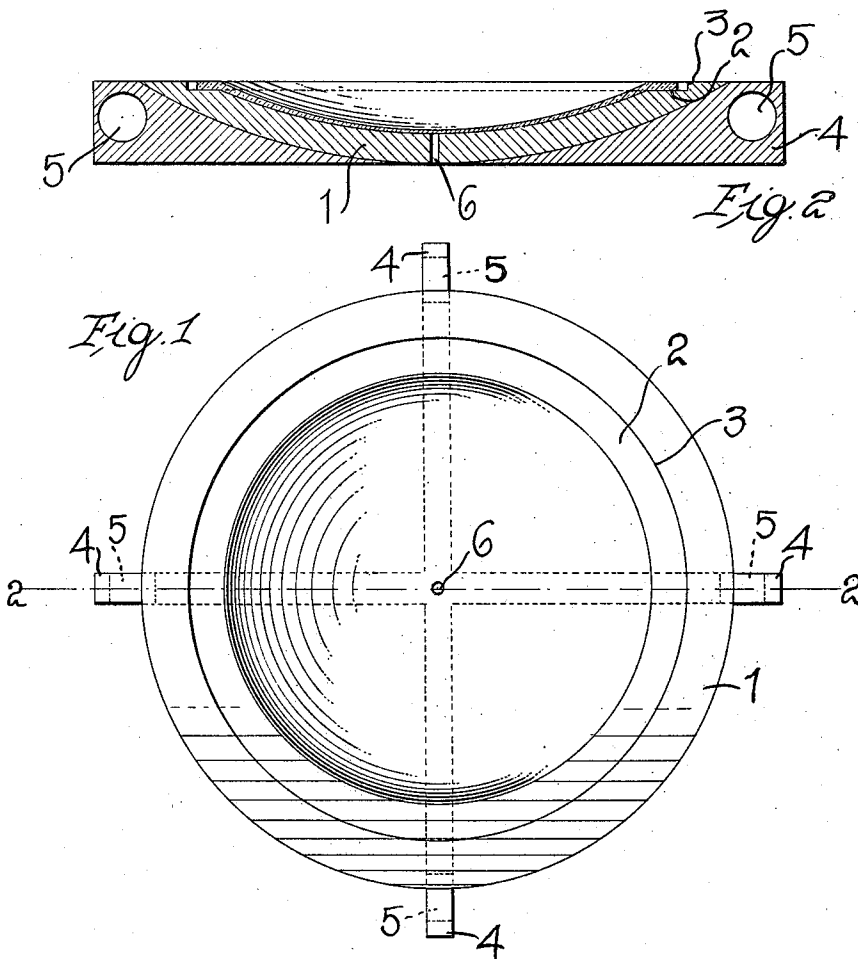


A. S. TITUS, F. P. WEIBLE & S. E. JOHNSON.
GLASS MOLD.

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1,161,998.

Patented Nov. 30, 1915.



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GLASS-MOLD.

1,161,998.

Specification of Letters Patent.

Patented Nov. 30, 1915.

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To all whom it may concern:

Be it known that we, ALBERT S. TITUS, FERDINAND P. WEIBLE, and SAMUEL E. JOHNSON, citizens of the United States, residing at Port Allegany, in the county of McKean and State of Pennsylvania, have invented certain new and useful Improvements in Glass-Molds, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in glass molds and more particularly to a mold for forming concavo-convex glass having an annular flange and which is adapted for use upon lamps used on automobiles, motor-cycles, etc.; the main object of the present invention being the provision of a mold wherein the concavo-convex lens is formed and which, at the same time is provided with a flat marginal edge whereby the same may be readily attached to automobiles and motor-cycle lamps and all other similar lamps of this character.

Another object of the present invention is the provision of a mold which consists of a concavo-convex body having oppositely extending wings formed upon the under face thereof, whereby to support the same in an upright position, said wings being provided at their outer ends with suitable openings for the reception of a tool, whereby the mold may be readily handled and, at the same time the body of the mold is provided with a central opening to permit of the escape of air beneath the glass as it takes the form of the mold.

