1755, even though he received a subsidy for the preparation of that map from the Pennsylvania Assembly, he gave Cape Henlopen the northern position without equivocation. In his Geographical Essays accompanying the map he gives it as his firm opinion that the northern location was correct, but goes on to say that a different belief was held by others whose opportunities for investigating the question were no less good than his own. But despite this tolerant acknowledgment of the rights of others to their opinions, Evans was carrying on cartographical tradition in placing Cape Henlopen at the entrance of the Bay, a tradition well established nearly a century before his time and carried on in general by most of his successors. However sound Fisher’s motive, we may regret that he set himself against that current of belief and practice. This political aspect may not be disregarded in any consideration of his admirable guide to the Delaware waters.
The Second Edition of the Chart

A second edition of the Fisher Chart, completely re-engraved on a smaller plate but encompassing a larger geographic scope, is known through the evidence of copies found in three American libraries. This edition was without date or place of publication and carried neither the engraver's nor printer's name. No reference to its publication in newspaper or other contemporary document has been found. In the face of these negative characteristics, however, the map has been described—correctly, it seems to me—as an issue of Philadelphia, 1775, and it has been suggested that Henry Dawkins, of Philadelphia and New York, was its engraver. The chief geographical feature differentiating this edition from the first issue of the map in 1756 is its enlargement to include the river channels from Reedy Island to the Philadelphia docks and beyond to Ancocas Creek. The title and description of this second Fisher Chart follow:

SECOND EDITION

[Within a decorative cartouche, surmounted by the Penn arms]: To the / Merchants & Insurers / Of the City of Philadelphia / This Chart of / Delaware Bay and River, / Containing a full and exact Description of / the Shores, Creeks, Harbours, Soundings, Shoals / Sands; and Bearings of the most considerable / Land-Marks with a Tide Table / from the Capes to Philadelphia and the / Set of the Tide on the several Quarters / of the Flood and Ebb / Is dedicated / By a Friend to Trade and Navigation / Joshua Fisher

[Within lower panel of the cartouche]: A / Tide-Table / . . . [arranged in two columns of thirteen lines each].

[In upper left corner on the representation of a sheet of paper attached to its background by two large pins]: We the Subscribers having perused the annexed Draught / of Delaware Bay do recommend it as a very exact Performance / and will greatly contribute to the safe Navigation in the said Bay / as the several Draughts heretofore made are very imperfect and no / Dependance to be had on them / [in two columns]: Pilots / . . . [twenty-two names] Masters of Vessels / . . . [twenty-two names identical with those on the edition of 1756 except for the addition at end, under Masters of Vessels, of “John Bolitho” and “Daniel Dingee”].
Map measures 18 3/8 x 27 1/2 inches. Orientation: South-North line runs horizontally the length of the map from left to right. Extreme southern point: "Cape Hinlopen." Extreme northern point: "Ancocas Cr." Printed on a single sheet. Watermarks in this sheet are: northern half, crowned shield, charged with fleur-de-lis, with 4 and \( \mathcal{L}U\mathcal{G} \) beneath; southern half, \( I\!H\!S \) with cross standing above the crossbar of the \( H \) and, beneath the symbol, the figure \( IV \) and the letters IVILLEDARY, i.e., Jean Villedary. (See H. N. Eavenson, Map Makers & Indian Traders [Pittsburgh, 1949], Appendix 34.)

Copies: The Historical Society of Pennsylvania. On a line with the name of Joshua Fisher at end of dedication has been added with a pen "Feb. 28' 1756."


The Circumstances of Publication of the Second Edition

The authorship of the second edition of the Chart here described seems sufficiently attested by the presence upon it of the name "Joshua Fisher" signed to the dedication, and by the virtual identity of its geographical features with the Fisher Chart of 1756. A manuscript version of the revised Chart in the library of The Historical Society of Pennsylvania bears, in place of the Penn arms of the printed map, a shield charged with three dolphins or other fish, presumably a punning armorial device referring to the name of the maker.24 The fact that the second edition of the Chart is smaller in size, bears a different orientation, and is larger in scope need not in any sense disturb the conclusion that it was a revision of the earlier Chart carried through by the original cartographer.

The questions of authorship and place of publication seem clearly resolved if we accept the principle that in the absence of evidence contradicting their tenor or of improbability inherent in them, words

24 Of the two manuscript versions of the Chart in the Society's Library one seems to be Fisher's own draft for the earlier publication of 1756. The other manuscript, smaller in size and larger in scope, does not seem to be an original draft. The very close resemblance it bears to the printed Chart of 1775 in style of drawing and lettering leads one to suggest that it was the engraver's rendering of the original draft prepared for use as "copy" for the engraved version.
may usually be taken as meaning what they say. In a later section are named three London editions of the Chart published in the year 1776. The Faden and Dury editions there specified bear the statement, "taken from the Original Chart Published at Philadelphia by Joshua Fisher"; the Sayer and Bennett edition asserts that it had been "Faithfully coppied from that Published at Philadelphia by Joshua Fisher." All these were copied from the second edition we are now concerned with. Certainly their London publishers accepted Philadelphia as the place of publication and Joshua Fisher as the maker of the revised Chart, copied by them as appropriate to the needs of merchant and naval vessels in that momentous year. The presence upon it of the Penn Arms and the dedication "To the Merchants and Insurers of the City of Philadelphia" carries implications unlikely to be found in a publication issued elsewhere than in the Pennsylvania city itself. There seems no good reason, therefore, to doubt the attribution of the map to the city in which its designer lived.

