(No Model.)

W. H. BRUNT.

GLASS MOLD AND THE PRODUCT THEREOF.

No. 297,062. Patented Apr. 15, 1884.

Fig. 1.

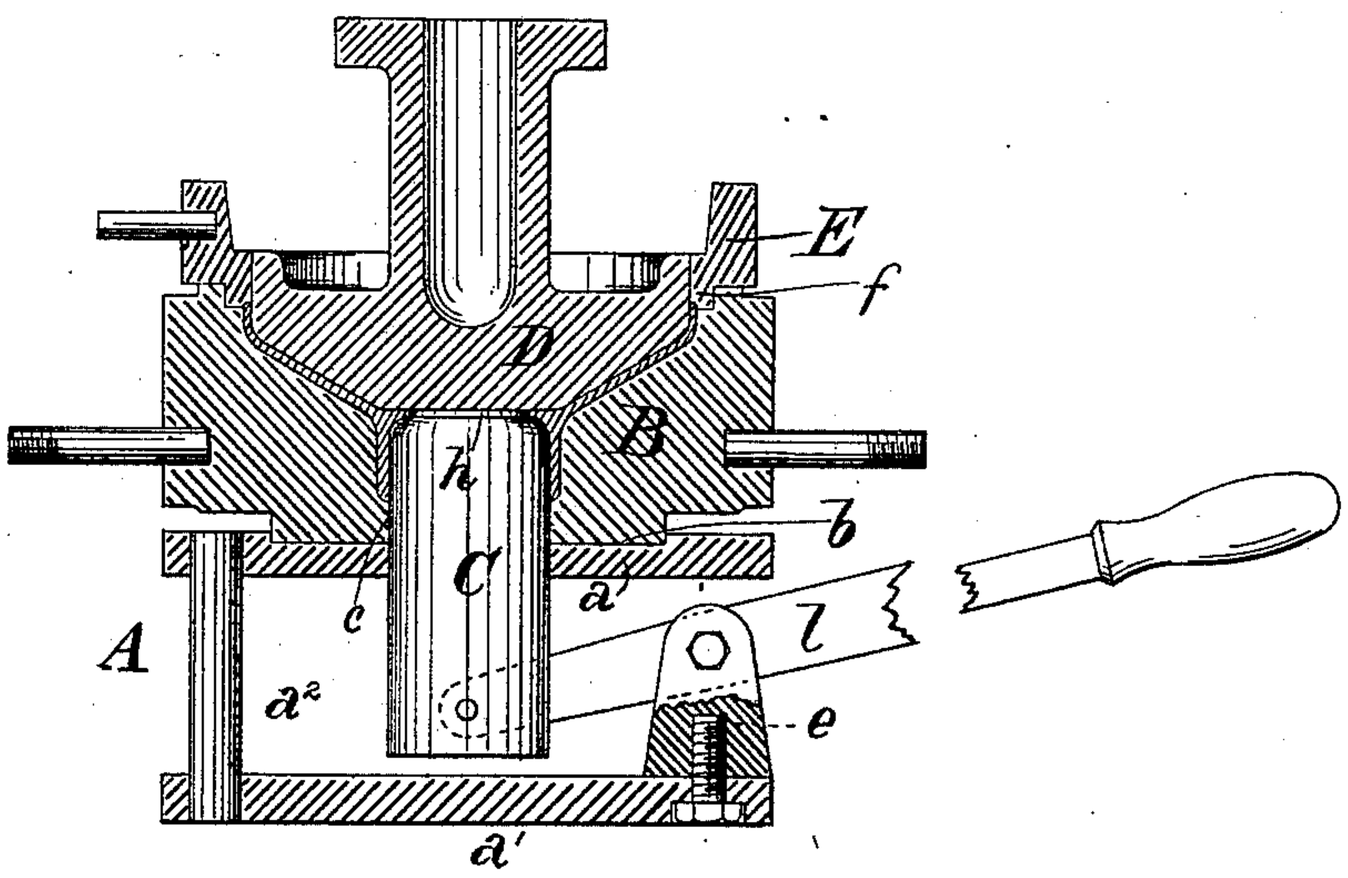


Fig. 3.

Fig. 4.

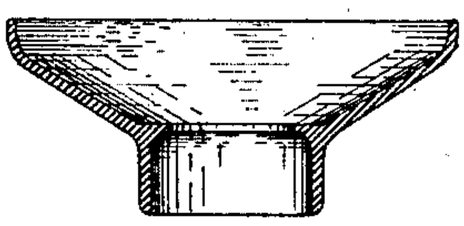
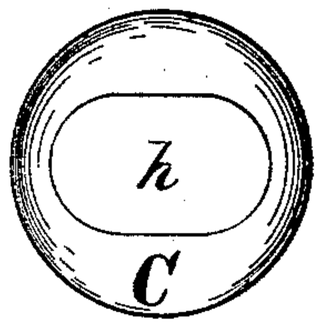


Fig. 2.



WITNESSES:

R. F. Whittlesey

C. M. Clarke

William H. Brunt INVENTOR

By George H. Christy Atty.

UNITED STATES PATENT OFFICE.

WILLIAM H. BRUNT, OF BALDWIN, ALLEGHENY COUNTY, ASSIGNOR TO VOIGT, WARD & CO., OF PITTSBURG, PENNSYLVANIA.

GLASS-MOLD AND THE PRODUCT THEREOF.

SPECIFICATION forming part of Letters Patent No. 297,062, dated April 15, 1884.

