Barry Lawrence Ruderman
Antique Maps Inc.

Patapsco River and Approaches from a Trigonometrical Survey under the Direction of F.R. Hassler and A.D. Bache . . . 1861 [Rare Thick Paper Electrotype Edition!]

Stock#:   32257mb
Map Maker: United States Coast Survey

Date: 1859
Place: Washington
Color: Uncolored
Condition: VG+
Size: 32.5 x 22 inches

Price: SOLD
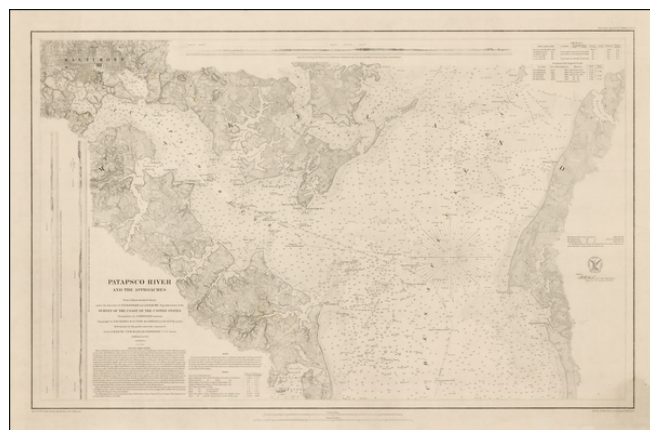
Description:

Fine example of this rare Electrotype edition of the US Coast Survey map of the Patapsco River and northern Chesapeake region, published separately on thick paper as a presentation copy.

The chart provides a fantastically detailed look at the Patapsco River and contiguous parts of the Chesapeake, extending west to Baltimore. The chart Also includes detailed navigational notes and sailing directions for entering the harbor, with a list in top center of lighthouses and beacons. There are also several coastal profile views.

Printed on thick paper and never folded, the chart is in near fine condition.

The United States Coast survey was responsible for several major printing innovations, including electrotyping and photography as applied to cartography. Neither of these technologies were invented within the Coast Survey. However, because of the electrical and mechanical genius of George Mathiot, both of these methods were improved and applied to the rapid production of charts and maps with great effect by the end of the 1850's.

As noted by NOAA,

Electrotyping was an electro-chemical method of producing an exact replica of an engraved copper plate. This was a vitally important procedure as first-class copper engravings took years to produce and would be ruined after a few hundred impressions on a printing press. The Coast Survey began experimenting with electrotyping in 1846. Selmar Siebert, a senior engraver, conducted these experiments; in 1847 Bache reported, "Several of the plates have been copied by the electrotype process, preserving the

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originals from injury, and rendering possible an unlimited multiplication of copies from a single engraved plate." This early work was not without its risks, as the lower plate of the chart of Delaware Bay was destroyed by the adherence of copper to the original plate in 1849. Perhaps it is just coincidence, but the following year George Mathiot was first mentioned in the annual report as being in charge of the electrotyping division.

Under Mathiot, the electrotyping division prospered. At the end of 1851, Major Stevens reported:

The electrotyping department has improved so greatly the past year in all its arrangements and processes, that at my request its chief, Mr. Mathiot, has made a general report on the subject of electrotyping, (Appendix No. 55,).... The advances which have been made through the agency of the Coast Survey have scarcely been equaled in the history of any art. Not a single failure has yet occurred in Mr. Mathiot's process. A single plate has again been reproduced from the junction of plates with complete success.

The time for reproducing a plate has been greatly abridged. Time has been saved, and a greater certainty given to the process ...

The time saved was significant. During the first electrotyping experiments, no more than six plates a year could be reproduced. By the end of 1851 the time for producing a first reproduction of a plate was reduced to four days with all subsequent duplications reduced to three. The significance of this advance was that for the first time virtually unlimited printings of map sheets could be accomplished. In Stevens' words, "... in fifty days the plates can be made for fifteen thousand sheets of any Coast Survey map, however large and elaborate it may be."

Detailed Condition:

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