(No Model.)

T. B. ATTERBURY.

GLASS REFLECTOR.

No. 362,415. Patented May 3, 1887.

Fig. 1.

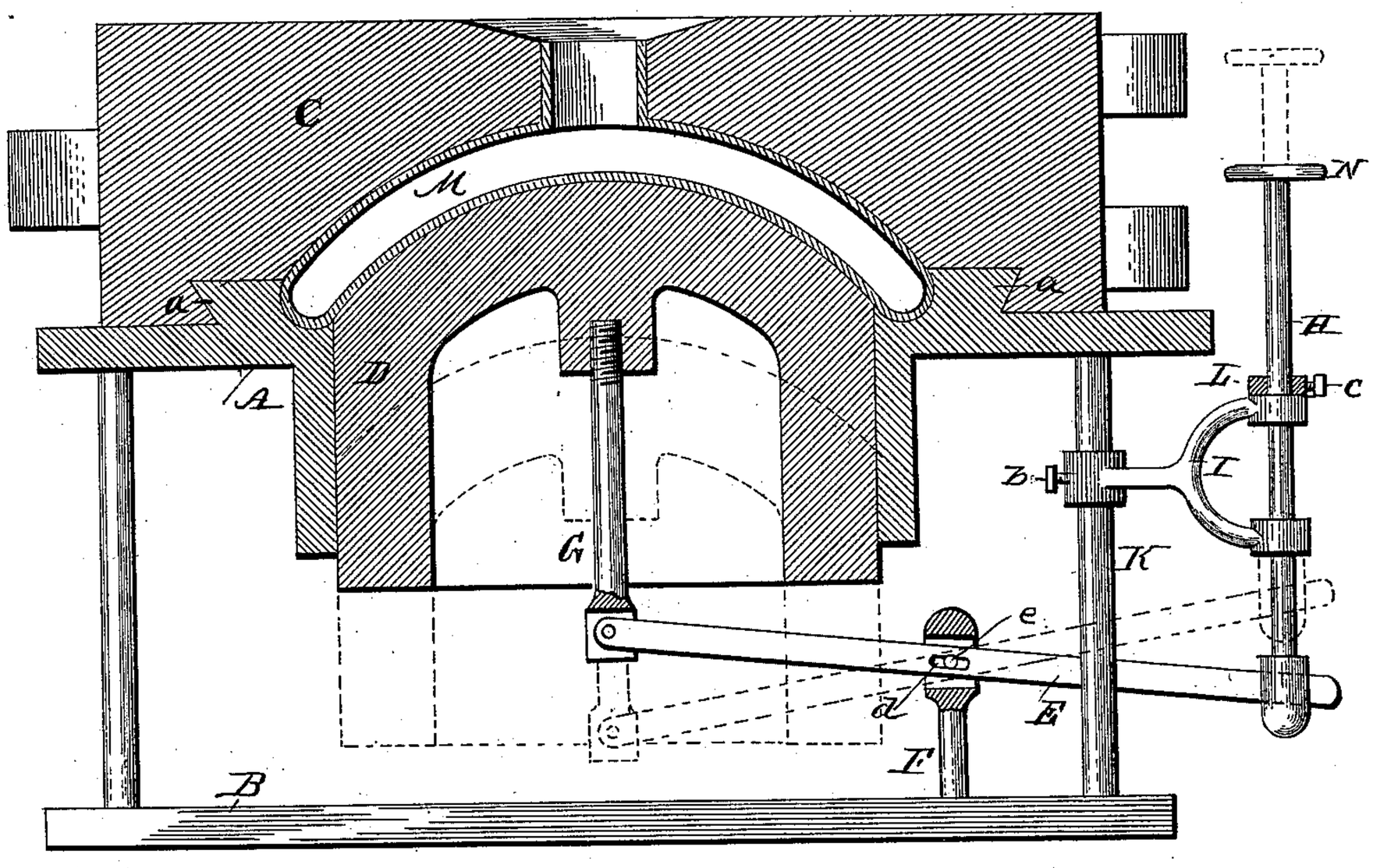
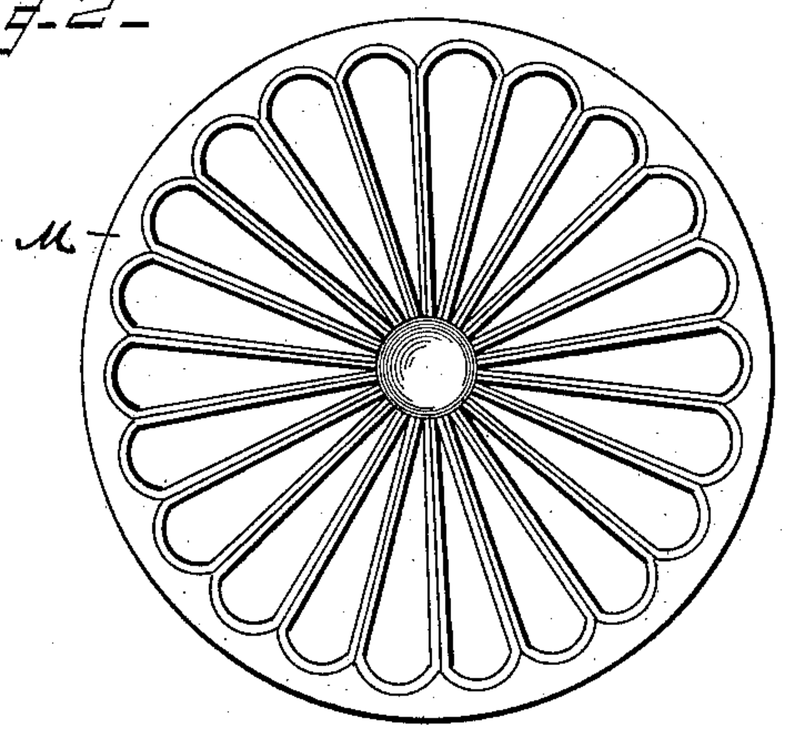


