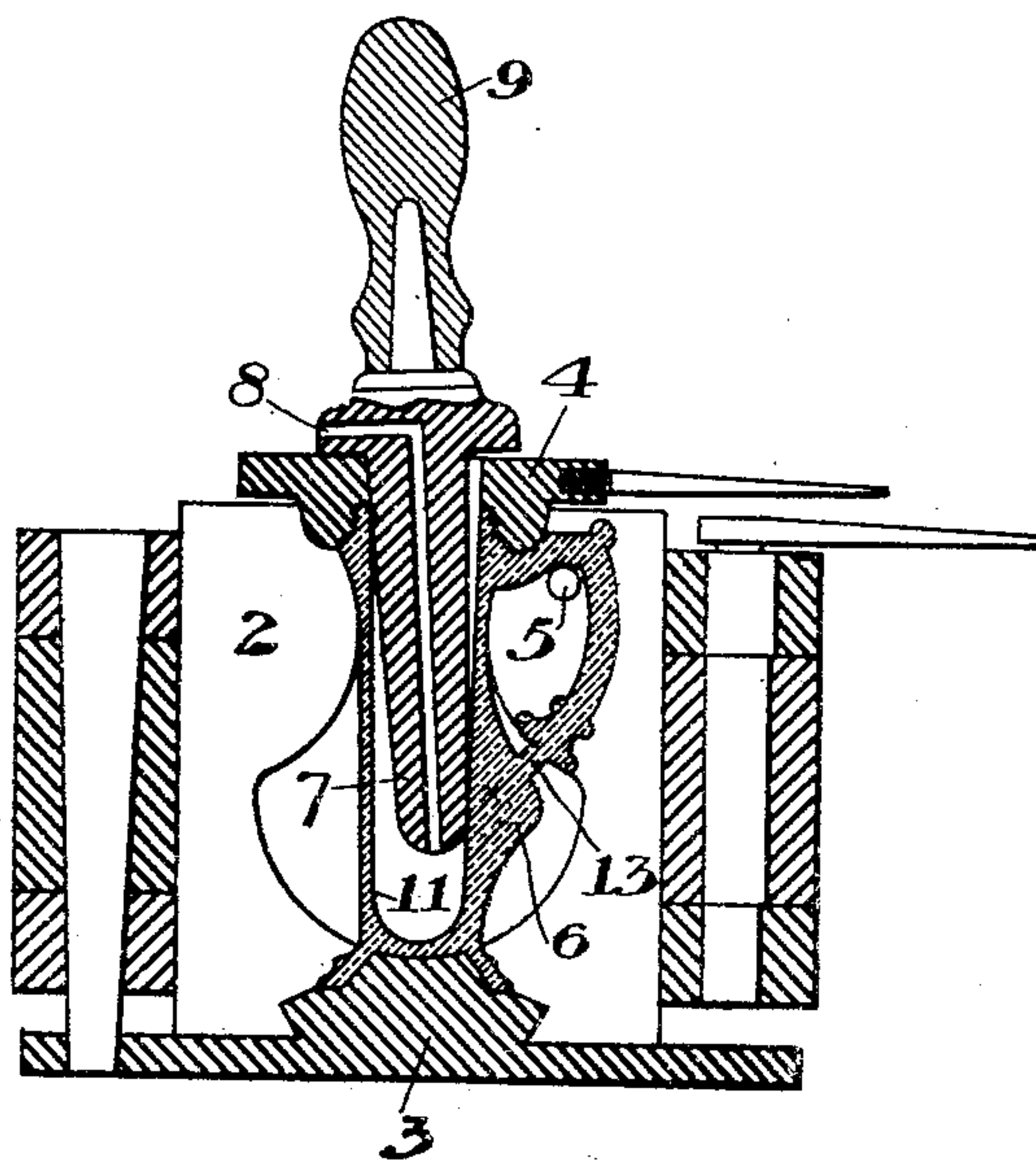


No. 786,114.

