

W. FREEMAN.

Lamp.

No. 32,358.

Patented May 21, 1861.

Fig: 1.

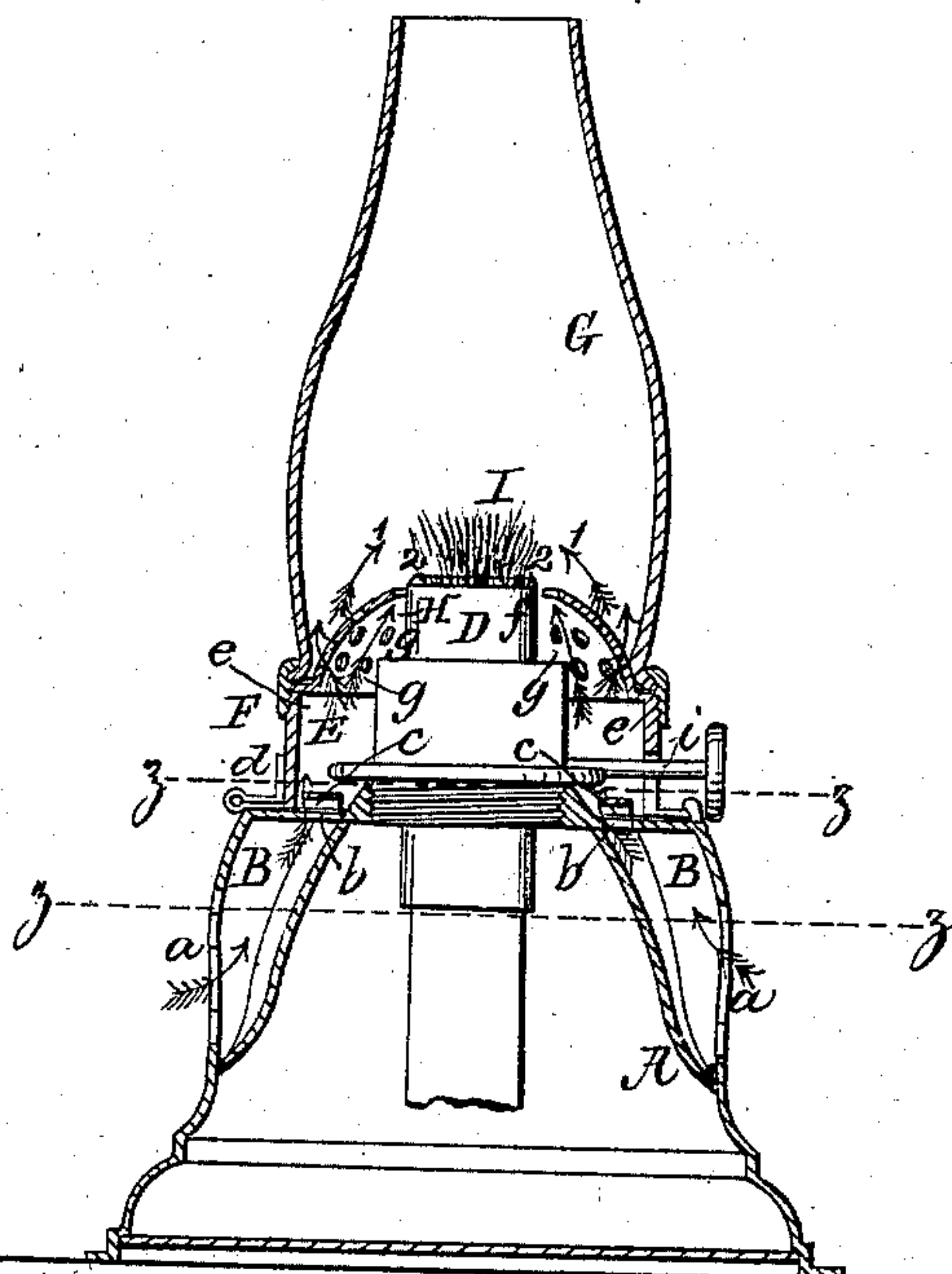
