

Lamp 10 inches by 6 - B. A Reflector which collects the light together D. a Bulls Eye which receives the Reflection of B.
 3 the Burner & Tube which illuminates both B and D.
 Figures 1, 2, 3, 4, 5, 6 are all Copied Lamps as A is the wire
 7 and 8 in Circumference is 30 inches each. Cu Tube 6 inches in Circumference
 9 the Burner the Circumference of B. is 4 inches & half inches consumes 1/2
 & a half in 12 Hours if the Specimens Oyle is good
 Figures 7, 8, 9, 10, 11 & 12 are all Bulls Eyes of the same Circumference as D.
 with Lamps Burners & Reflectors as A, B, & C are of the same size
 What they rest on is a circular Stand of the Diameter of 6 1/2
 supported on a Stand 3 Feet high

The upper Circular Stand is of the Diameter of 3 Feet
 with Lamps Burners & Reflectors the same as the Stand next the burner
 A, B, C & D, and all of the same Dimensions supported on the same
 2 Feet & 3/4 inches above the Circular Stand of A, B, C & D
 The Number of Lamps in all are 16, the Reflector Burners & Bulls Eyes
 each 16. And the 16 Burners by Experiments with consume 5 Quarts in
 12 Hours.

This is the exact size of the Cotton Wicks

when illuminated some of these Bulls Eyes were
 seen at any point of the Compass for 4000000 feet
 light of one in that distance the sun in view

Lamps 39 - Miscellaneous



SMITHSONIAN AMERICAN
 HISTORY MUSEUM
 ROOM 5006
 MAR 622
 FILE 6.311
 LIGHTHOUSE EQUIPMENT

(FACIMILE)

UNITED STATES PATENT OFFICE.

WILSLOW LEWIS of BOSTON, MASSACHUSETTS

MAGNIFYING and REFLECTING LANTERN

Specification forming part of Letters Patent No. **1305-X**, dated June 8, 1810

To all whom it may concern:

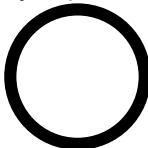
Be it known that I, Winslow Lewis, Boston Massachusetts, have invented a new and improved Magnifying and Reflecting Lantern for use in lighthouses; and I do hereby declare that the following is a full, clear and exact description of the same, reference being had to the accompanying drawings making a part of this specification in which:

- A:** Lamp 10 inches by 6.
 - B:** A Reflector which collects the light together.
 - D:** A Bulls Eye which receives the reflection of **B**.
 - C:** The Burner and Tube which illuminates both **B** and **D**.
- Figures 1,2,3,4,5,6 are all Copper Lamps as **A** is likewise.
D and **B** in Circumference is 30 inches each. (**Ed:** 9.5-inch diameter)
C: A Tube 6 inches in circumference. (**Ed:** 1.9-inch diameter)
E: The Burner the circumference of **E** is 4 inches and a half (**Ed:** 1.4 inch diameter) which consumes two Gills and a half in 12 hours if the Spermeciti Oyl {sic} be good.

Figures 7,8,9,10,11 and 12 are all Bulls Eyes of the same circumference as **D**'s, with Lamps, Burners and Reflectors as **A**, **B**, and **C** are and of the same size. What they rest on is a Circular Frame of the diameter of 4 foot supported on a stand 3 foot high.

The upper Circular Stand is of the diameter of 3 feet with Lamps, Burners and Reflectors the same as the stand which supports **A**, **B**, **C** and **D**, and all of the same dimensions supported on the same stand 2 foot and 2 inches above the Circular Stand of **A**, **B**, **C** and **D**.

The Number of Lamps in all are 16, the Reflectors, Burners and Bulls Eyes are each 16, and the 16 Burners by experiment will consume 5 quarts in 12 hours.

This is the  exact size of the Cotton Wick. (**Ed:** ¼ inch diameter)

When illuminated one of these Bulls Eyes may be seen at any point of the compass for before you loose the sight of one another presents itself in view.

The original description and drawings of the Winslow Lewis patent were destroyed in a fire at the Patent Bureau on December 15, 1836. However, the drawing shown attached was found in the collection of the Smithsonian Institution, its original source is unknown, but was probably from one of the copies often furnished by the Patent Bureau for examination or litigation. The drawing was made on paper that was dated to 1796, and there are good indications that it is a copy of the actual patent drawing for Patent 1305.