E. D. DITHRIDGE.

Manufacture of Glass Lamp-Chimneys.

No. 205,478. Patented July 2, 1878.

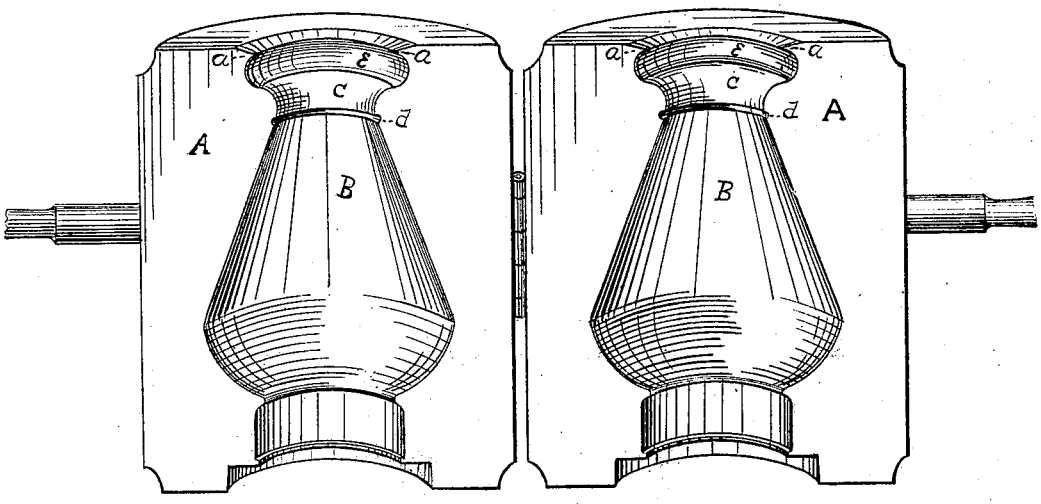

Fig. 1.

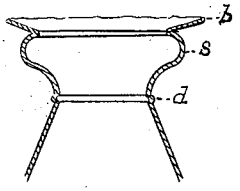

Fig. 2

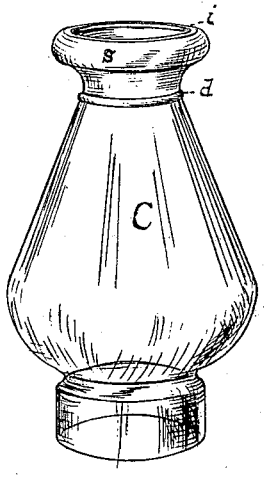

Fig. 4

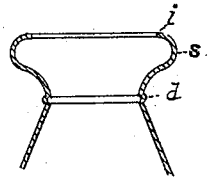

Fig. 3.

Witnesses.

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN MANUFACTURE OF GLASS LAMP-CHIMNEYS.

Specification forming part of Letters Patent No. **205,478**, dated July 2, 1878; application filed May 7, 1878.

To all whom it may concern:

Be it known that I, EDWARD D. DITHRIDGE, of Allegheny city, county of Allegheny, State of Pennsylvania, have invented or discovered a new and useful Improvement in Glass-Molds and their Product; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—like letters indicating like parts—

Figure 1 is a perspective view of a two-part glass-mold illustrative of my improvement, the parts of the mold being opened out, so as to show the interior or mold-cavity. Fig. 2 is a sectional view of the top of a lamp-chimney as blown or shaped in this mold. Fig. 3 is a like view of the same part when finished, and Fig. 4 is an outline perspective view of a lamp-chimney as made in my improved mold.

In finishing lamp-chimneys and other like articles of blown glassware, it is customary, after breaking off the surplus glass, or "blow-over" which connects the article to the blow-pipe, to smooth such broken end or ends by grinding. If such ends flare outward, as is often the case, or if the outer sides or faces are at or nearly at right angles to the ground edge or end, a sharp cutting angle is formed at the corners; and as it is difficult and expensive to grind the broken ends perfectly smooth, this sharp angle is made more objectionable by being left more or less ragged. Such sharp and ragged edges are not only unsightly in appearance, but render the article unpleasant, and even dangerous, to handle.

The object of my invention is to form the end or ends of lamp-chimneys and other like articles in such way that a smooth and rounded edge will be left after grinding away the neck or "blow-over;" and in accomplishing this I not only avoid sharp and ragged angles, but I also secure an improved design and appearance in the finished article.

I have illustrated my improvement as applied to the top of lamp-chimneys and the molds for shaping the same. It may, however, be applied to either end of the chimney, and especially to what are known as "hinged chimneys," as well as to many other articles of glassware; and the mold employed may be made in two parts, as shown, or in three or more parts, as desired.

In the drawing, A A represent the two halves of a two-part glass-mold, within which are formed the cavities B for shaping lamp-chimneys. The lower part of this mold-cavity is formed in the usual way, and need not be particularly described. At a point marking the top proper of the chimney C, I make an inwardly-projecting sharp lip, *a*, by means of which the glass is marked for breaking off the neck or blow-over *b*, Fig. 2. Instead of forming this projecting lip *a* on or adjacent to the outwardly-flaring top *c*, as has heretofore been the custom, I interpose between the two a depressed groove, *e*, in which a bead, *s*, is formed on the top or upper end of the chimney C. I prefer to make this bead curvilinear in outline; it may, however, be polygonal; and in any case the groove should be of such form as to allow the parts of the mold to be opened out after the chimney is blown. The blowing is done in the usual or any known way.

After removing the chimney from the mold the neck or blow-over *b* is broken off, and the broken edge ground down smooth, as at *i*, Fig. 3, and the curve or upper face of the bead *s* merging gradually into the line of the ground end *i*, sharp angles are effectually avoided, and there is no danger of chipping or breaking the glass. Thus the objectionable features alluded to are avoided.

These advantages may be secured, in part at least, by making the upper side or face of the bead *s* a right line instead of a curve, the line sloping upward toward the end or top.

The distance which the lip *a* projects forward into the mold-cavity may be varied somewhat according to circumstances. I prefer to extend it far enough to allow the upper face of the bead to be made equal, or nearly equal, to the under face. In any case the upper face should be extended over far enough to unite with or merge into the ground edge *i* without making an abrupt or sharp angle.

Other beads, as at *d*, or ornamentation, may be added, as suggested by good taste, to improve the appearance of the article.

A chimney thus formed is shown in Fig. 4

It will be readily seen from this, as well as the section figures Nos. 2 and 3, that a smooth and well-finished top may be secured in this way, which not only avoids the objections referred to, but an elegant and improved appearance is given to the chimney as a whole.

But in so far as my improvement relates to a superior design alone, it is not claimed herein, the same forming the subject-matter of another application.

I claim herein as my invention—

The lamp-chimney C, having a beaded top, *s*, substantially as described.

In testimony whereof I have hereunto set my hand.

EDWARD D. DITHRIDGE.

Witnesses:
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