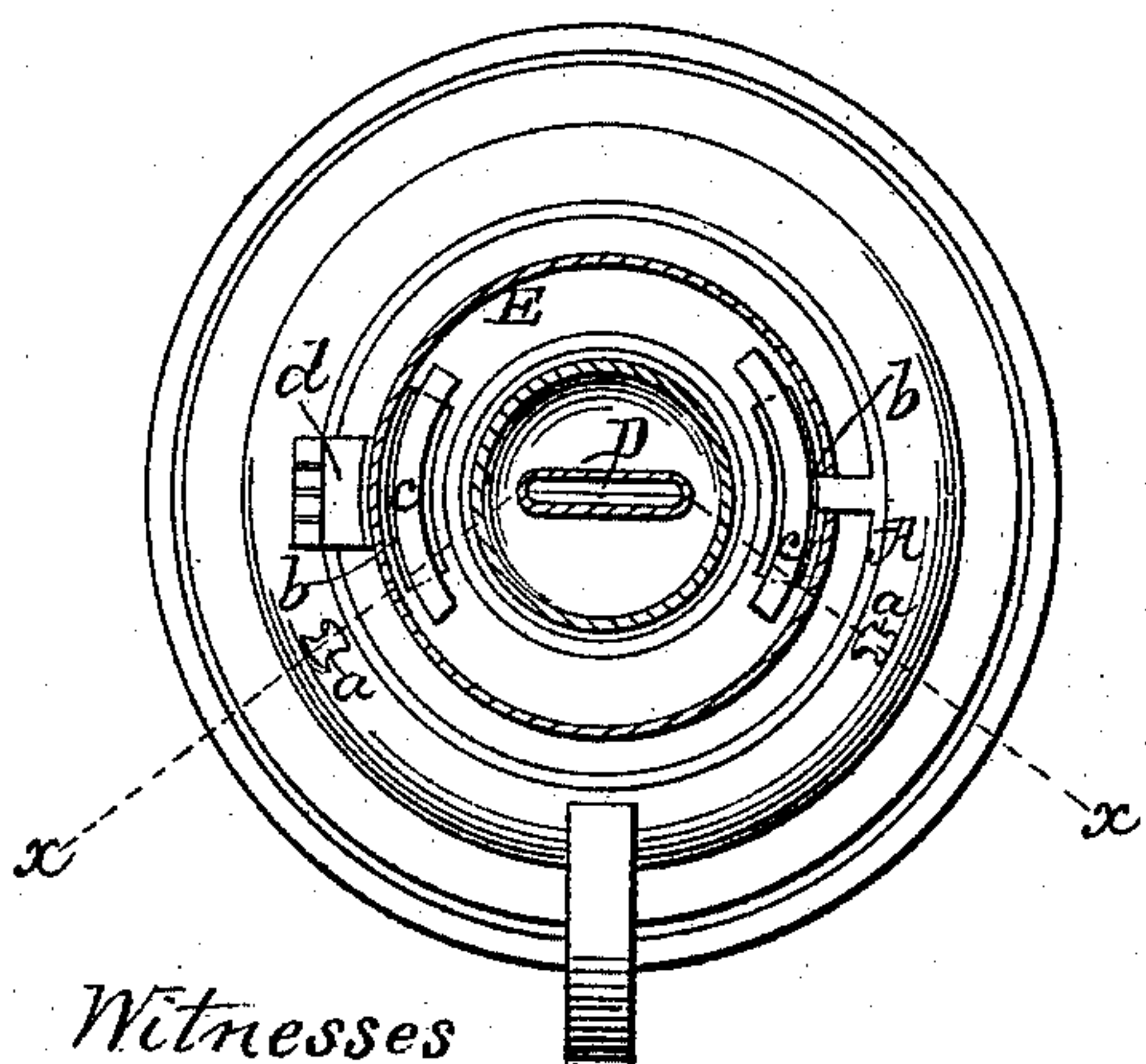
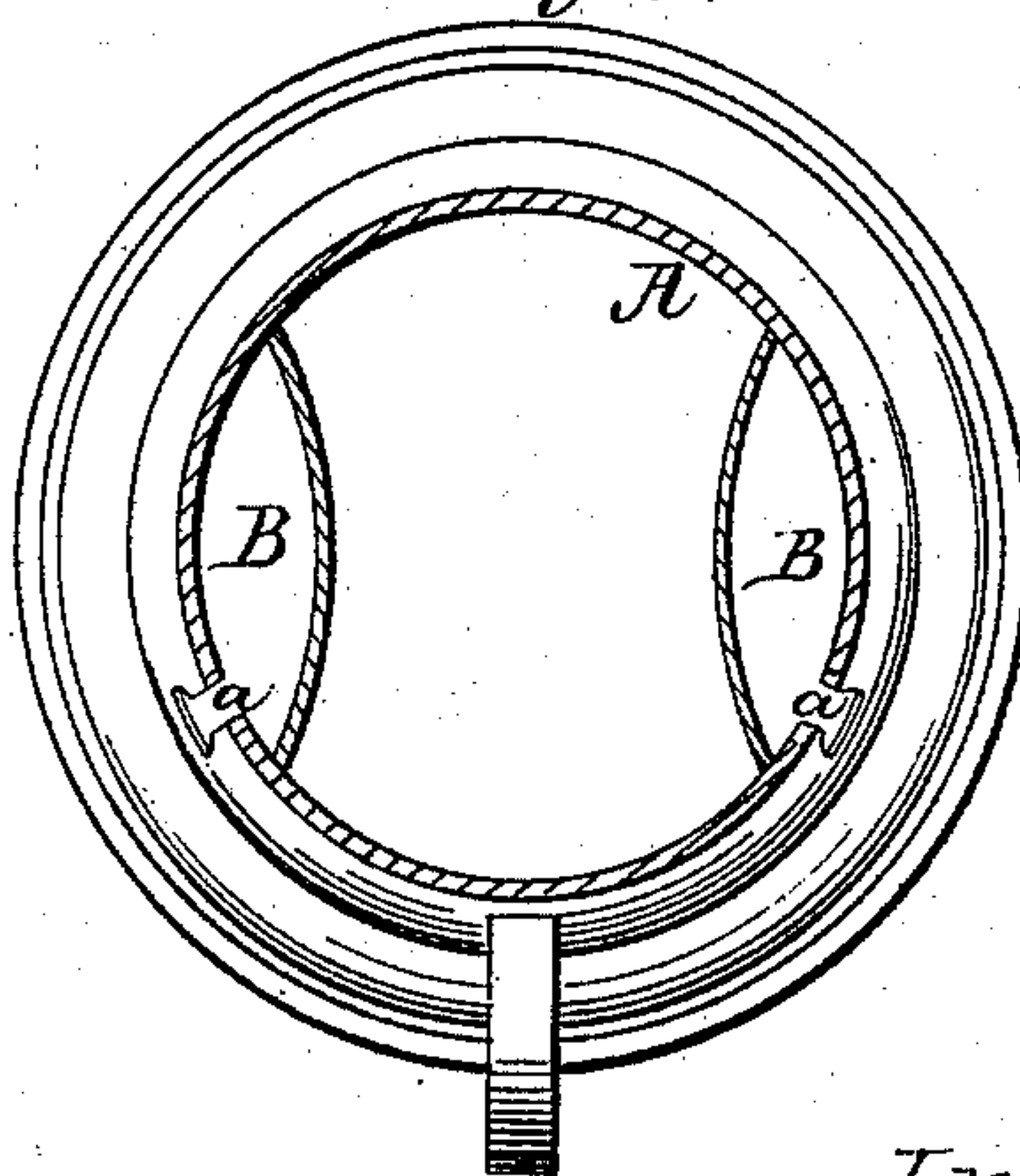


