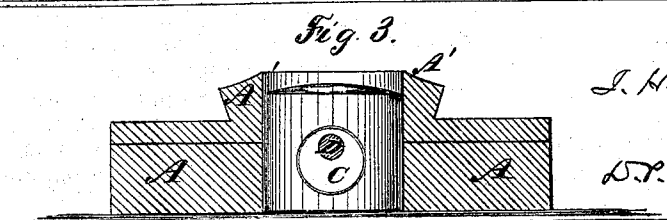
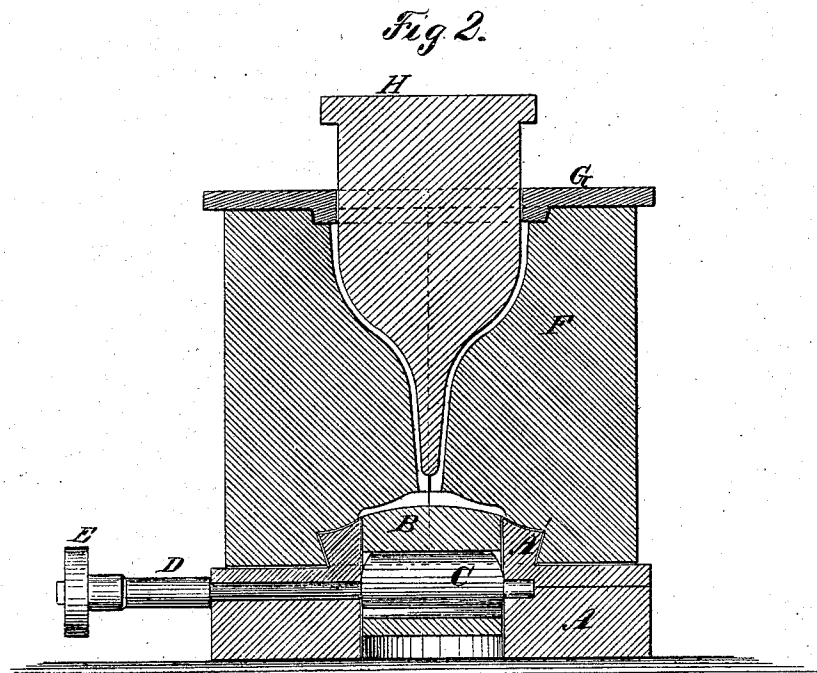
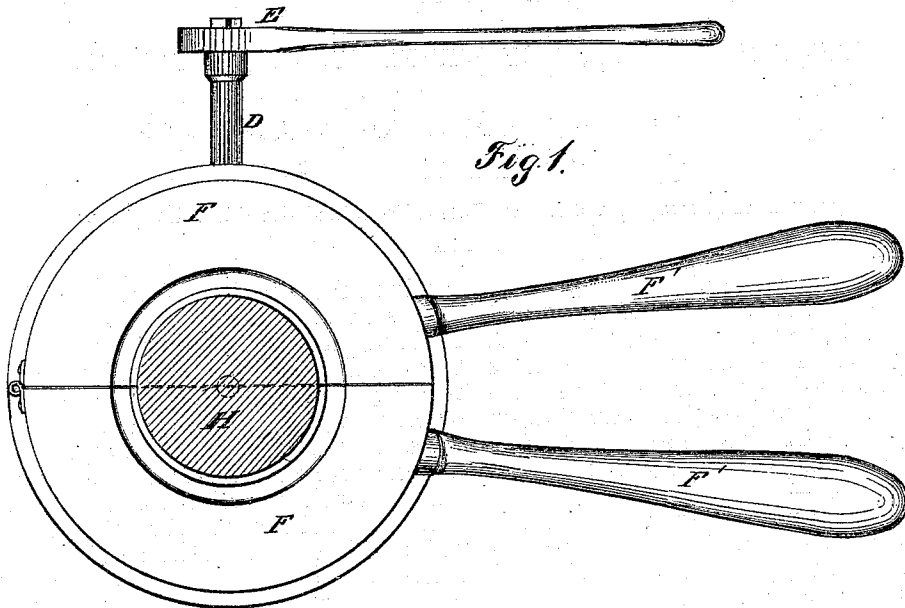


JACOB H. REIGHARD.
Molds for Glass Ware.

No. 125,083.

Patented March 26, 1872.



Witnesses:
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A. Ruppert

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Atty

UNITED STATES PATENT OFFICE.

JACOB H. REIGHARD, OF WHEELING, WEST VIRGINIA.

IMPROVEMENT IN MOLDS FOR GLASS-WARE.

Specification forming part of Letters Patent No. 125,083, dated March 26, 1872.

