



The Text Message

Winslow Lewis and the Expansion of Early Federal Lighthouses

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By Andrew Begley, Archives Specialist at the National Archives at Boston

When the First Congress passed “An Act for the establishment and support of Lighthouses, Beacons, Buoys, and Public Piers” on August 7, 1789, there were only twelve lighthouses illuminating the shores of the newly formed nation. By 1842, that number had grown to 250. For better or worse, no individual had a greater impact on how those 250 lighthouses were constructed, lit, and supplied than Winslow Lewis of Boston, Massachusetts. A ship captain by trade, in 1808 Lewis patented a binnacle lamp used for lighting ships’ navigational equipment. By 1810, Lewis had repurposed his design and patented a “reflecting and magnifying lantern” for use in lighthouses. With the help of contacts at the Boston Marine Society, Lewis arranged a demonstration of his new lamps at Boston Light. Within two weeks of filing his lighthouse patent, Lewis wrote to Massachusetts Superintendent of Lighthouses Henry Dearborn and announced that he had “invented a New Method of lighting Light Houses” that would burn two-thirds less oil and could be seen at twice the distance of the common ‘spider lamps’ in use at the time. Never one

to beat around the bush, Lewis offered to sell his patent to the United States for a sum of \$10,000, and to contract to install his lamps in all lighthouses in the U.S.

The Subscriber having invented a New Method of lighting Light Houses & has obtained Letters Patent from the United States for the same, the Experiment has been try'd in the Light House at Boston & is highly approved of, & it is prov'd that the saving of the Oil will be ~~two thirds less than~~ ^{it is} ~~was formerly~~ consumed in lighting Light Houses. & a Light produced that may be seen near by Double the Distance that the Common Light is now seen. The Inventor of the Above now offers to sell to the United States the Patent Right of this valuable Invention for Ten Thousand Dollars; & to contract to put any Light House, on the Place described in the Patent, in a workmanlike manner for fifty Dollars for each Lamp so lighted with the Number amount to ten: all over that, thirty Dollars for each Lamp; Or will contract to put any Light House for 500 Dollars each Lamp.

Winslow Lewis
Boston 20th June 1810

Winslow Lewis to Henry Dearborn, June 20, 1810.

<https://catalog.archives.gov/id/81128603>, Image 58.

While Lewis's patent had indeed been approved by the Secretary of State's office, his claim to inventing a new method of lighting was quite a stretch. Lewis's 'invention' was in fact an inferior version of the Argand Lamp, invented by Swiss scientist Francois-Pierre-Amédée Argand nearly 30 years earlier. Lewis's lamps lacked the true parabolic reflectors that were necessary for focusing the beam of the light, and the lamps'

workmanship was often questionable. However, the “Lewis lamp” was undoubtedly an improvement over lamps used in United States lighthouses at the time, and in 1812 Lewis signed a contract with Treasury Secretary Albert Gallatin to sell his patent to the U.S. and install his lamps in all lighthouses in the U.S. within two years, for a sum of \$24,000. Lewis would also be paid \$500 per year for the next seven years to keep the lamps in good

Treasury Department
July 5th 1811.

Sir

Your letter of 27th Ult. has been received. Referring you to mine of 1st inst., I can only add, that the success of Mr. Lewis's improvement appears to be such, that I feel disposed to extend it as fast as the appropriations will permit, to all our light houses. Your opinion will of course have great weight, and it is important to ascertain on what terms Mr. Lewis will agree to prepare and fix the apparatus in the several Light Houses. It is within the reach of the appropriations to carry the plan into effect this year in all the Light Houses under your superintendance which you will recommend, and in those of Montauk point, Sandy Hook, Cape Cod, & Cape Henry.

