

(No Model.)

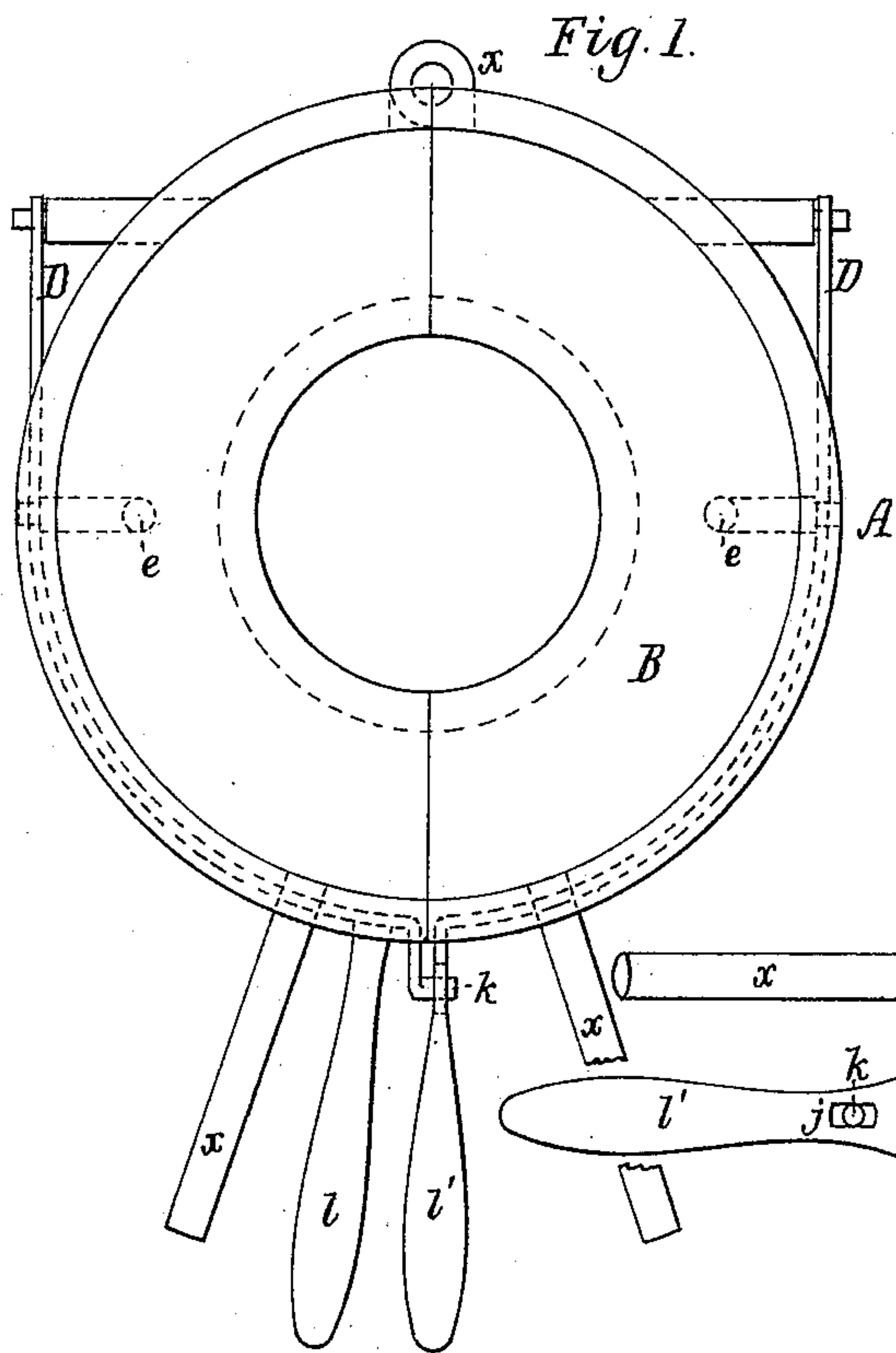
2 Sheets—Sheet 1.

