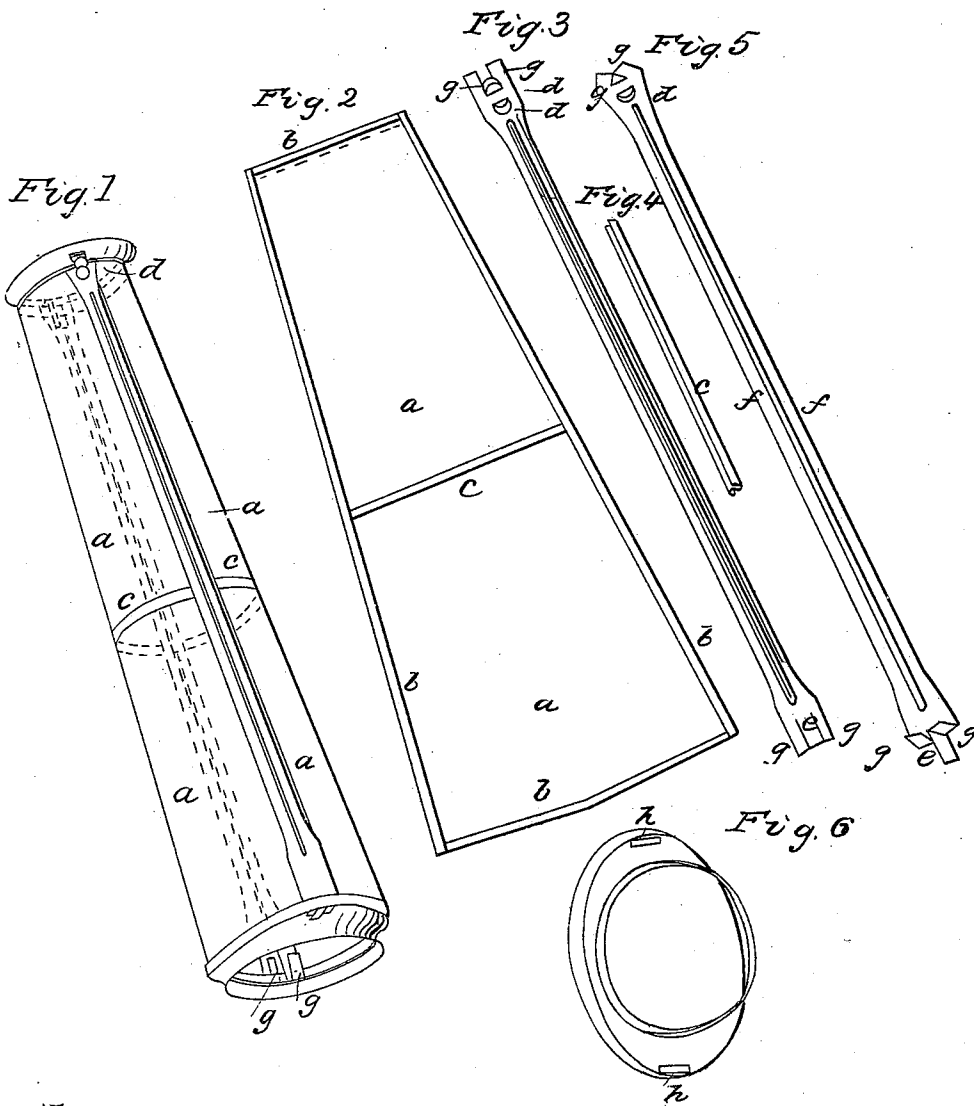


B. J. C. HOWE.  
Mica Lamp Chimney.

No. 37,506.

Patented Jan. 27, 1863.



witnesses  
J. B. Gaylord  
C. E. Postwick.

Inventor  
Benjamin J. C. Howe.

# UNITED STATES PATENT OFFICE.

BENJAMIN J. C. HOWE, OF SYRACUSE, NEW YORK.

## IMPROVEMENT IN MICA CHIMNEYS FOR LAMPS.

Specification forming part of Letters Patent No. 37,506, dated January 27, 1863.

*To all whom it may concern:*

Be it known that I, BENJAMIN J. C. HOWE, of the city of Syracuse, in the county of Onondaga and State of New York, have invented a new and useful Improvement in Lamp-Chimneys; and I do hereby declare that the same is fully and accurately described and represented in the following specification and drawings.

The nature of my improvement consists in the application of sheets of mica supported by a frame consisting of two upright posts held in position by an oval ring at the base and a round or oval ring at the top, the object of which is to produce a cheaper and more durable article of use and trade.

In the accompanying drawings the same letters indicate like parts in each of the figures.

Figure 1 is a perspective view of the chimney complete.

Fig. 2 is an elevation showing the method of securing the edges of the sheets of mica *a a* by the brass binding *b b*, thereby securing the thin layers from separating, and preventing the lodgment of smoke or dust between them. *c* is a clasp for joining or splicing.

Fig. 3 shows one of upright posts. *d d* are the lips for fastening the upper end to the top ring. *e* is a lip or projection for securing the post to the oval base or ring.

Fig. 4 shows the clasp for joining the edges of mica where it is necessary to use two pieces instead of one.

Fig. 5 is an inside view of one of the posts. *f f* are the grooves which hold the sides of the sheets of mica in shape and place. *g g* are lips which are bent or clasped over the ends of the sheets.

Fig. 6 is an elevation showing the oval ring or base. *h h* are holes through which the lips *e e* are passed.

In the manufacture of these chimneys I find it best to form the bottom and top rings, the posts, and also to cut the holes and lips for fastening the different parts together by means of steel punches and dies worked in iron presses. When the different parts are fitted, I secure the upper ends of the posts to the upper ring. The sheets are then slid into the grooves *f f*, and made fast by turning over the lips *g g* at both ends of the posts and pressing them down. The oval bottom ring (Fig. 6) is then put on. The lips or projections *e e* are passed through the holes *h h*, and firmly clinched down, thus securing the whole complete.

The advantages of this invention over glass are that it is not broken by heat or cold or by falling, and over other mica chimneys are that, being oval at the base, it conforms more nearly to the flame, thus bringing the sides farther from it, and at the same time the mica is not bent enough to injure the texture.

I believe I have thus shown the nature, construction, and advantages to be derived from the use of this improvement clearly enough to enable a person skilled in the art to make the same.

What I claim, therefore, as my own invention, and desire to secure by Letters Patent, is—

The oval base, (Fig. 6,) the construction of the frame as described, and the transferable sheets of mica *a a*.

BENJAMIN J. C. HOWE.

Witnesses:

J. B. GAYLORD,  
E. E. BOSTWICK.