Fig: 2.



Witnesses  
J. W. Coombs  
R. S. Spencer

Fig: 3.



Inventor  
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# UNITED STATES PATENT OFFICE.

W. FREEMAN, OF MOUNT CARMEL, CONNECTICUT.

## LAMP.

Specification of Letters Patent No. 32,358, dated May 21, 1861.

*To all whom it may concern:*

Be it known that I, W. FREEMAN, of Mount Carmel, in the county of New Haven and State of Connecticut, have invented a new and Improved Lamp; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a vertical section of my invention taken in the line *x, x*, Fig. 2. Fig. 2, a horizontal section of the same, taken in the line *y, y*, Fig. 1. Fig. 3, a horizontal section of the same, taken in the line *z, z*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to obtain a simple and portable lamp for burning coal oils, one that may be economically constructed and carried about from place to place equally as well as lamps for burning other materials which do not require a glass chimney to insure proper combustion.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A, represents the fountain or body of a lamp, the upper part of which has an air or draft passage B, at each side, said passages communicating at their lower ends with the external air by perforations, as shown at *a*, and the top of the passages B, are perforated as shown at *b, b*, the perforations being covered by guards or flaps *c, c*, which are simply metal strips projecting over the perforations *b, b*, some distance above them, see Figs. 1, and 2.

D, is a wick tube which is screwed as usual into the upper end of the fountain or body A, of the lamp, and E, is a metal ring which is connected by a hinge or joint *d*, to the top of the fountain or body A.

On the upper part of the ring E, there is formed or cut a screw thread *e*, on which a ring F, is screwed, said ring F, being placed on the lower part of a glass chimney G, and serving as a means for securing the chimney G, to the lamp, as shown clearly in Fig. 1.

H, is a dome-shaped deflector which is attached to the ring E, at its upper part. This

dome has an oblong opening *f*, at its center or apex in line with the wick tube D, and the dome is perforated with small holes *g*, as shown in Fig. 1.

When the ring E, is secured down on the top of the body or fountain A, the top of the wick tube D, is flush with the top of the deflector H.

The wick within the tube D, is raised and lowered by means of the usual notched wheels placed on a shaft *i*, and arranged in the ordinary way.

From the above description it will be seen that when the lamp is in operation the flame I, is supplied with air through the passages B, B, which extending down on, or through the body A, of the lamp cause a sufficient draft to supply the flame with the requisite amount of oxygen to support proper combustion. The air passes through the perforations *g*, of the deflector H, and impinges against the sides of the flame as shown by the arrows 1, and also passes up by the sides of the wick tube and impinges against the base of the flame as indicated by the arrows 2. By this arrangement a sufficient draft is obtained with quite a short chimney G, the draft passages B, compensating for the shortness of the chimney. The guards or flaps *c, c*, serve as protectors for the flame and prevent the flickering of the same which would otherwise be caused by a sudden movement of the lamp. The wick tube it will be seen is rendered accessible for trimming and for filling the lamp by simply turning over the ring E, on its hinge *d*.

The whole device is extremely simple and efficient.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent; is,

In connection with the draft passages B, B, and ring E, provided with the deflector H, the guards or flaps *c, c*, placed over the openings or perforations *b, b*, to operate as and for the purpose set forth.

W. FREEMAN.

Witnesses:

ALMON WARNER,  
L. A. DICKERMAN.