G. H. LOMAX.

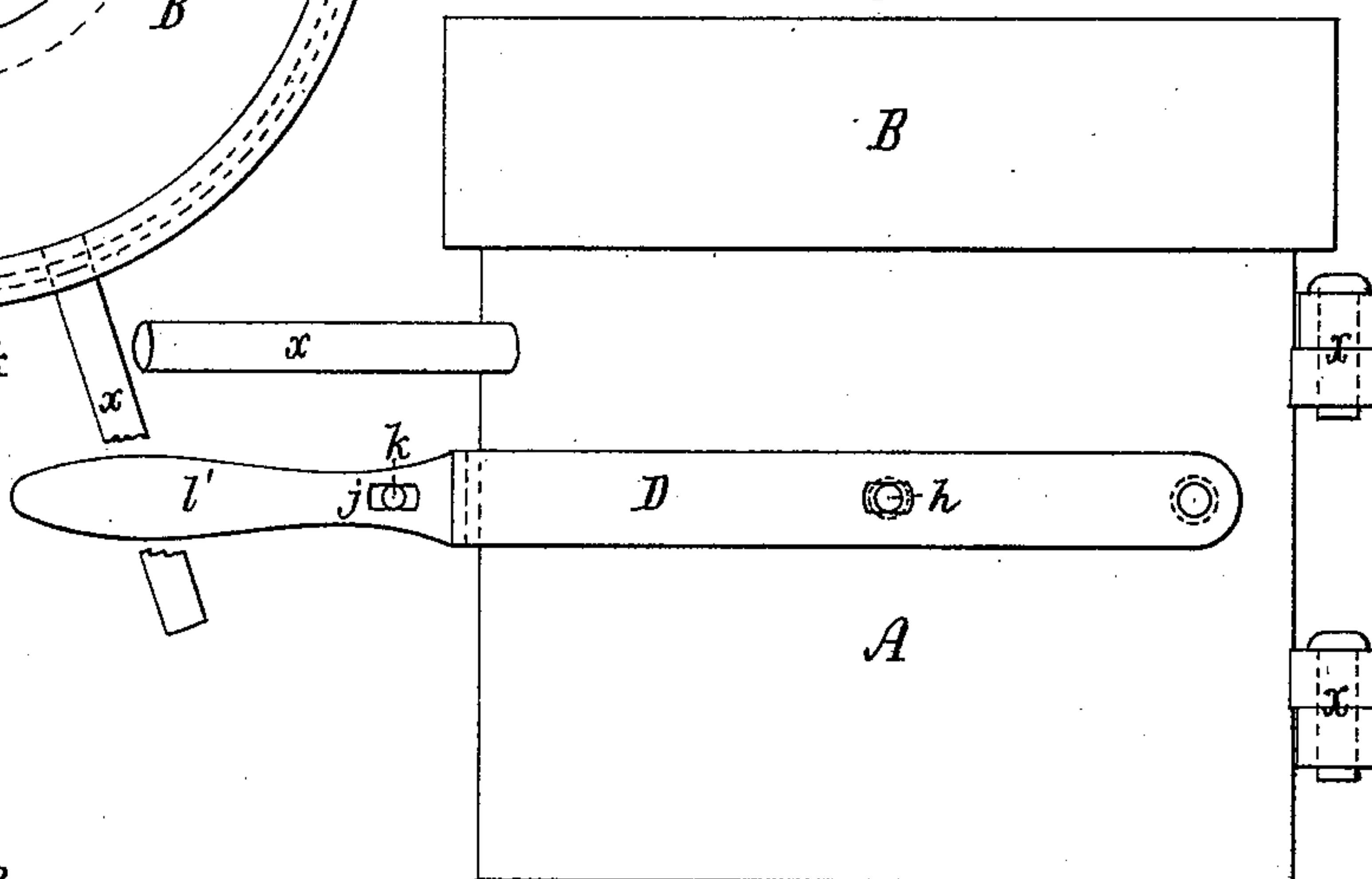
MOLD FOR FORMING FLANGES ON GLASS SHADES, &c.

No. 438,893.

