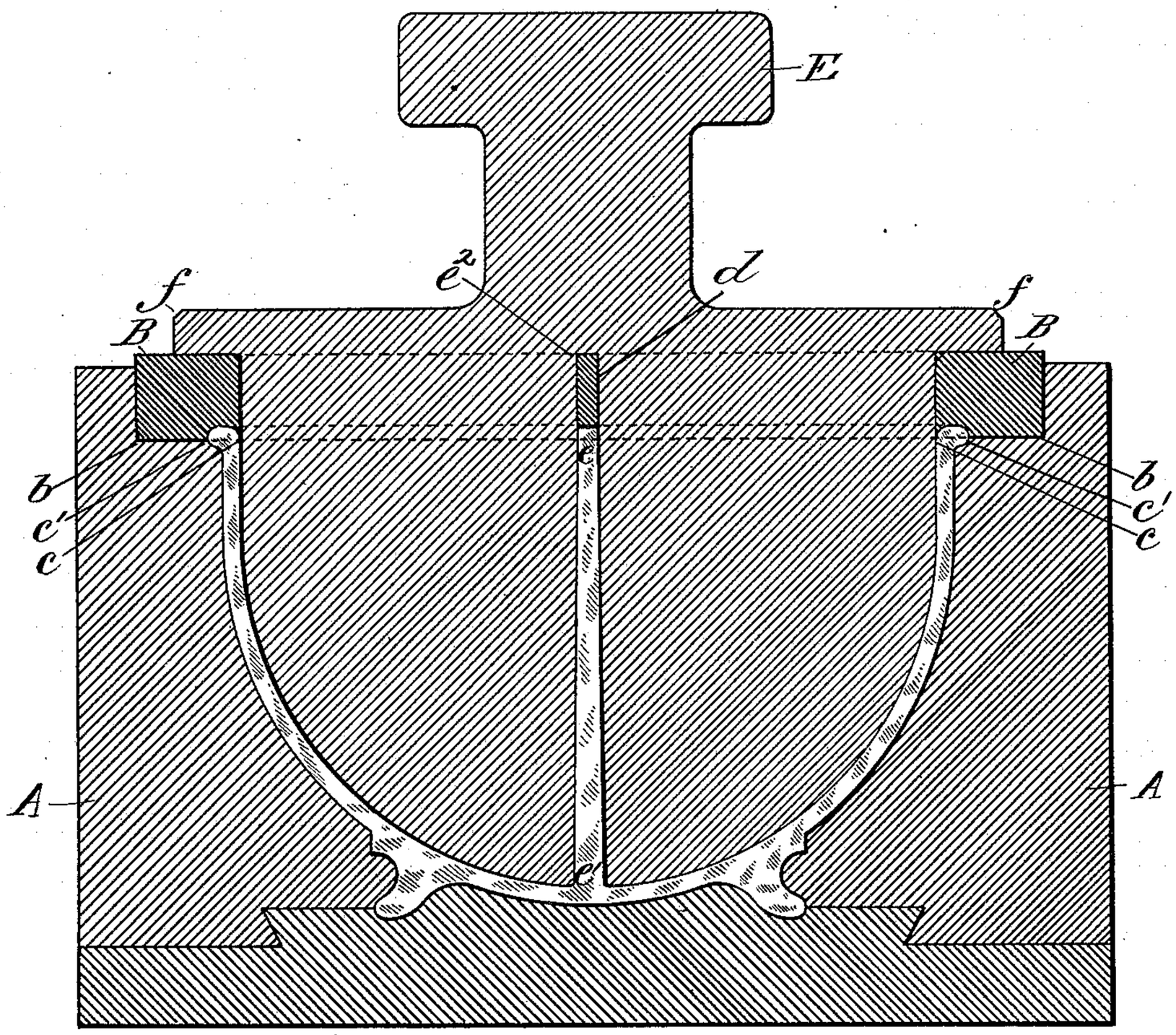
(No Model.)

M. L. BLACKBURN.

GLASS MOLD.

No. 359,553. Patented Mar. 15, 1887.