I am respectfully
Your Obedt. Serv.
Albert Gallatin

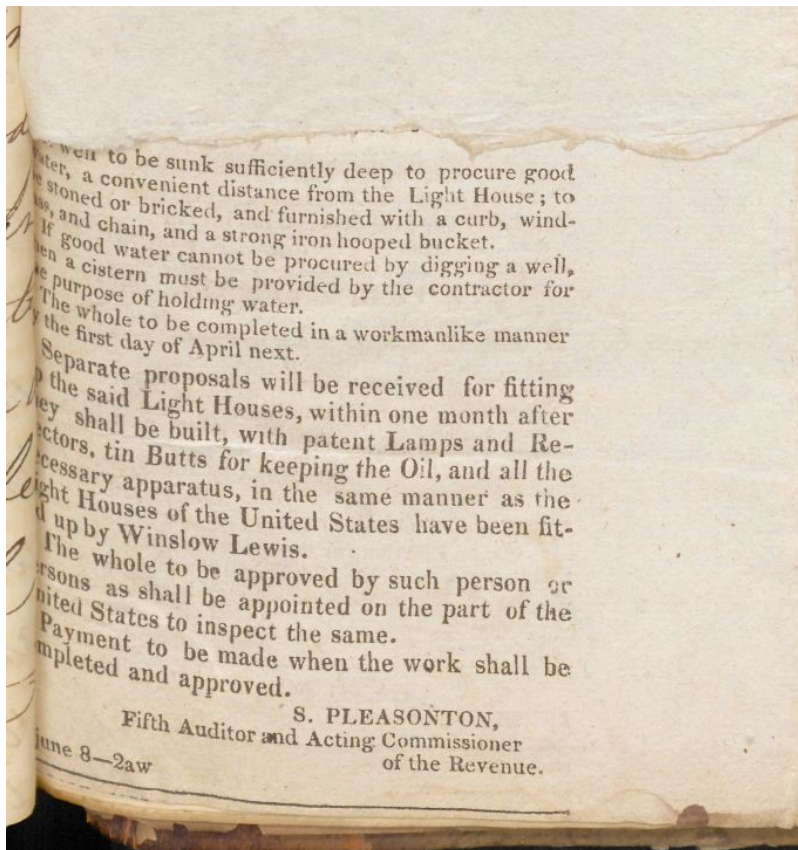
Henry Dearborn Esq.
Sup. of Light Houses
in Massachusetts.

Albert Gallatin to Henry Dearborn, July 5, 1811, lauding the “success of Mr. Lewis’s improvement”

<https://catalog.archives.gov/id/81128603>, Image 87.

repair. The contract stipulated that Lewis's lamps must burn oil at half the rate of older lamps, and must provide "a more brilliant light than appears from the present mode of lighting." ⁽¹⁾

Although delayed somewhat by the War of 1812, Lewis succeeded in installing his lamps across the whole U.S. lighthouse system by 1816. As the pace of lighthouse construction along the Eastern Seaboard and the Great Lakes increased, Lewis oversaw the installation and repair of lights well beyond his original seven-year contract period. A representative advertisement for contractors to 'fit up' three new lighthouses in Florida in 1824 states that the work must be done "in the same manner as the Light Houses of the United States have been fitted up by Winslow Lewis." By the mid-1820's, Lewis's name had become synonymous with U.S. lighthouse illumination.



Advertisement for proposals, June 5, 1824.

<https://catalog.archives.gov/id/132147760>, Image 386 (detail).

While Lewis's monopoly on providing lamps for the country's lighthouses must have kept him fairly busy, he was never one to limit his ambitions. As he traveled around New England installing his lamps in 1812-1816, Lewis became the de-facto representative of Massachusetts Lighthouse Superintendents Henry Dearborn and his son (and successor) Henry A.S. Dearborn. Like many of their contemporaries in other states, the Dearborns focused on their primary duties as Collectors of Customs and rarely visited the lighthouses in their districts. Lewis used this position of authority to suggest repairs and improvements to a number of lighthouses and keepers' dwellings, and often received contracts to perform the repairs himself. He would also secure successive contracts from 1816-1827 to supply all of the lighthouses in the United States with spermaceti oil for their lights.