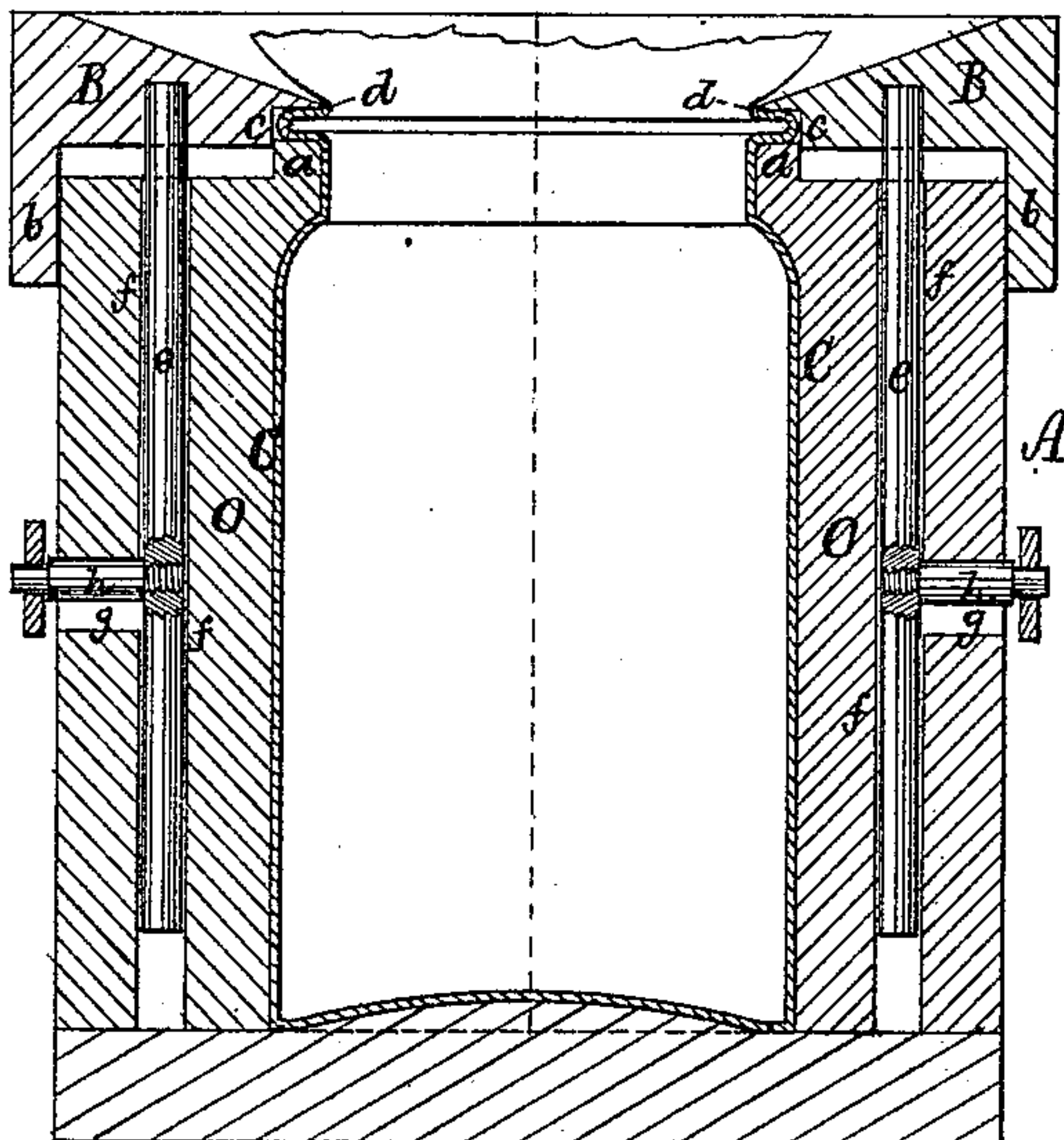
Patented Oct. 21, 1890.



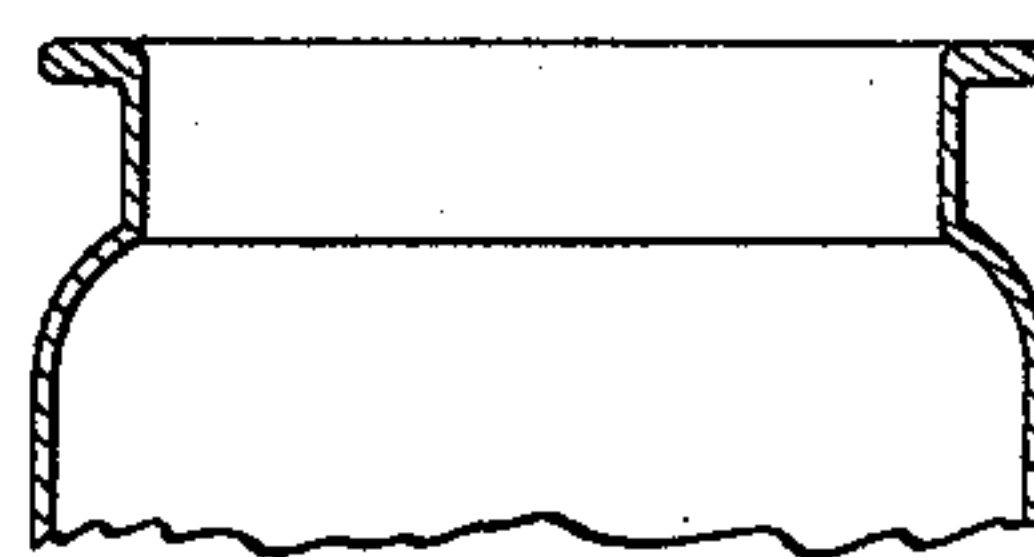
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Witnesses.*