— FIG. 1. —



— FIG. 2. —

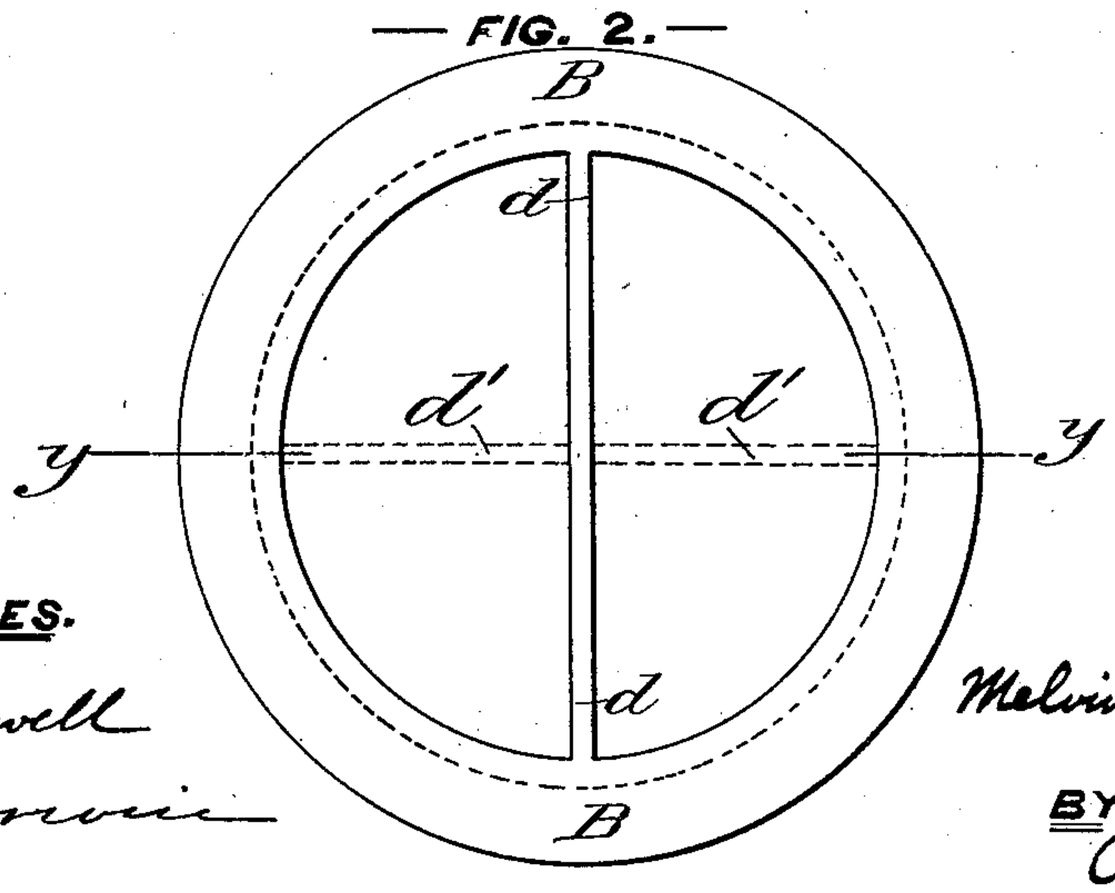
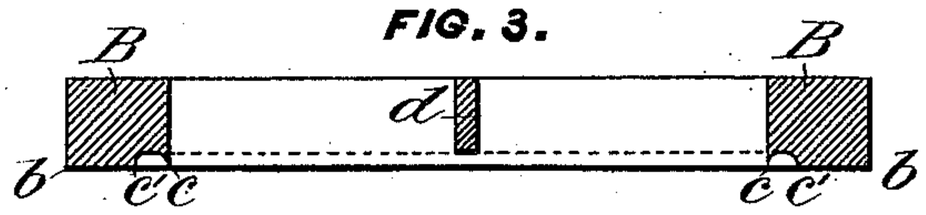


FIG. 3.



WITNESSES.

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UNITED STATES PATENT OFFICE.

MELVIN L. BLACKBURN, OF BELLAIRE, OHIO.

GLASS-MOLD.

SPECIFICATION forming part of Letters Patent No. 359,553, dated March 15, 1887.

Application filed December 15, 1886. Serial No. 221,534. (No model.)

