Sept. 27, 1932. V. E. HOFMANN 1,879,872

MOLD FOR GLASSWARE FORMING MACHINES

Filed Jan. 16, 1930

FIG-1-

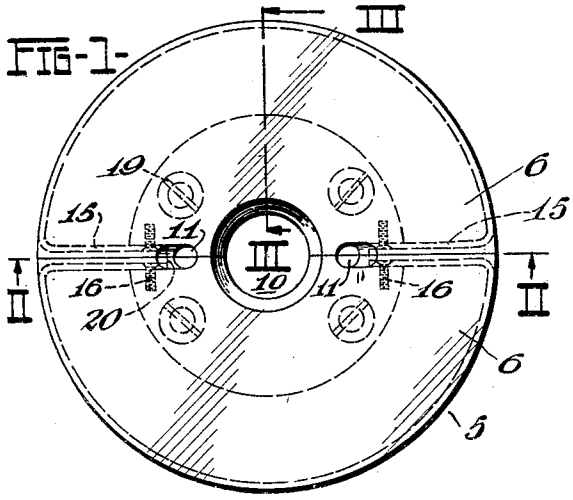


FIG-2-

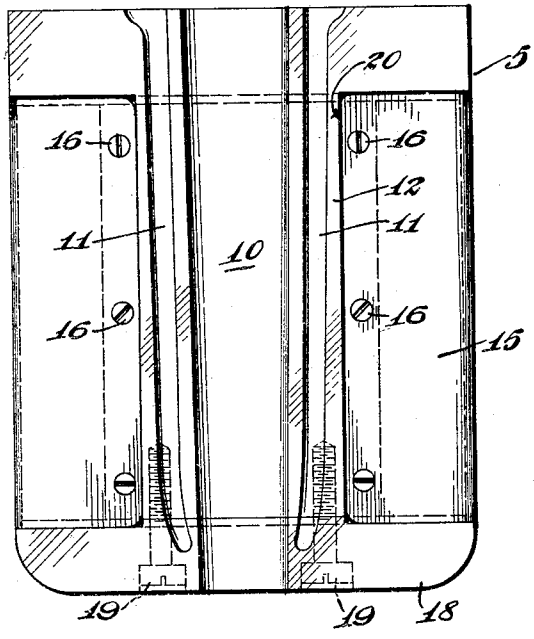
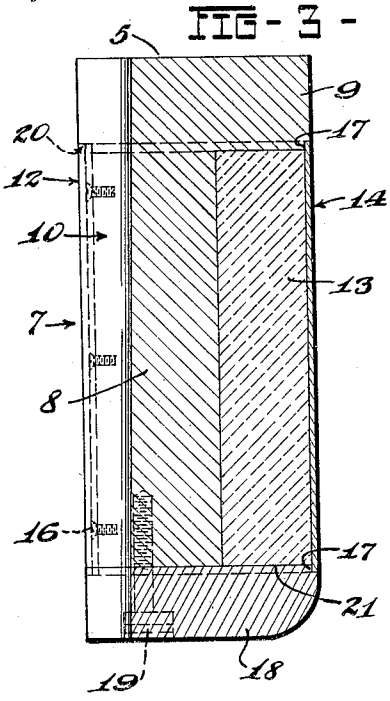


FIG-3-



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UNITED STATES PATENT OFFICE

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MOLD FOR GLASSWARE FORMING MACHINES

Application filed January 16, 1930. Serial No. 421,153.

The present invention relates to improvements in molds for machines used in forming hollow glassware and more particularly to the blank or parison molds in which the articles of glassware are given their initial form.

An object of the invention is the provision of an improved mold construction whereby conservation of heat is materially furthered. To this end the mold is for the greater part insulated in a fashion to reduce radiation of heat.

Another object is the provision, in a mold embodying the above characteristics, of means for greatly reducing the weight of the mold and incidentally the manufacturing cost.

Other objects will be in part apparent and in part pointed out hereinafter.

In the drawing:

Fig. 1 is a plan view of the improved mold.

Fig. 2 is a view taken along the line II—II of Fig. 1.

Fig. 3 is a sectional view taken substantially along the line III—III of Fig. 1.