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*Inventor.*

*George H. Lomax.*  
*by S. V. Piper, atty.*

(No Model.)

2 Sheets—Sheet 2.

G. H. LOMAX.

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Fig. 5.

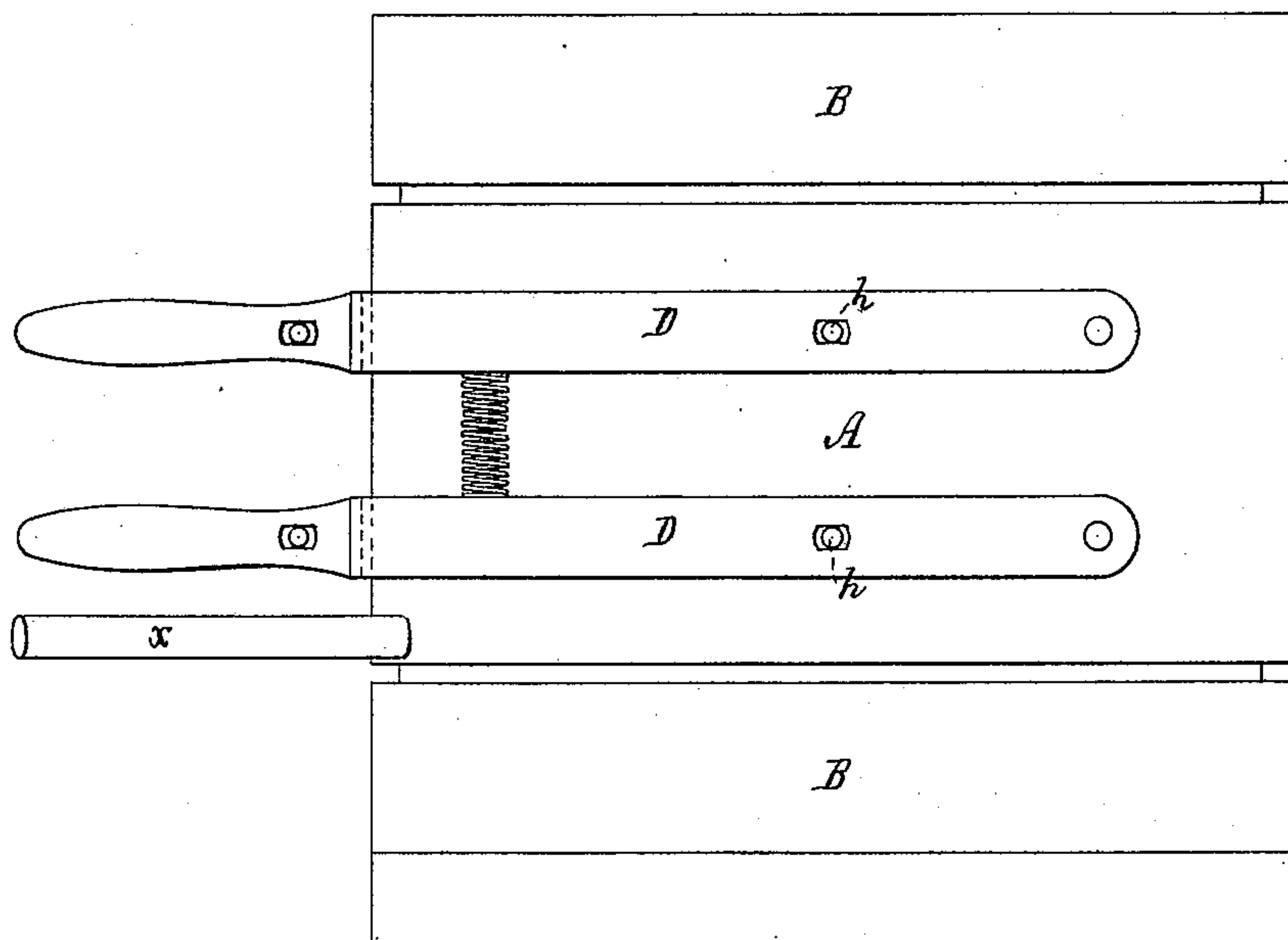