1819
Lighthouses from the Chesapeake to Maine.

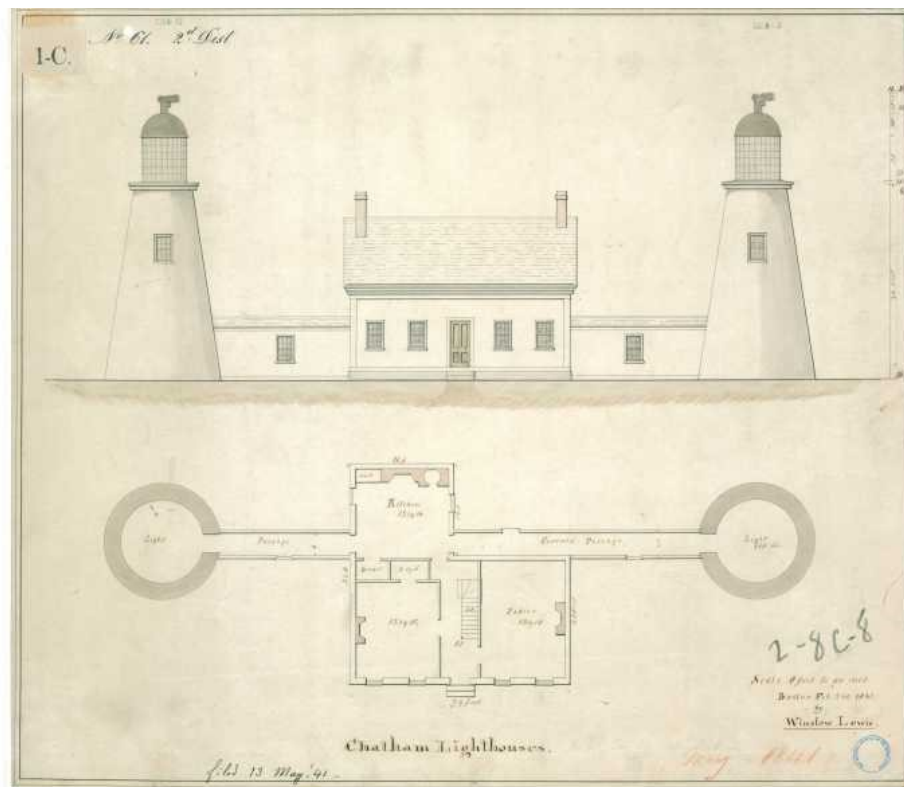
Names.	Oil Lamps	Names.	
Cape Henry	14	New Port.	10
Old Point Comfort.	10	Great Island.	8
New Point Comfort.	9	Clark's Point.	8
Smith's Point.	9	Bird Island.	10
Redkin.	13	Walter's Point.	9
North Point.	18	Long Head.	10
Cape Montpelier.	13	Carpauling Cove.	7
Cape May.	15	West Chop.	9
Fort Delaware.	8	One lamp added by the	
Sandy Hook.	31	Order of Mr. Dearborn.	
Sandy Point.	11	Cape Poge.	7
Eaton's Neck.	12	Grand Point.	6
Old Field Point.	10	Nantucket.	13
Montauk Point.	13	Point Quemoa.	7
Gull Island.	14	Monamoy.	8
Black Rock.	8	Chatham.	14
New Haven.	8	Cape Cod.	16
Stratford Point.	10	Race Point.	10
Faulkner's Island.	12	Billinggate.	8
Synde Point.	7	Plymouth.	12
New London.	9	Situate.	7
Norington.	10	Boston.	14
Fort Sh. Hill.	10	Long Island head.	10
Point Judith.	10	Daker's Island.	29

Amount brought up	
Ten pound Island	10
Thacher Island	16
Squam	5
Phoeb Island	14
White Island	15
Portsmouth	11
Dean Island	7
Wood Island	10
Portland	15
Pond Island	9
Leguin	14
Burnt Island	10
Franklin Island	7
Monhegan	10
Whitehead	8
Petit Manan	9
Silly Island	10
Whaddy	7
Whole number 702 lamps	

List of lighthouses “from the Chesapeake to Maine,” indicating the total number of lamps to be supplied with oil by Winslow Lewis, 1824. <https://catalog.archives.gov/id/132147760>, Images 396-397.

When Lewis was underbid for a new oil contract in 1827, he turned his focus to working as a lighthouse contractor and builder. An 1842 Congressional report indicates that Lewis was responsible for building around 80 lighthouses throughout the country to that date. ⁽²⁾ Apparently without any formal training in building or engineering methods, Lewis appears to have relied on practical experience gained while touring lighthouses to install his lamps and make repairs. During the 1820’s and 1830’s Lewis would build a close working relationship with Treasury official Stephen Pleasonton, who oversaw the Light-House Establishment as the Fifth Auditor of the Treasury.