The year of publication of the second edition is not yet determined. It could have been published at any time between 1756, the date of the first edition, and 1776, the date of three unassociated and separately issued London editions. One is disposed to think that the actions of these three English map publishers had been caused by the arrival in London from Philadelphia of copies of a newly issued Chart rather than by the memory of an edition brought out years before. Even though this is an unsubstantial basis for decision, it seems not unreasonable, especially with the exigency of the times in mind, to hold to 1775 as the year in which the second Philadelphia edition of the chart was brought into being.  

The Engraver

There is some probability that the engraver of the map which we are attributing to Philadelphia, 1775, was Henry Dawkins. That engraver, who was at work in New York as early as 1754, seems to

25 An examination of Philadelphia newspapers for the period 1763–1776 has revealed nothing relating to the publication of this edition of the Fisher map. It may be that a search more widely extended in newspapers and manuscript sources will make certain the date of publication.

26 This suggestion was made to me by Mr. James Clements Wheat, whose study of maps of American publication has been long-continued and intensive.
have removed to Philadelphia about 1758. He is last heard of as engraving paper money for the government in 1780,27 having in the meantime been found guilty in New York of counterfeiting Continental currency. The work of Dawkins has certain characteristics upon which assumptions may be based. One of these is his employment of the Chippendale border in his decorative cartouches. The frame of the cartouche and its flowering decoration in the second edition of the map is comparable in many distinct features to Dawkins's well-known title page for James Lyon's *Urania* (Philadelphia, 1761). The lettering of the two titles contains many likenesses in common, not the least of them being a sharply angled spur on the long "s" in the word "Insurers," a letter all but identical in size and formation with the same character in the word "Necessary" on the *Urania* title page. Dawkins seems to have been at work in Philadelphia as late as 1774; he could claim previous experience in map engraving; and certain of his devices and mannerisms (variety, or rather, lack of uniform usage, in letter forms) are present as common elements in the Fisher map, in the piece of his signed work to which it has just been compared, and in an attributed map of 1761. This is the case for Dawkins as the engraver of Fisher's second edition. It was accepted as an interesting suggestion and remains unproven.

*Sailing Directions for Delaware Bay*

The chart and the book of sailing directions have come through the centuries hand in hand. In the same year in which he issued the London, 1776, re-engraving of the Fisher Chart as one of the elements in his *North American Atlas* of that year, William Faden published *Directions for Navigating up Delaware-Bay, from the Capes to Reedy-Island. By Capt. James Campbell, Late Commander in His Majesty's Navy.* Because of the correspondence, in chart and written directions, of place names and of courses and channels, it is clear that Captain Campbell had built his guide upon the basis of the Fisher Chart. Because the Directions end at Reedy Island, furthermore, it seems likely that Captain Campbell had made use only of the 1756 edition of the Chart. But upon this point one need not be dogmatic. The passage from Reedy Island to Philadelphia may have been

omitted from the Directions by Faden for fear of giving comfort to a possible enemy, and that consideration was fully justified. A comparison made in the course of this inquiry shows that the sailing directions engraved upon one of the French copies of the Fisher Chart, the Carte de la Bay et Riviere de Delaware in the Neptune Americo-Septentrional (Paris, 1778), are simply a translation into French of Captain Campbell's Directions of London, 1776.28

A second set of sailing directions was issued with the Fisher Chart as reference. This brief statement is not an abstract of Captain Campbell's Directions, but, one might suggest, an enlargement of certain prescriptions of that guide not made sufficiently explicit in the original. There are phrases in it which make one certain that it was written with the Campbell Directions in hand. This is a broadside piece, entitled Directions to sail into and up Delaware Bay. The only known copy of this piece is owned by the Library Company of Philadelphia. It is entered in Evans's American Bibliography under the year 1778, on the basis of a note in longhand on the lower margin of that unique copy. If that was the year of publication, it was, in all probability, issued in the course of the British occupation. The employment in this broadside of the Baskerville letter relates it typographically to other productions of an unidentified Philadelphia press of this period.29

The English and French Imprints

It is impossible to bring within the scope of this article a full description and discussion of the English and French copies of the second edition of the Fisher Chart. It must be enough to say that the year 1776 saw editions issued in London by William Faden, included in his North American Atlas of 1777; by Sayer and Bennett, included in their North American Pilot, also of 1777; and by A. Dury as a separate publication dated November 30, 1776. A much reduced copy was issued with The Gentleman's Magazine20 in 1779, and years

29 In my History of Printing in Colonial Maryland (Baltimore, 1922), Imprint Section, I attributed No. 285, an item of the year 1768 showing Baskerville types, to a Baltimore press. I have been convinced for a good many years that this was an error and that the printing of that piece was done in Philadelphia.
20 Gentleman's Magazine, XLIX (1779), 369.
later an edition, or possibly a reissue, dated 1794, is found in Laurie and Whittle's *North American Pilot* of 1795. In France the mapmaker and publisher Le Rouge brought out, dated 1777, a copy of the map in French for his *Pilote American Septentrional* of Paris, 1778–[1779]. Another French edition was made for inclusion in *Neptune Americo-Septentrional* (Paris, 1778–1780). It was upon the face of this edition that one finds engraved a translation into French of Captain Campbell’s *Directions for Navigating up Delaware Bay*, mentioned earlier.

Americans, English, and French thus were provided with an accurate chart of Delaware Bay and River at a time of need. In the Library of Congress collection there are to be found four contemporary manuscript Fisher *Charts* copied from different English and French versions, and photostats of four Spanish charts showing the Fisher influence. Not many American-made maps of the eighteenth century can show influence so great in degree and so widespread in time and space as the *Chart of Delaware Bay* of Joshua Fisher, Philadelphia merchant and self-taught cartographer.

*The John Carter Brown Library*  
*Lawrence C. Wroth*