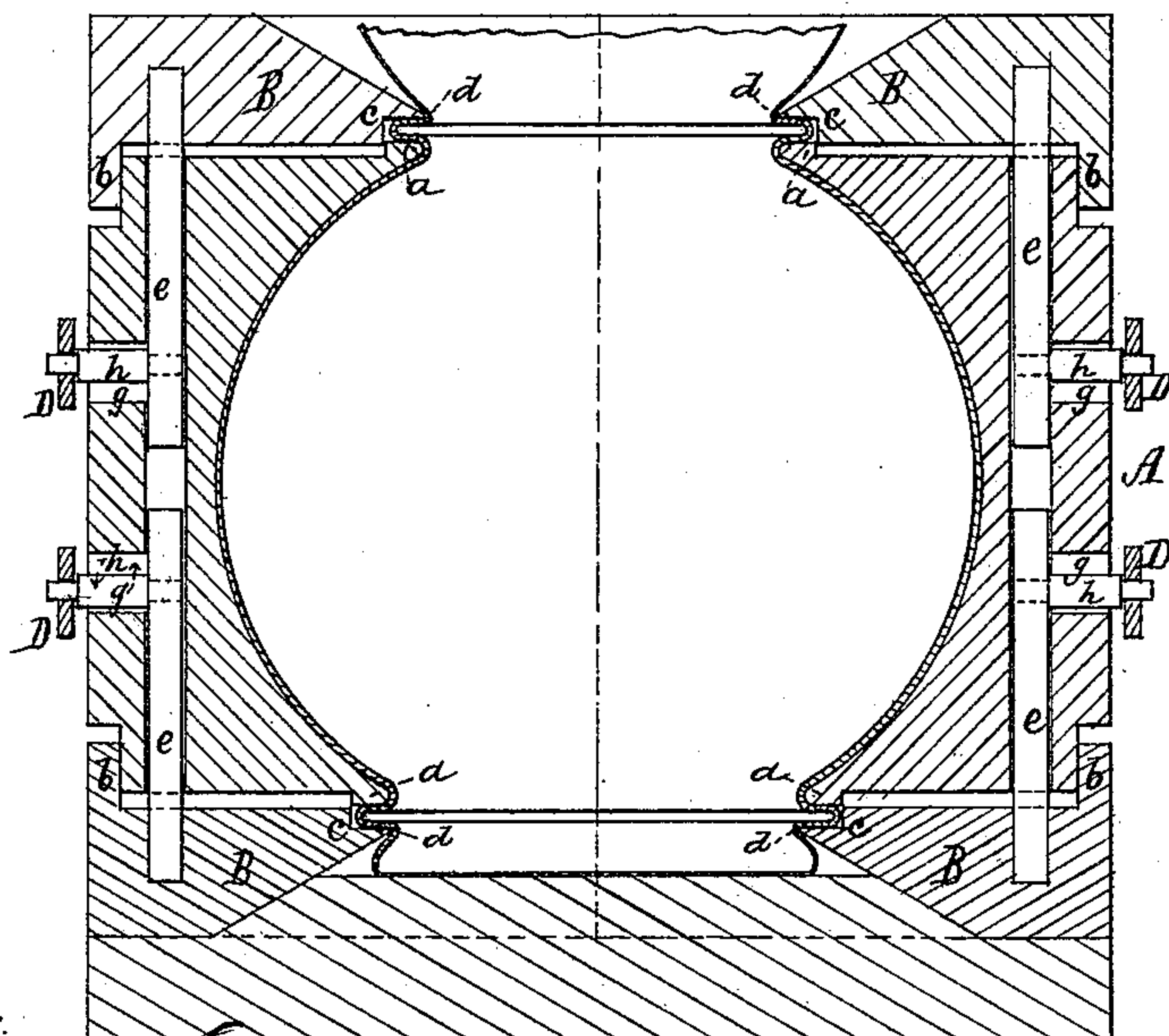


Fig. 6.



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Inventor:

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by *S. N. Piper, atty.*



# UNITED STATES PATENT OFFICE.

GEORGE H. LOMAX, OF SOMERVILLE, MASSACHUSETTS.

