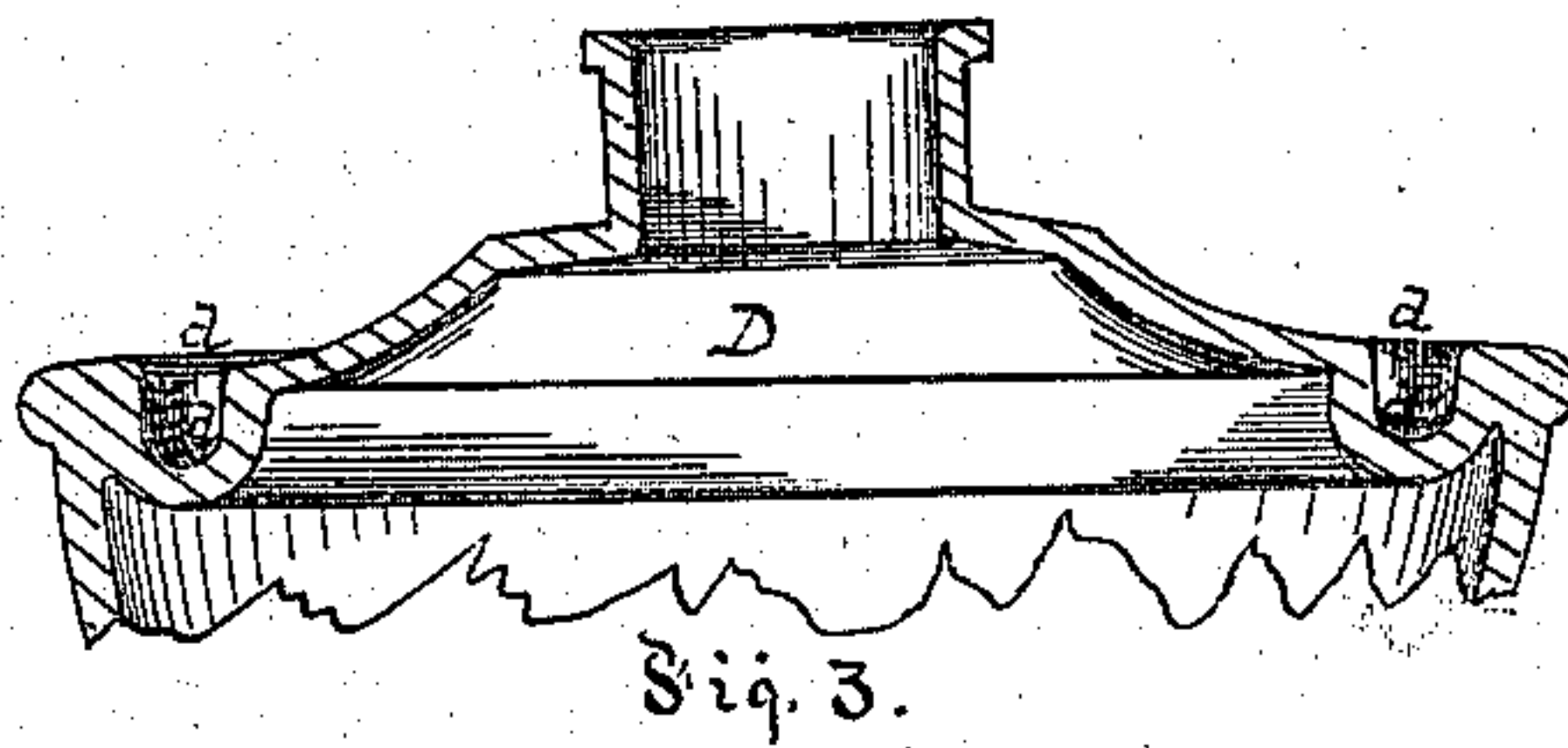
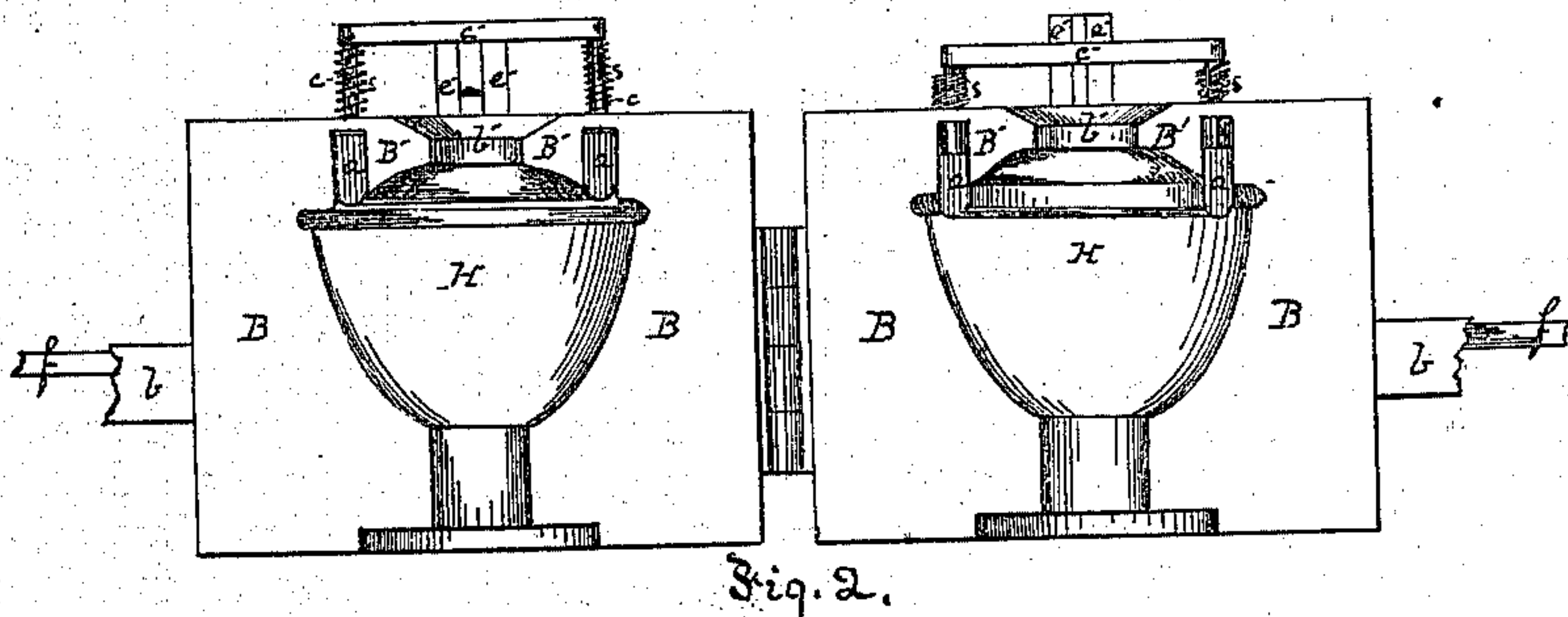