To all whom it may concern:

Be it known that I, MELVIN L. BLACKBURN, of Bellaire, in the county of Belmont and State of Ohio, have invented a new and useful Improvement in Glass-Molds; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to glass bowls divided into two or more compartments by divisions formed at the same time that the bowl is pressed; and it consists in improvements in the mold and plunger by means of which such bowls may be made, with their divisions, complete at one operation.

Though bowls have heretofore been made with divisions therein, the labor and expense necessary to present them in a finished state have prevented them from being a marketable article. This has been due to the fact that in forcing into the mold a plunger provided with a slot for the required partition the glass has risen up within the slot to a height above that of the bowl and presented an uneven surface, and it has been necessary in many cases to finish the article by grinding down the partition to the proper level.

My invention consists in providing a bar to stretch across the mold, over which the slot in the plunger straddles, and which prevents the glass from rising in the slot too far, and at the same time gives the glass partition an even and finished surface. By this means the whole manufacture is complete in one operation.

I will now describe my invention with reference to the accompanying drawings, in which—

Figure 1 is a vertical transverse section of the plunger and mold at the termination of the stroke of the plunger. Fig. 2 is a plan view of the ring B. Fig. 3 is a vertical transverse section on the line *y y* of Fig. 2.

Like letters of reference indicate like parts in each.

The mold A is at its lower part of the ordinary construction and of any desired shape or pattern. The cavity of the mold is enlarged at the top to form an annular recess, *b b*, which is adapted to contain the ring B. The ring B is larger in cross-section than the recess *b b*, and therefore projects into the mold A to a point, *c*, the difference between the length of the base of the recess *b c'* and the width *b c* of the ring B making the thickness of the sides of the bowl. The recess may be beveled at its edge, as at *c'*, and the ring B provided with a corresponding annular recess, *c c'*, to form the rim of the bowl. Across the ring B a bar, *d d*, is placed diametrically, of a width equal to the desired thickness of the partition to be formed in the bowl and of a depth about equal to the depth of the ring from its surface to the top of the recess *c c'*.

The plunger E, of the desired shape to form the interior of the bowl, is provided with flanges *f f*, which, when the plunger has been driven its full depth into the mold, rest upon the ring B. The sides of the plunger then fit closely to the sides of the ring B. The plunger E is also provided with a diametrical slot, *e' e²*, which extends, tapering gradually from its base, vertically upward to a point level with the base of the flanges *f f*, where it is of a width just sufficient to easily accommodate the bar *d d*.

The mode of operation is as follows: The ring B having been placed in position in the recess *b*, a sufficient quantity of plastic glass is placed within the mold, and the plunger E is then brought down in such a manner that the bar *d d* passes within the slot *e² e'*. The glass is forced by the plunger against the sides of the mold, into the recess *c c'*, and the other parts of the mold, and up the slot *e² e'* until it reaches the bar *d d*, where its progress is stayed. The top of the partition *e e'* will thus be made level with the top of the rim of the bowl. Any excess in the glass placed in the mold will not pass up the slot *e² e'* to raise the height of the partition, but will be distributed evenly over the surface of the bowl, merely making a difference in the thickness of the sides and base.

I do not limit myself to the precise construction described, as the ring B may be provided with any number of bars *d d d' d'* and the plunger E with any number of corresponding slots *e² e'*, according to the number and form of the partitions desired; also, the bars *d d* may be made of greater depth to furnish lower partitions. I attach importance to the taper form of the slot *e² e'*, the withdrawal of the plunger being thereby facilitated.

The cast is removed from the mold by re-

moving, first, the plunger, then the ring *b*, and opening the mold.

I claim—

1. A glass-mold having a bar extending across the cavity of said mold, substantially as and for the purposes described.

2. In a glass-mold, a ring fitting in said mold and having a cross-bar, substantially as and for the purposes described.

3. In a glass-mold having a recess in its interior, a ring fitting in said recess and having a bar extending across the cavity of said mold, substantially as and for the purposes described.

4. In combination with a glass-mold having a bar across its cavity, a plunger provided with a slot, substantially as and for the purposes described.

5. In combination with a glass-mold provided with a bar extending across the cavity of said mold, a plunger having a slot tapering from its base upward and adapted to engage with said bar, substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand this 6th day of December, A. D. 1886.

MELVIN L. BLACKBURN.

Witnesses:
W. A. GORLEY,
L. T. BATTELLE.