Pleasanton had no relevant maritime experience—his position was granted to him in large part in gratitude for saving the Declaration of Independence and Articles of Confederation from destruction during the War of 1812—and as a result Pleasanton relied heavily on Lewis’s practical experience to guide matters related to lighthouse construction and repair. Lewis was often the lowest bidder on lighthouse construction projects, and with his connections at both the local and national level, he was able to consistently win contracts for new lighthouse projects.



Plan for Chatham Lighthouse, built by Winslow Lewis in 1841.

<https://catalog.archives.gov/id/85967585>

Lewis’s impact on the growth of the federal lighthouse system in the U.S. is undeniable. However, it is often difficult to view this impact in a positive light (pun intended). The “Lewis lamp” was viewed by many contemporaries as a poor copy of the Argand lamp—an improvement over its predecessors in American lighthouses to be sure, but one that perhaps should not have remained the industry standard into the 1840’s. An

1837 report to Congress by the publishers of the *Coast Pilot*, the first of many negative reports that would ultimately end the influence of Pleasonton and Lewis in the Light-House Establishment, includes this scathing pronouncement: “[w]e have been for years behind other nations in taking advantage of improvements [in lighting lighthouses]; but if we were to judge from an advertisement for a contract of the ‘patent lamps,’ we should suppose something new was in contemplation. It is nothing but the Argand lamp, with miserable arrangements.”⁽³⁾

Perhaps more damaging to Lewis’s reputation was the quality of workmanship found at the lighthouses built or repaired under his watch. Many needed extensive repairs if not outright replacement within a few years of being built. Lewis’s nephew (and oft nemesis) I.W.P. Lewis, himself a civil engineer and lighthouse expert, wrote an extensive report on the state of the country’s lighthouses in 1843. Referring to the original 1789 law governing lighthouses, beacons and buoys, the younger Lewis writes that it “omits, in short, every wholesome regulation calculated to confine the cupidity of contractors within the bounds of honesty; and the nation has thus been encumbered with a family of 250 light-houses, all more or less defective, and all crying out for continual repairs.”⁽⁴⁾ As the most prominent lighthouse contractor of the era, this critique was almost certainly aimed at the work of Winslow Lewis. The elder Lewis’s influence waned during the 1840’s with the movement towards a more professional approach to managing the nation’s lighthouses, and he died in 1850, two years before the creation of a new Lighthouse Board. Nevertheless, with maritime know-how, a knack for self-promotion, and perhaps a pinch of patent infringement, Lewis was able to thrive in this era lacking in “wholesome regulation” and stamp his imprint on the history of America’s early federal lighthouses.

Note on sources: Recently digitized records related to early federal lighthouses can be found in the following series at the National Archives at Boston: [Letters Received Concerning Lighthouses, 1789 – 1819](#) (in Record Group 26), and [Letters Received from the Departments of State and Treasury, 1789-1882](#) (in Record Group 36).

A number of reports to Congress relating to lighthouses can be found in the ponderously titled *Compilation of Public Documents and Extracts from Reports and Papers Related to Light-Houses, Light-Vessels, and Illuminating Apparatus, and to Beacons, Buoys, and Fog Signals, 1789-1871*, from the U.S. Lighthouse Establishment: <https://catalog.hathitrust.org/Record/012310361>.

The following secondary sources also provided helpful background information for this post: *Brilliant Beacons: A History of the American Lighthouse*, by Eric Jay Dolin; *Kindly Lights: A History of the Lighthouses of Southern New England*, by Sarah C. Gleason.

For information on additional recently digitized lighthouse records see: [Lighting the Way: RG 26 Lighthouse Plans & Maps Now Digitized](#) at the *Unwritten Record Blog*.

Footnotes:

(1) United States. Light-House Establishment, *Compilation of Public Documents and Extracts from Reports and Papers Related to Light-Houses, Light-Vessels, and Illuminating Apparatus, and to Beacons, Buoys, and Fog Signals, 1789-1871* (New York: Government Printing Office, 1871), 4,

<https://catalog.hathitrust.org/Record/012310361>,
HathiTrust.

(2) Ibid., 323-324.

(3) Ibid., 95.

(4) Ibid., 353.

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