E. BLACKMAN. Mica Lamp Chimney.

Patented Feb. 6, 1872. No. 123,325. Fig.A. Fig. 6. Inventor. Witnesses. Ebenezer Blackmun by Dodgesmunn Phil. of Dodge!

## UNITED STATES PATENT OFFICE.

## EBENEZER BLACKMAN, OF NEW YORK, N. Y.

## IMPROVEMENT IN LAMP-CHIMNEYS.

Specification forming part of Letters Patent No. 123,325, dated February 6, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, EBENEZER BLACKMAN, of New York, in the county of New York and State of New York, have invented certain Improvements in Lamp-Chimneys, of which the following is a specification, reference being had to the accompanying drawing.

My invention consists in a novel construction of a mica lamp-chimney, and its combination with a glass base, as hereinafter more

fully explained.

Figure 1 is a side elevation of the chimney and base complete, as applied to a lamp; Fig. 2 is a top-plan view of the glass base of an oval form; Fig. 3, a similar view of a circular base, somewhat modified; and Figs. 4, 5, and 6 are views of portions shown in detail.

In constructing the chimney proper I prepare two sheets of mica, A, of suitable size and form, and unite their vertical edges by a thin and narrow strip of sheet metal, b, bent longitudinally in the form of a letter S, as shown in section in Fig. 5. After inserting the adjoining edges of the inica sheets A in the grooves formed by thus bending the metal strips b, the metal is indented, as represented at e, Fig. 5, thereby locking the parts firmly together. These indentations may be formed along the whole length of the strips b, or they may be made only at intervals, as may be found necessary. I then secure around the top a narrow band, d, and around the bottom another band, C, which has a series of projections l on its lower edge, as represented in Fig. 6 and also in Fig. 1, where they are shown bent under the shoulder of the glass base B, their object being to fasten the mica chimney securely to the base. The bottom of the chimney is made to fit over the top of the oval base B, which is made slightly inclined for that purpose, and it may be fastened by extending the strips b down far enough to bend them under the shoulder, in which case the projections l on the band C may be omitted; but I prefer to use the latter, as it renders the union of the chimney and base more secure and firm. The glass base I make of the form shown in Fig. 1—that is to say, its upper portion h is made of a suitable size and form to fit the chimney and its lower portion to fit the lamp; and between the upper and lower portions it is contracted by an external groove, I, the upper portion h flaring or inclined outward, as shown clearly in Fig. 1.

By this plan the air which is drawn up through the glass base keeps the glass cool, so that it can be easily handled, and prevents it from cracking. As the air passes the contracted throat I and enters the upper portion it spreads out laterally, and, in connection with the burning oil, produces a very broad, brilliant, and steady flows.

liant, and steady flame.

Although I prefer the oval form of base, as represented in Figs. 1 and 2, it is obvious they may be made circular, as represented in Fig. 3, and have the chimney secured in the manner already described. Or the chimney may be made to fit inside of the base B, which latter, in that case, should be formed with an internal groove, as shown at f, Fig. 4, with two openings or notches, n, entering it from above, as shown in Fig. 3. When this style is used, the chimney will be provided at the bottom with external projections, which will enter the notches n; when, by turning the chimney around, the projections will enter the groove f, and thus lock the chimney and base together by what is usually known as the bayonet joint. The locking projections may be formed on the strips b in case the band C is not used, or on the band C if the latter is used. Where, as in this case, the bottom of the chimney fits within the base the band C is as necessary as when the chimney fits over or outside of the base, as is necessary when the oval form of base is used.

In use, the chimney and base are intended to remain united, the whole being put on or taken off together. By making the base of glass the light is readily transmitted through it, and thus there is no shadow around the lamp, as there would be if the base were of metal

metal.

Having thus described my invention, what I claim is—

1. A lamp-chimney, consisting of sheets of mica united by means of the doubled and indented or perforated metal strips b, and provided with means for attaching it to the base B, substantially as described.

2. A glass base B having the contraction I and the flaring top h, constructed and arranged to operate substantially as set forth.

EBENEZER BLACKMAN.

Witnesses:

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