Fig. 2.



WITNESSES

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THOMAS B. ATTERBURY, OF PITTSBURG, PENNSYLVANIA.

GLASS REFLECTOR.

SPECIFICATION forming part of Letters Patent No. 362,415, dated May 3, 1887.

Application filed September 11, 1886. Serial No. 213,298. (No model.)

To all whom it may concern:

Be it known that I, THOMAS B. ATTERBURY, a citizen of the United States, residing at Pittsburg, in the county of Allegheny, State of Pennsylvania, have invented certain new and useful Improvements in Glass Reflectors, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to the methods and apparatus for making glass reflectors or other double-walled articles of glassware.

The object of my invention is to produce a hollow or double-wall reflector of glass in a mold at one heat.

Referring to the drawings, Figure 1 is a vertical sectional view of the mold and operating devices by which the reflectors are made. Fig. 2 is a front view of the inner wall of the reflector, having formed thereon prisms or other irregular forms which will increase the intensity of the light.

A indicates the base of the mold mounted on suitable supports, B, on which the top portion, C, is mounted by dovetailed recesses and tongues *a*, in the usual manner, the said top portion C being hinged so that it can be opened and the finished article removed therefrom.

D is a plunger which forms the bottom of the mold, and is adapted to work up and down in a cavity formed in the main body or base of the mold.

E is a lever pivoted to the standard F, the inner end of which is pivoted to the bar or post G, secured in the under side of the plunger D. The other end of the lever E is secured to the rod H, said rod being passed through the guide or bracket I, said bracket being adjustable on the post K by means of a set-screw, *b*.

L is a nut or washer secured to the rod H by means of the set-screw *c*, above the bracket or guides I, so that the movement of the lever E and plunger D is regulated, and thus regulate the distance between the two walls of the reflector.

The lever E is provided with a slot, *d*, through which the pivot-pin *e* in the standard F is passed, the slot allowing the lever to move slightly in a horizontal direction, and thus allow the plunger D to be raised in a vertical direction without impinging or binding against the sides of the cavity in which it works.

M indicates the reflector as formed by my process, and, as shown in the mold in Fig. 1, is hollow to receive the quicksilver or other material, which will increase the reflective power of the reflector.

The operation of my device is as follows: The workman having removed his foot from the knob N on the standard H, the plunger will fall to the position shown in dotted lines in Fig. 1. The blower inserts a ball of glass in the usual manner, and the upper portion of the mold C is closed. The blowing operation is continued until the gather of glass has filled the mold, when the workman places his foot on the knob N of the rod H and forces the plunger up into the position shown in full lines in Fig. 1, which brings the two walls of the reflector parallel with each other, the distance between the walls being regulated by the throw of the lever E, as heretofore explained.

By the method herein described I am enabled to make double-walled reflectors at one heat and finish the article in the mold at one and the same operation, and in this way I am enabled to produce reflectors in an economical manner without having to pay the high prices required by skilled workmen.

I do not confine my invention to the manufacture of glass reflectors alone, as it is obvious that it can be used to advantage in the manufacture of lamps, lamp-shades, vases, and other articles of glassware where double walls are required.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

A hollow or double-walled glass reflector, having its inner or reflecting surface provided with raised and depressed portions to increase the reflecting-power of the same, as set forth.

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

THOMAS B. ATTERBURY.

Witnesses:
D. P. BERG.
J. SEAM ATTERBURY.