A further object of the present invention is the provision of a device of the above character which will possess advantages in points of efficiency and durability, is inexpensive to manufacture and, at the same time, is simple in construction and operation.

With the above and other objects in view, the invention consists in the novel features of construction, combination and arrangement of parts as will be hereinafter referred to and more particularly pointed out in the specification and claim.

In the accompanying drawing forming a part of this application, Figure 1 is a top plan view of a mold constructed in accordance with our invention; and Fig. 2 is a longitudinal sectional view taken on the line 2-2, of Fig. 1.

Referring more particularly to the drawing, 1 indicates the main body of the mold which is formed of iron, steel or any other suitable metal of this character and is preferably constructed as shown, of a concavo-convex form. The upper edge of the body of the mold is provided with a cut-away portion forming a suitable annular flat surface 2 and a shoulder 3. Arranged beneath the mold and adapted to support the same, are the elongated lugs 4, which extend outwardly in opposite directions from the center of the body and project at their outer ends beyond the outer edge of the mold and are preferably welded or otherwise secured to the convex surface of the mold.

The lugs 4 are provided within their outwardly projecting ends with suitable openings 5 adapted to receive the tines of a fork or other instrument for placing the molds within a heated oven or removing the same therefrom. In the formation of this head-light glass, a circular piece of window or plate glass is mounted upon the annular flat surface 2, it being understood that the glass will be of sufficient size to fit snugly within the annular shoulder 3. A fork or other instrument is then engaged within the openings 5 of the lugs 4 and the mold placed within an oven heated to a degree which will accord with the thickness of the glass which is used in forming the head-light glass. As the glass is heated, the central portion thereof will tend to drop downwardly within the body of the mold, expanding the glass to a certain degree.

It will be understood that from placing the circles of glass upon the flat surface 2, a certain amount of air will be beneath the surface and as the glass is heated and the central portion drops down to form the concavo-convex portion, the air beneath the glass will escape through a central opening 6 formed in the bottom of the mold. It will also be noted that the annular flat surface 2 is to be of sufficient width to support a circle of glass which is large enough to provide an annular retaining flange, after the central portion has been heated and expanded into a concavo-convex form. It will be noted in Fig. 1 that the circle of glass has been melted so that the central portion thereof conforms to the shape of the mold and it will be further noted that the edge of the glass has contracted and drawn away

from the shoulder 3, but as stated before, this flat portion will be of sufficient width to retain a circle of glass the diameter of which will be sufficient so that after the concavo-convex portion has been formed, the marginal edge thereof will still be of the desired width.

From the above description taken in connection with the accompanying drawings, it will be apparent that we have provided a simple and durable glass mold wherein the concavo-convex glass is formed having a flat marginal edge, said glass being used for the head-lights of automobiles and motor-cycles and the like, and the flat or marginal edge being adapted for use in securing the glass or lens in position. It will also be understood that before using this mold, a sufficient glazing surface will be applied to the inner face of the mold so that the heated glass will not stick or adhere thereto, but can be quickly removed after the mold has been cooled.

It will also be noted from the foregoing that our mold, as herein shown and described is extremely simple in construction and can be manufactured and placed upon the market at a comparatively low cost.

While we have shown and described the preferred form of our invention, it will be obvious that various changes in the details of construction and in the proportions may be resorted to for successfully carrying our invention into practice, without sacrificing any of the novel features or departing from

the scope of the invention, as defined by the appended claim.

Having thus described our invention, what we claim is:

A glass mold including a concavo-convex body member disposed with its convex face lowermost, and a plurality of supporting members radiating from the center of the body member and bearing against the convex face thereof for maintaining the upper edge of the concave face in horizontal position, said supporting members being provided with curved edges adapted to flatly engage against the convex face of the mold and being provided at their outer terminals with apertures through which lifting instruments may be inserted for transporting the mold, said supporting members being arranged in pairs, the individual supporting members of each pair being diametrically alined, whereby a lifting instrument, having parallel tines may be applied to the mold, by the insertion of the tines in the apertures of a pair of the supporting members.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses.

ALBERT S. TITUS.
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SAMUEL E. JOHNSON.

Witnesses:

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