In the illustrated embodiment of the invention, the blank mold 5 in which the blanks or parisons constituting partially completed articles of glassware are formed, comprises two cooperating sections 6 which are adapted to be supported upon, and alternately opened and closed by, a mold carrier (not shown) in any conventional manner. The mold is designed to cooperate with a neck mold (not shown) and gather mold charges by suction in accordance with the usual practice, said mold charges being transformed into blanks which are later transferred to finishing molds (not shown) for final shaping.

The two sections 6 of the mold are identical in structure, each comprising a body portion 7 which may be formed of iron or other suitable metal. This body portion is substantially semicircular in cross-section and provided with a channel in its flat longitudinal face, said channel cooperating with a corresponding channel in the other section when the mold sections are brought together in the formation of the mold cavity 10. Vacuum grooves 11 formed in the flat sealing surfaces 12 of the mold section are adapted to be suitably connected through a neck mold (not shown) with a source of vacuum supply (not shown) during gathering of mold charges of molten glass. The upper end of the intermediate section 8 of the body portion 7 terminates in a radial flange 9 which cooperates with a face plate 18 or mold bottom at the lower end of said intermediate section 8 in the formation of a substantially semicircular channel 21 or chamber adapted to enclose an insulating material 13, such as asbestos, mineral wool or the like. The face plate 18 may be attached to the intermediate section 8 of the body portion by screws 19 or like fasteners. Preferably the flange 9 is formed integral with said section 8.

For the purpose of retaining the insulating material within the chamber provided between the flange 9 and face plate 18, a cover plate 14 of semicircular form extends about the periphery of the flange 9 and face plate 18, having its upper and lower ends set into corner recesses 17 (Fig. 3) so that its outer surface is flush with the outer surfaces of said flange and face plate. End walls 15 on the cover plate 14 close the ends of the channel 21 or chamber and have their extremities set into recesses 20 provided in the intermediate section 8 of the body portion. Screws 16 or other suitable fasteners provide suitable connection between these end walls 15 and the intermediate section 8 of the body portion 7 and thereby reliably secure the cover plate 14 in position to prevent displacement of the insulating material. Because the end walls 15 of the cover plate are set into the recesses 20 inwardly from the sealing surfaces 12, interference with proper contact between said sealing surfaces when the two sections of the mold are brought together is entirely avoided.

The face plate 18 is formed of high temperature steel and consequently provides a mold bottom having exceptionally long life. Also it provides reliable means for assisting in holding the insulating material 13 in proper position about the mold section. Since this face plate is attached to the body portion by means of screws 19, replacement

thereof, when necessary, is greatly facilitated.

By constructing a blank mold as set forth above, the weight is greatly reduced because of the decreased quantity of iron or other metal employed, and by substituting an insulating material for the metal eliminated, radiation of heat is greatly reduced. Also, replacement of molds on machines while operating is facilitated through this weight reduction.

Modifications may be resorted to within the spirit and scope of the appended claims.

What I claim is:

1. A mold comprising a pair of separable sections, each section including a body portion substantially semicircular in cross-section formed with one portion of a mold cavity extending lengthwise of one face, said one face being flat to provide sealing surfaces at opposite sides of the mold cavity, each section formed with a semicircular channel concentric with said one portion of the mold cavity, an insulating material in said channel, a cover plate adapted to hold the insulating material within said channel, said plate having end portions extending parallel with said sealing surfaces, said sealing surfaces having recesses into which said end portions extend, and means for securing the end portions against movement relative to the remainder of the mold and thereby holding the cover plate in proper position.

2. A mold comprising a pair of separable sections, each section including a body portion substantially U-shaped in cross-section and having a radial outwardly extending flange at one end, a face plate secured to the other end of the body portion and extending radially to form a flange which cooperates with the first named flange in providing a semicircular channel, an insulating material in said channel, and a cover plate connecting said flange and face plate and holding the insulating material in said channel.

3. A mold comprising a pair of separable mold sections, each section including a body portion substantially semicircular in cross-section, formed with one section of a mold cavity extending lengthwise of its inner face, said face being flat to provide sealing surfaces at opposite sides of the mold cavity, each mold section being formed with a semicircular channel concentric with said mold cavity, insulating material in said channels, each mold section comprising a cover plate of sheet material overlying said insulating material and holding it within said channel, each cover plate having end portions bent inward to extend parallel with said sealing surfaces, and means for securing the cover plates to the mold sections.

Signed at Toledo, Ohio, this 14th day of January, 1930.

VICTOR E. HOFMANN.