## MOLD FOR FORMING FLANGES ON GLASS SHADES, &c.

SPECIFICATION forming part of Letters Patent No. 438,893, dated October 21, 1890.

Application filed July 5, 1890. Serial No. 357,904. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE H. LOMAX, a citizen of the United States, residing at Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Molds for Forming Flanges on Glass Shades, &c.; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a vertical section, of a mold of my invention for forming lips or flanges on glass jars, bottles, &c. Fig. 4 is a vertical section of the upper portion of a jar having its lips formed in accordance with my improvement. Fig. 5 is a side view, and Fig. 6 is a vertical section, of a mold provided with a movable cap at its opposite ends, to be hereinafter explained.

The nature of my invention is defined in the claims hereinafter presented.

In carrying out my invention I form the body A of the mold in two parts or halves O O, hinged to each other at *x* in the usual manner, and at the top provide said body with a neck *a*, which surrounds the upper portion of the matrix C within said body, and to the top of the body I apply a cap B, formed in sections equal in number to those of the mold, and which has a flange *b* extending downward from its bottom and encircling the upper portion of the exterior of the body, as shown. The inner periphery of the said cap B is rabbeted, as shown at *c*, said rabbet receiving the neck *a* of the body when the said cap is depressed, the junction of the inclined top of the cap with the inner periphery thereof forming a sharp edge, (shown at *d*.) Guide-rods *e e*, secured in the cap, extend into holes *ff*, formed in the body A to receive them. Slots *g g* lead from the said holes *f* outward through the body of the mold, into and through which project studs *h h*, secured to the said guide-rods. Levers D D, fulcrumed to the mold and pivoted to the studs *h*, permit of vertical movement of the cap with relation to the body when desired. One of the levers D is slotted

at *j* to receive a projection *k* from its fellow, and said levers are provided with handles *l l'*. Each section of the mold-body is also provided with a handle *x*, as shown.

In forming a glass jar or bottle in the mold, hereinbefore explained, said mold being in position as shown in Fig. 3, a mass of molten glass attached to a blow-pipe, when in the proper condition, is introduced into said mold and expanded against the interior thereof by blowing in the usual manner. During said operation the glass will be forced within the rabbet *c* and against the top of the neck *a*, as shown in Fig. 3, the glass above the rabbet being further expanded against the sharp edge *d* of the cap, so as to render it very thin. As soon as the blowing of the glass is completed, and while the glass is still hot, the cap B is forced downward by an attendant by depressing the handle *l'*, and the glass in the upper portion of the rabbet is pressed down against and caused to unite or weld to the glass on the top of the neck *a* of the mold, so as to make a solid lip or flange to the jar, as represented in Fig. 4, and the blower breaks the thin glass above the flange by a sudden movement of the blow-pipe.

Heretofore in the manufacture of glass jars, bottles, &c., the formation of the lip or flange on the neck of the article has comprised a separate operation from that of shaping the said articles in the mold and has necessitated the reheating of said article before providing it with said lip or flange, all of which is avoided by my improvement, hereinbefore explained. Furthermore, it will be seen that all the articles having their lips or flanges formed in a mold provided with my improvement will be of equal height from the bottom of the article to the under side of the flange, the difference in the extreme height, if any, being caused by the variation in the thickness of the glass of which the flange is formed.

By providing a mold for forming lamp-shades with a movable cap at its opposite ends the flanges or lips thereof can be simultaneously formed on opposite ends of said shades in like manner as a single lip is formed on a jar, as hereinbefore explained.

Figs. 5 and 6 represent a mold for forming lamp-shades provided with my improvement. The molds and caps are each shown in the

drawings as formed in two sections; but I sometimes form them in three or more sections.

I do not wish to limit myself to the particular way shown for operating the caps with relation to the mold, as various ways may be employed for effecting said movement.

What I claim is—

1. The cap B, made in sections, provided in its inner face or periphery with a rabbet *c* and a sharp edge *d*, and furnished with guide-rods *e*, in combination with a glass mold made in sections and provided with a neck *a* to enter the said rabbet, and passages to receive the guide-rods, as and for the purpose explained.

2. A glass-mold having its body formed in sections and provided at its top and bottom with a neck *a*, in combination with caps B B, each formed in sections and provided with a rabbet and a sharp edge and adapted to be moved toward or away from said body, essentially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEO. H. LOMAX.

Witnesses:

S. N. PIPER,

JAMES COMLEZ.