

J. LOWERY.

TOOLS FOR FINISHING LAMP-CHIMNEYS.

No. 170,283.

Patented Nov. 23, 1875.

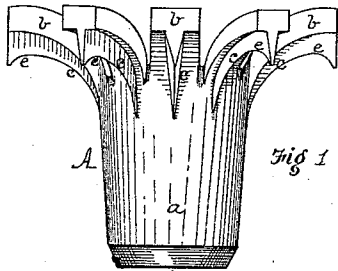


Fig 1

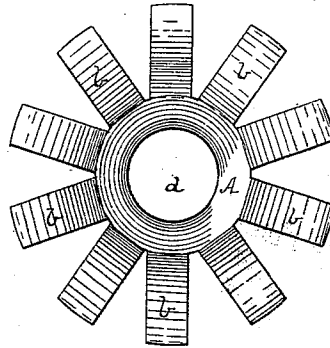


Fig 2.

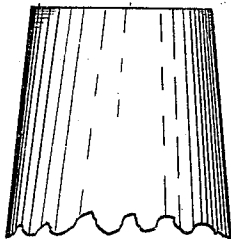


Fig 3.

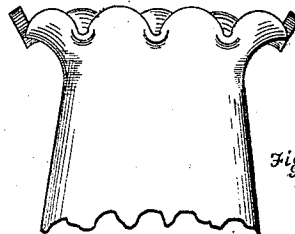


Fig 4.

WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHN LOWERY, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO THE
EXCELSIOR FLINT-GLASS COMPANY, OF SAME PLACE.

IMPROVEMENT IN TOOLS FOR FINISHING LAMP-CHIMNEYS.

Specification forming part of Letters Patent No. **170,283**, dated November 23, 1875; application filed
November 5, 1875.

To all whom it may concern:

Be it known that I, JOHN LOWERY, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Tool for Finishing Lamp-Chimneys; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, making part of this specification, in which—

Figure 1 is a side view of my improved tool for finishing lamp-chimneys. Fig. 2 is a top view of the same. Fig. 3 is a view of a lamp-chimney before the tool is used therewith, and Fig. 4 is a view of a lamp-chimney finished by my improved tool.

Like letters of reference indicate like parts in each.

My invention relates to the manufacture of glass lamp-chimneys having flaring and fluted mouths; and it consists in a tool for forming the mouth or top of the chimney, said tool having a conical or tapered shape, and provided on its surface with curved knife-edges, which open or flare the glass, and at the same operation flute or scroll up the edges of the chimney.

Heretofore, in the manufacture of glass lamp-chimneys of the class above mentioned, it has generally taken from two to three operations to do the same work; and when the tool used was not sufficiently heated, upon coming in contact with the glass it would chill the edges thereof, forming crizzles or cracks in the upper part of the chimney.

In using my improved tool only one operation is necessary, the tool flaring the glass at the same time that the flutes are formed, and as only the knife-edges touch the glass there is no danger of it being injured thereby.

To enable others skilled in the art to make and use my invention, I will describe its construction and operation.

In the drawing referred to, A represents my improved tool. The lower portion or body *a*

of the tool is cylindrical, and slightly tapered. Above the part *a*, and extending therefrom, are a series of radiating and curved arms, *b*, provided with the curved and radiating knife-edges *c*. These knife-edges *c* extend from the body *a* of the tool along the lower part of each of the arms *b*, the angle of the curve being slightly increased at the end of the knife, as shown at *e*.

If desirable, the knife-edge may extend to the base of the tool.

In the part *d* of the tool is the socket *d*, by which a handle may be attached.

The operation of my improved tool is as follows: The lamp-chimney being formed to the shape shown in Fig. 3, the top is heated and the tool is pressed into the mouth, the edges being caught on the lower part of the curved knife-edges *c c*, and as the tool is pressed into the chimney flared by them, traveling up the knives until it reaches the point *e*, when, upon further pressure of the tool, the flutes or scallops are formed around the mouth of the chimney.

The advantages of my improved tool are, that it saves time and labor, accomplishing in one operation that which has necessitated two or three by the processes heretofore in use; and that, as the knife-edges only touch the glass, it does not crack or crizzle the top of the chimney, which is the case when a solid tool is used.

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

A tool for opening and fluting lamp-chimneys, said tool having a series of radiating and curved knife-edges, substantially as described.

In testimony whereof I, the said JOHN LOWERY, have hereunto set my hand.

JOHN LOWERY.

Witnesses:

JAMES I. KAY,
T. B. KERR.