To all whom it may concern:

Be it known that I, J. H. REIGHARD, of Wheeling, in the county of Ohio and State of West Virginia, invented certain Improvements in Molds for Glass-Ware; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making part of this specification, in which—

Figure 1 is a top view of my improved mold, showing the hinge which holds the parts together, the handles by which they are opened and closed, the lever, and a portion of the shaft for operating the lower pressing-die and the end of the upper die. Fig. 2 is a transverse vertical section, showing the means of uniting the two sections of the mold, the lower pressing-die, and the method of operating it, the cap which forms the guide for the upper die, and said die in its position in said cap. Fig. 3 is a vertical section of the lower portion of the mold, showing the means of moving the lower pressing-die.

Corresponding letters refer to corresponding parts in the several figures.

This invention relates to molds which are to be used in the manufacture of porcelain or glass-ware; and it consists in the construction of such molds in such a manner that the article to be pressed shall receive two separate and distinct impressions, one from below and the other from above, in order that articles having small connecting parts, such as lamps, goblets, wine-glasses, and various others, may be made in two separate parts, and united in said mold while at a temperature sufficiently high to cause them to form a perfect union.

A refers to the base or lower portion of the mold, which may be of any desired form externally, such portion being of sufficient thickness to permit a pressing-die or plunger to work up and down in it. Upon the upper surface of this portion A there may be placed a thin plate of metal having upon its upper surface, near or around the aperture formed in its center, a projecting beveled or dove-tailed flange for the reception and retention of the upper portion of the mold when the two parts are to be used in connection with each other. Through a recess formed in the lower portion of this section of the mold, or partly in it and

partly in the plate A', a shaft passes for a purpose soon to be described. B refers to the lower pressing-die or plunger, which is made to move in the aperture formed in this section, it being so arranged that when in its lowest position its upper surface will be below the upper surface of the projecting-flange of plate A', and thus form a receptacle in such plate for such an amount of molten glass, porcelain, or other material as is required to form the base or lower portion of the article to be made. C refers to a cam or eccentric, which is placed upon a shaft which passes through an aperture in the plunger B, as shown in Fig. 2. This cam or eccentric is firmly secured to the shaft, so that as said shaft and cam are rotated, or partially rotated, the die or plunger shall be moved up and down in the aperture in which it is placed. D refers to the shaft above alluded to, it having its bearings in the section A of the mold, one of its ends projecting beyond the outer surface thereof for such a distance as to enable it to receive a lever or crank, by which it is operated. E refers to a lever, which is placed upon the end of the shaft D, and is used for giving motion to the same. F F refer to the upper sections of the mold, which consists of two parts hinged together and so arranged as to part at their centers. In or upon the inner surfaces of these sections are formed cavities, each of the form of one-half of the outer surface of the article to be formed therein, or of so much thereof as is shaped and pressed in this the upper section of the mold. In the bottom of these sections, or in that portion which comes in contact with the lower section, there is formed an annulus of the shape required to cause it to fit upon the projecting flange formed upon the plate A', so that when the upper sections or parts F F have been opened, or so far separated as to allow them to be placed upon said lower section, they may be closed upon said section by means of the handles F' F', and thus a tight joint formed between the two sections. G refers to a cap, which, when the two parts which form the upper section of the mold are closed together, fits upon such section, it being provided with a projecting flange upon its under surface, which, enters a recess formed in the top of said upper section, and thus serves to

keep it in its proper position with reference thereto. Through the center of this cap there is formed an aperture, the diameter and shape of which is such as to receive the upper pressing-die or plunger H and guide it in its movement while giving form to the upper portion of the article to be made. H refers to the upper pressing-die or plunger, its form being such as to give the required form to the interior of the goblet or other article which at the time it is desirable to make.

The operation of this device is as follows: The parts being constructed substantially as described, the lower section of the mold is placed upon a table or in any other convenient place to be operated, when the lever E is thrown into such a position as to carry the lower die or plunger down to its lowest position, when the cavity or space in the plate A', which is above such plunger, is filled with the molten material to be used, when the upper section of the mold is at once placed upon said lower section and closed tightly thereon by means of the handles F', and the lever or crank is moved into such a position as to cause the plunger to rise, and thus press the material above it into the space which has been formed in the upper part of the mold to receive it and

give it its proper form, at which time a sufficient quantity of the molten material is placed in the cavity, and the upper die or plunger is placed in position, (it having been previously removed,) and any suitable press is used to force said upper die or plunger down, and thus is formed the upper portion of the vessel, and at the same time the two parts are united in consequence of the pressure applied to the material which is in the upper portion of the mold.

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

A mold for forming articles made of glass, porcelain, and other similar substances, said mold being constructed in sections and in the manner described, so that one portion of the article to be made is formed in the lower section, and the other in the upper section, the two portions being united by the pressure applied in forming the last portion, substantially in the manner set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

Witnesses:

J. H. REIGHARD.

J. H. HOBBS,

CHAS. N. BRADY.