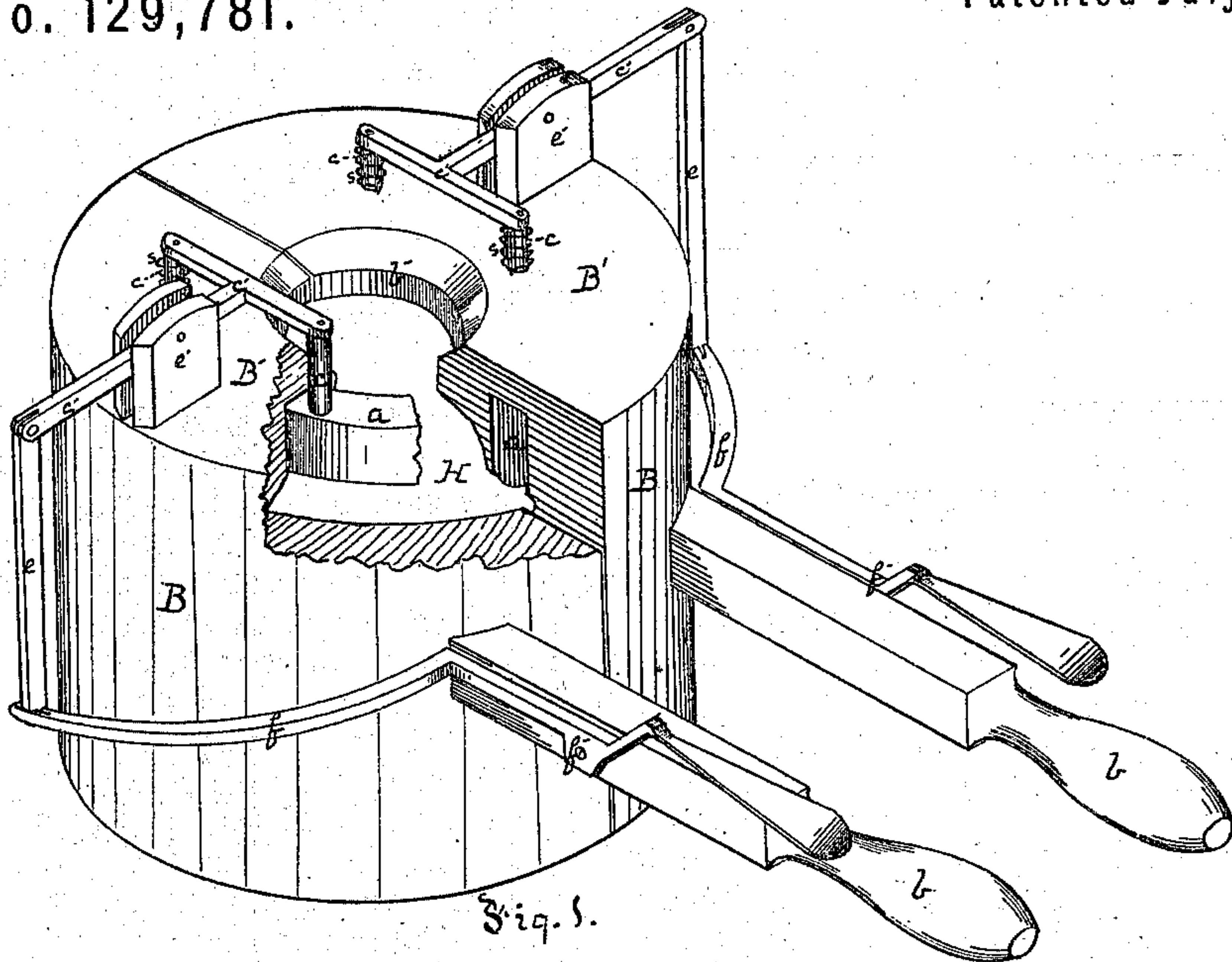


