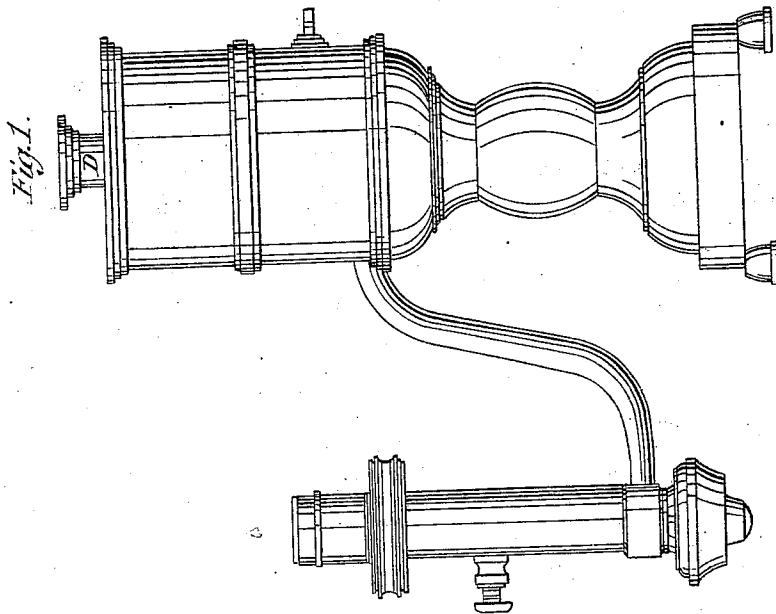
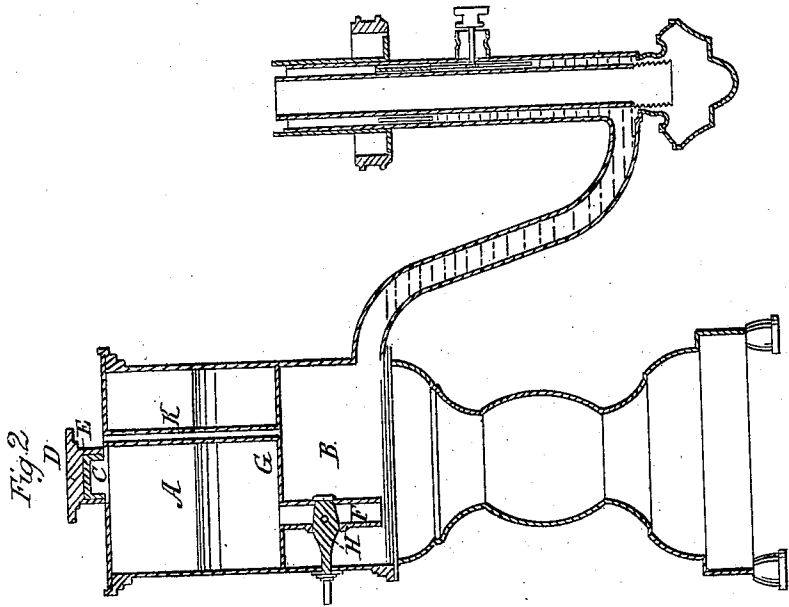


B. HEMMENWAY

Lamp.

No. 1,934.

Patented Jan'y 20, 1841.



# UNITED STATES PATENT OFFICE.

BENJAMIN HEMMENWAY, OF ROXBURY, MASSACHUSETTS.

## CONSTRUCTION OF ARGAND LAMPS.

Specification of Letters Patent No. 1,934, dated January 20, 1841.

*To all whom it may concern:*

Be it known that I, BENJAMIN HEMMENWAY, of Roxbury, Norfolk county, State of Massachusetts, have invented new and useful Improvements in Argand Lamps.

The said improvements, the principles thereof, manner in which I have contemplated the application of the same by which they may be distinguished from other inventions of a like character, together with such parts or combinations, I claim as my invention and for which I solicit Letters Patent, I have herein set forth and described, which description taken in connection with the accompanying drawings herein referred to, and which exhibit my invention, forms my specification.

Figure 1, represents an elevation of the exterior of an Argand lamp with my improvements. Fig. 2 is a vertical section of the same exhibiting the construction of the interior.

In general in all the Argand lamps now in use it is necessary to remove and invert the oil chamber in order to replenish it with oil; the same being usually connected to the body or stand by a screw. This operation, besides its inconvenience and its tendency to cause a derangement of the connecting parts from wear incident thereto, is generally attended with the accident of an overflow or dropping of oil on the exterior of the lamp.

The object of my improvement is to render the removal of the oil fountain unnecessary, and to provide a very simple method of resupplying the same with the combustible fluid.

A, Fig. 2 represents the oil reservoir, and B the air chamber, situated immediately under the same in the body of the lamp. The oil chamber has a short tube C projecting from its top. This tube has a screw cut on that portion of its outer surface which is above the top of the oil chamber, on which a hollow milled nut or cap D is screwed. A leather washer E is interposed between the top of the tube C and the bottom of the interior of the nut. On removing the cap D, the reservoir A may be filled with oil through the tube C; and on firmly screwing down the cap D, the washer E prevents the entrance of any air, into the reservoir A, through the tube C. The reservoir A communicates with the air chamber B by a tube F, inserted in the bottom plate G of the former, as seen in the drawing.

This tube has a stop cock H therein the head or handle of which projects on the outside of the air chamber, so that by applying the hand thereto, it can be turned at pleasure. The shank of the air cock, where it passes through the side of the air chamber B should be well fitted therein. A tube K, open at both ends passes downward through the reservoir and is soldered into the top and bottom of the same; leaving a free passage for the external atmosphere through the tube into the air chamber B. The other parts of the lamp are the same or similar in their construction to those in common use.

From the above it will be observed that in order to fill the reservoir A with oil, it is only necessary to close the stop cock H, there by shutting off the communication between the reservoir and air chamber B. Then unscrewing the cap or nut D, the oil may be poured through the tube C. On closing the passage C by firmly screwing down the cap D, and opening the cock H air will ascend through the tube F, causing the oil to pass downward through the tube into the air chamber B, and will rise in the said air chamber to the level of the bottom of the tube F. Then as the oil is gradually consumed by the flame of the wick, its surface in the air chamber will fall below the bottom of the tube and permit a small quantity of air to rise into the reservoir A, at the same time displacing an equivalent body of oil, which descends into the air chamber.

I claim—

Combining with the air chamber B, in the manner set forth, a tube K for admitting air to said chamber and a stationary fountain or reservoir for containing oil constructed as described, that is having a tube to admit of a supply of oil when necessary, with a cap adapted to said tube to exclude the pressure of the air, and a tube F for conveying the oil to the chamber B provided with a stop cock to intercept the communication while the fountain is being filled; all as set forth.

In testimony that the above is a true description of my invention I have hereto set my signature this sixth day of October in the year eighteen hundred and forty.

BENJAMIN HEMMENWAY.

Witnesses:

R. H. EDDY,  
EZRA LINCOLN, JR.