(No Model.)

H. BROOKE.

MOLDING GLASS.

No. 588,319. Patented Aug. 17, 1897.

Fig. 1,

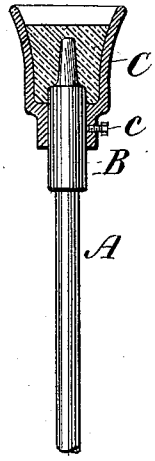


Fig. 2,

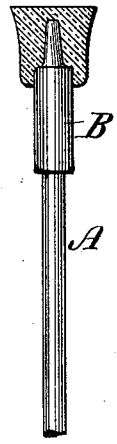


Fig. 3,

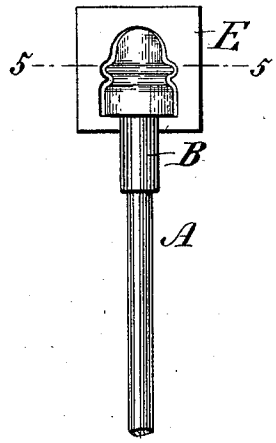


Fig. 4,

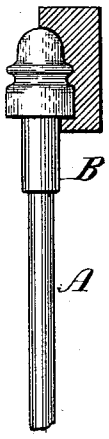


Fig. 5,

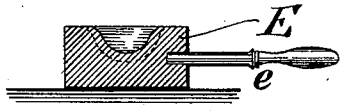


Fig. 6.

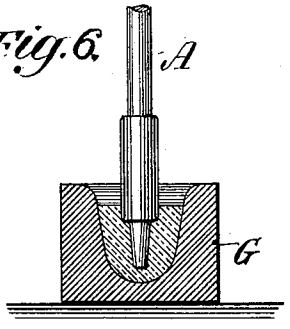
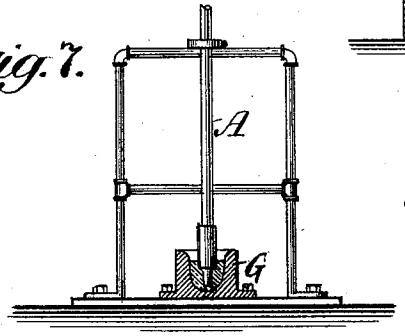


Fig. 7.



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UNITED STATES PATENT OFFICE.

HOMER BROOKE, OF JERSEY CITY, NEW JERSEY, ASSIGNOR OF THREE-EIGHTHS TO JOHN C. GROUT, OF BROOKLYN, NEW YORK.

MOLDING GLASS.

SPECIFICATION forming part of Letters Patent No. 588,319, dated August 17, 1897.

Application filed January 14, 1897. Serial No. 619,143. (No model.)

To all whom it may concern:

Be it known that I, HOMER BROOKE, of Jersey City, in the county of Hudson and State of New Jersey, have invented a certain new and useful Improvement in Molding Glass, of which the following is a specification.

I will describe my invention in detail and then point out the novel features in the claims.

In the accompanying drawings, Figure 1 is a side view of a rod having an inner form of mold fitted to its end and a receiver attached to the latter, the said receiver being shown in vertical section. Fig. 2 is a similar view of the rod and inner form of mold without the receiver, and it shows in vertical section a mass of glass attached to the latter. Fig. 3 is a plan or top view of the rod and inner form of mold, a mass of glass attached to the latter, and an open-block form or outside-profile form in which the mass of glass is rotated. Fig. 4 is a side elevation of all the parts except the block, which is shown in longitudinal section. Fig. 5 is a transverse section at the plane of the dotted line 5 5, Fig. 3, of the said block. Fig. 6 is a side elevation of a rod, the inner form of a mold, and a vertical section of a receiver for molten glass. Fig. 7 illustrates the parts in the same way; but it additionally shows a frame for guiding and directing the inner form of mold.

Similar letters of reference designate corresponding parts in all figures.

A designates a rod of any suitable material and form. On its end is fastened the inner form B of a mold. This part is to be shaped appropriately for producing the desired conformation of the inside of an article of glass—as, for example, an insulator for telegraph-wires.

In Fig. 1 I have shown a receiver C attached to the inner form B of the mold, the attachment being made by forming a collar at the lower end of the receiver proper for fitting the inner form of the mold and securing it in position by a set-screw *c*, which is loosened and the receiver C slid down over and off the handle A when the receiver contains the desired amount of molten glass. Any other suitable device may be used as a substitute for the set-screw. The lower portion of the receiver may be made to serve as a mold, if desired, and I have so shown the receiver constructed in Fig. 1 that it will give the final form or shape to the lower portion of the mass of glass D contained in it.

In Fig. 2 I have shown the receiver removed and the mass of glass D adhering to the inner form of the mold, the inner mold B being sufficiently cool to congeal the glass in proximity therewith, whereby the mass of glass D is held by the frictional grip of the congealed portion of the glass, which grip, however, is not so strong as to prevent the mass of glass from being readily removed upon the application of force when it has received its final form. The glass, being still in a plastic state, is laid upon an open-block form E, resting upon a table, such as I have shown more particularly in Figs. 3 and 4, and rotated therein by rotating the rod A until it has sufficiently congealed to retain its form. Then it may be removed. If the open-block form E be provided with a handle *e*, as shown in Fig. 5, it may be supported by the hand of the workman while he rotates the rod A upon the arms of a glass-worker's chair in a well-known manner.

Instead of using the receiver C, I may use a receiver G, such as I have shown in Fig. 6. Then I shall turn the inner part of the mold upside down, as compared with its position in Fig. 1, to insert it within its receiver G. The glass being in a plastic condition will conform to the inner-mold form. The inner-mold form and glass will be removed and treated, as already described in the open-block form E, by rotating in the block-form, which will complete the inner and outer configuration. If the inner surface or form comprised a screw-thread or equivalent conformation, it would of course better engage with the inner-mold form B.

It will be advantageous to use a frame such as I have shown in Fig. 7 for guiding the rod A and determining its vertical position with reference to the receiver G to obviate the difficulty of securing the proper relation of the inner-mold form to the said receiver if that had to be secured by the hand of the operator alone.

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

1. The process of giving formation to a mass of plastic glass which consists in supporting said mass and thereby molding and giving final shape to a portion of the surface of said mass, and subsequently molding the remaining portion of the surface thereof by subjecting the mass to a rotary motion, substantially as specified.

2. The process of giving formation to a mass of plastic glass, which consists in supporting a mass of plastic glass until final formation is given thereto, the supporting of said mass acting also to mold and give final shape to a portion of the surface thereof, and then completing the formation of the mass by molding the remaining portion of the surface by subjecting the mass to a rotary motion, substantially as specified.

3. The combination of a portable hand-rod and a mold-form attached thereto for supporting a mass of plastic glass, substantially as specified.

4. The combination of a portable hand-rod, an inner-mold form attached thereto for supporting a mass of plastic glass, and a receiver for molten glass into which the inner-mold form is projected, substantially as specified.

5. The combination of a portable hand-rod, an inner-mold form attached thereto for supporting a mass of plastic glass, a receiver for molten glass into which the inner-mold form is projected, and a detachable connection between said receiver and inner-mold form, substantially as specified.

6. The combination of a portable hand-rod, an inner-mold form attached thereto for supporting a mass of plastic glass, a receiver for molten glass into which the inner-mold form is projected, and a frame or support for gaging the position of the inner form relatively to the receiver, substantially as specified.

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

HOMER BROOKE.

Witnesses:
JOHN C. GROUT,
W. LAIRD GOLDSBOROUGH.