J. BRIDGES.

Improvement in Glass Lamp-Molds.

No. 129,781.

Patented July 23, 1872.



Witnesses.

R. W. Gresham.

James F. Kay.

Inventor.

John Bridges,
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his Attys.

UNITED STATES PATENT OFFICE.

JOHN BRIDGES, OF ALLENTOWN, ASSIGNOR TO ADAMS & COMPANY, OF BIRMINGHAM, PENNSYLVANIA.

IMPROVEMENT IN GLASS-LAMP MOLDS.

Specification forming part of Letters Patent No. 129,781, dated July 23, 1872.

SPECIFICATION.

To all whom it may concern:

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

Figure 1 is a perspective view, partly in section, of my improvement as applied to a two-part glass-lamp mold. Fig. 2 is an inside elevation, somewhat reduced, of an open mold, further illustrative of the same; and Fig. 3 is a sectional view of the top of a lamp-bowl as produced by the molds of Figs. 1 and 2.

Like letters of reference indicate like parts in each.

My improvement relates more particularly to devices for the manufacture of a lamp-bowl with an annular depression or ring in the upper face of the bowl, inside the largest part of the swell, of suitable depth for catching such oil as may, in filling, be accidentally spilled onto the bowl, or which may drip down from the wick-tube or burner, so that the oil shall not be liable to run down onto the stem by which the lamp is ordinarily carried, nor onto the table or stand on which the lamp may be placed.

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

The parts B B represent the ordinary two-part mold, with the usual handles *b b*, and an ordinary cavity, H, in each of suitable form for the blowing therein of the desired form of lamp-bowl D. The usual plate or stand is employed at the bottom, and the blowing is done in the usual way through the hole *b'* in the top B'. In order now to make an annular drip-ring or depression, *d*, in the top of the bowl D, I introduce into annular grooves made in the lower face of the top B' the segmental rings *a*, one in each half of the mold. These segmental rings *a*, when the mold is closed, come end to end, so that they constitute a complete ring, extending around the blowing

and neck cavity *b'*, but inside the largest diameter of the cavities H. They are made and set in their grooves in such a way as to be capable of a vertical motion at least as great as the vertical depth to be given to the ring-groove *d*. At their highest point of elevation they will stand clear of the upper face of the glass, so as to permit the mold to be opened and the lamp-bowl to be removed; and their downward motion is such that when down they extend into the cavities H far enough to form the groove *d*. In Fig. 2 I have shown one of these segmental rings up and one down. Just before the blowing is done both rings are suffered to drop. The bowl is then blown in the usual way. The molten glass is thus forced up around the exposed faces of the ring *a*, particularly on the outside of them, and thus forms the grooves *d*; and as soon as it solidifies or sets the rings *a* are raised, the mold opened, and the bowl D taken out.

Various devices for raising and lowering these segmental rings *a* may be employed, and in the use of such rings I do not limit myself to any particular devices. But as one mode of operating them I have shown them attached to stems *c*, which project up through the top B'. These stems are, at their upper ends, attached to the inner ends of the branching or T levers *c'*; or a lever may extend from each to an arm, *e*, on each half mold, from the lower end of which a bent lever, *f*, extends forward, suitably pivoted, as at *f'*, to a point such that it can be conveniently operated by the operator who manipulates the handles *b*. The levers *c'* are pivoted to posts *e'*. Springs *s* may be arranged on the stems *c* above the top plate B', which, when no pressure is applied to the outer ends of the levers *f*, will cause the rings *a* to rise. Then when the operator closes the mold for blowing the lamp-bowl D he at the same time depresses the outer ends of the levers *f*, which brings the rings *a* into a suitable position for making the drip-groove *d*, and holds them there till the blowing is done. But the springs may be arranged at any other suitable point, and may be operative in keeping the rings *a* up or down, the reverse motion being performed by the operator.

The same or equivalent devices may be applied to a three or four part mold.

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

1. A series of segmental rings, *a*, arranged in and carried by the top *B'* of a divided or jointed glass mold, and capable of being removed from the blowing-cavity of the mold while the latter continues closed, substantially as and for the purposes set forth.

2. A series of segmental rings, *a*, arranged as set forth in the previous claim, in combina-

tion with a lever-connection extending from the stems *c*, to which such rings are hung, outward to the handles *b*, substantially as and for the purposes set forth.

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

JNO. BRIDGES.

Witnesses:

M. A. COYNE,

D. WENKE.