Application filed January 28, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BRUNT, a citizen of the United States, residing at Baldwin township, Pittsburg P. O., county of Allegheny, State of Pennsylvania, have invented or discovered a new and useful Improvement in Glass-Molds and the Product Thereof; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—like letters indicating like parts—

Figure 1 is a sectional side elevation of a mold for shaping my improved shade-holders. Fig. 2 is an end view of the lower plunger. Fig. 3 is a perspective view of the shade-holder. Fig. 4 is a sectional elevation of the shade-holder.

My invention relates to molds for forming glass shade-holders for lamps, gas-jets, and other like purposes, which, when used in connection with a shade or globe, serve not only as a support for the shade, but also as a chimney; and my invention further relates to the construction of such shade-holder, whereby the air entering between the base of the shade-holder and the burner shall be deflected and directed against the flame at the top of the burner, thereby producing a more perfect combustion at that point.

A is the base or support for the mold, and is constructed of upper and lower plates, *a* and *a'*, connected by rods or standards a^2. In the upper plate, *a*, is formed a circular recess or socket for the reception of a projection, *b*, on the body portion B of the mold. This body portion B of the mold is formed with a bowl-shaped recess on its upper side, and with a vertical central aperture connecting at its upper end with the bowl-shaped recess. This vertical aperture is enlarged for a distance from its connection with the bowl-shaped recess equal to the desired length of the base of the shade-holder to be formed. Through the vertical aperture *c* works the plunger C, which is guided during its reciprocation by the lower contracted portion of the aperture and by an opening in the top plate, *a*. This plunger C is supported and reciprocated by a lever, *l*, pivotally connected to the plunger at its lower end, and having its fulcrum in a block, *e*, secured to the lower plate, *a'*.

D is the upper plunger, whose lower face is shaped to correspond with the shape of the recess in the mold B. This plunger is guided by the annular ring E, which is provided with an annular shoulder, *f*, fitting in an annular recess in the top of the mold B.

To form an inwardly-projecting flange on the shade-holder at the point of junction of the cylindrical base and the bowl-shaped portion, I form on the upper end of the plunger a boss or projection, *h*, and cut away the top of the plunger from the base of this boss or projection, so that when the two plungers are brought together in the use of the mold the end of the boss will bear against the end of the upper plunger, and there will be formed around this boss and between the ends of the plungers a groove or recess, into which the glass is pressed to form said flange. The upper edge of the bowl-shaped recess is made vertical, so as to form a vertical flange on the upper edge of the bowl of the holder, within which to rest the shade.

I have shown and described the mold B as made in one piece; but it is obvious that it may be made in two pieces hinged together, so as to separate vertically, or the body portion may be divided horizontally and one of these parts hinged together, as shown in my Patent No. 281,610.

In so far as relates to the shape of the boss *h* in cross-section, although I have shown it oval, I do not wish to be understood as confining myself to that shape, as the shape may be changed, so as to form any desired shape of opening in the flange of the shade.

In Fig. 3 I have shown one form of shade-holder, in which *o* is the cylindrical base or support and *s* is the bowl-shaped body, having the vertical upwardly-projecting rim *s'*. At the point of junction between the body *s* and the cylindrical base *o* is formed an annular flange or ledge, *p*, which projects inwardly on all sides, as shown. The opening formed by the inner periphery of the flange *p* is oval, round, or any other shape and size, according to the shape and size of the burner with which the shade-holder is to be used. In the use of this shade-holder the air which enters between

the base of the shade-holder and burner is deflected and directed toward the flame on every side, the cylindrical base being made of such a height as to bring the flange *p* nearly in the plane passing through the top of the burner with which it is used, and consequently a greater amount of air is supplied to the flame, thereby increasing the combustion, and, as a consequence thereof, the illuminating power of the flame.

In so far as relates to the shape of the base and body portion of the shade-holder or chimney, I do not confine myself to the shapes shown, as they may be varied to suit different kinds of burners or the fancy of the manufacturer.

In place of the construction above shown and described, I may simply bevel or round off the upper end of the lower plunger and form the boss *h* on the end of the upper plunger; or the boss may be formed partly on each plunger.

I am aware that it is not new to form shade-holders having the point of junction between the body and base contracted, as shown in my Patent No. 281,610, dated July 17, 1883, the glass of the contracted portion being of uniform thickness with the body of the shade-holder; but I am not aware that shade-holders have ever been made with an increased amount of glass at the junction of the body and base, such increased amount being pressed to form an inwardly-projecting flange.

I claim herein as my invention—

1. In a glass-mold, the combination of the body portion B, having suitably-shaped recess and an uncontracted central vertical opening therein, the guide-ring E, the upper plunger, D, the lower plunger, C, having a suitably-shaped boss on its upper end, and mechanism for operating said plunger, substantially as set forth.

2. In a glass-mold, the combination of the body portion B, the guide-ring E, the solid upper plunger, D, the lower plunger, C, having its upper end beveled or cut away, as shown, and having suitably-shaped boss thereon, and mechanism for operating said plungers, substantially as set forth.

3. In a glass-mold, the combination of the body portion B, the guide-ring E, the upper plunger, D, and the lower plunger, C. said plungers meeting in horizontal plane, the upper plunger having a suitably-shaped boss on its upper end, substantially as set forth.

4. A shade-holder for lamps having a cylindrical or bowl-shaped body portion united to a suitably-shaped base or support, and having an internal flange at or near the junction of the base and body, forming an increased body of glass at that point, substantially as set forth.

In testimony whereof I have hereunto set my hand.

WILLIAM H. BRUNT.

Witnesses:

R. H. WHITTLESEY,

C. M. CLARKE.