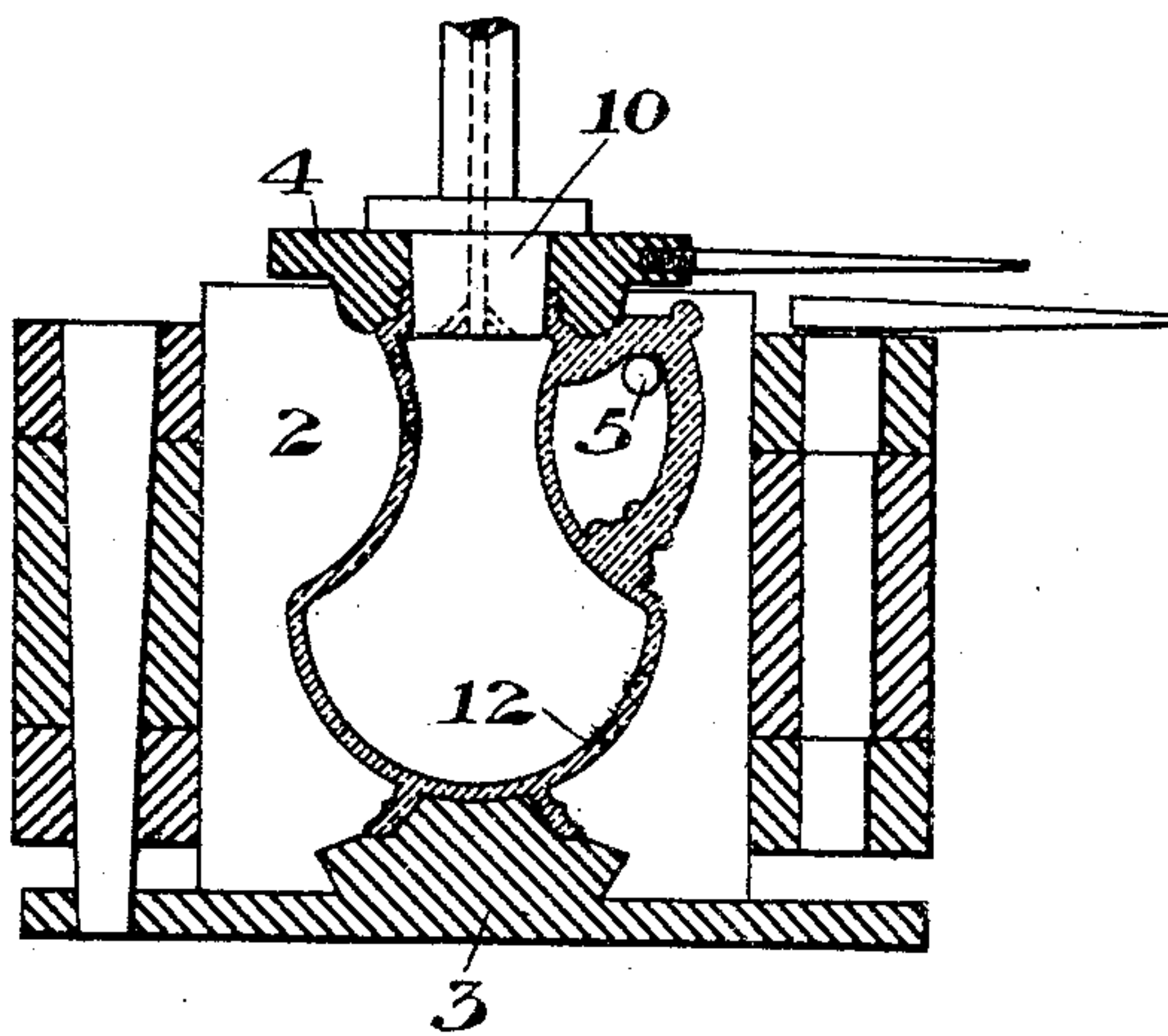
PATENTED MAR. 28, 1905.

A. R. GROTZ.  
BLOW MOLD FOR HANDLED GLASSWARE.  
APPLICATION FILED NOV. 1 1904.

*Fig. 1.*



*Fig. 2.*



WITNESSES

*L. A. Conner*  
*H. W. Conner*

INVENTOR

*Albert R. Grotz*  
*by Nathan Nymis*  
*his atty.*

# UNITED STATES PATENT OFFICE.

ALBERT R. GROTZ, OF WELLSBURG, WEST VIRGINIA, ASSIGNOR OF ONE-HALF TO EAGLE GLASS AND MANUFACTURING COMPANY, OF WELLSBURG, WEST VIRGINIA, A CORPORATION OF WEST VIRGINIA.

## BLOW-MOLD FOR HANDLED GLASSWARE.

SPECIFICATION forming part of Letters Patent No. 786,114, dated March 28, 1905.

Application filed November 1, 1904. Serial No. 230,941.

*To all whom it may concern:*

Be it known that I, ALBERT R. GROTZ, of Wellsburg, Brooke county, West Virginia, have invented a new and useful Blow-Mold for  
5 Handled Glassware, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section of my im-  
10 proved mold, showing the chilling device in position; and Fig. 2 is a similar view showing the blow-head and article in final shape.

My invention relates to the blow-molds em-  
15 ployed for finishing glass-blanks having handles thereon.

The object of the invention is to prevent downward flow of the glass in the thicker portion of the blank and also to prevent dropping of the soft handle, which is often pinched  
20 between the halves of the blow-mold.

In the drawings, 2 represents the blow-mold, which may be made in two parts in the ordinary manner, 3 being the base and 4 the mold-  
25 ring. One of the mold-halves is provided with a pin 5, which is in proper position to extend through the upper part of the handle and support it against sagging before the mold is closed, thus avoiding the pinching of the  
30 handle. This pin projects from one half of the mold and enters a corresponding recess in the other half as the mold parts are closed.

In my method of forming handled ware the blank is pressed with a thick portion of glass 6 at or adjacent to the point where the lower  
35 end of the handle joins the body. To prevent this thicker body of glass, which remains hotter than the rest, from running down in the mold, I preferably insert a hand chilling device, which is shown as consisting of a metal  
40 shank or presser 7, preferably having an outlet 8 extending through it to allow exit of the hot air. This presser is provided with a handle 9, by which after insertion it may be forced  
45 against the portion 6 of the glass in the blank, so as to chill this thickened portion and pre-

vent its running down. The presser also acts to partially force out the portion 6 of the glass toward its final position; but its primary function is that of chilling. After the presser is withdrawn the blow-head 10 is applied, as  
50 shown in Fig. 2, and the article is blown to its final form, the lower portion 11 of the blank taking the form shown at 12 in Fig. 2.

In the form shown the pin connection 13 between the lower end of the handle and the  
55 body is employed to support the handle and prevent air entering it during the blowing operation.

The advantages of my invention result from the use of the mold-support to prevent sag-  
60 ging and pinching of the handle and from the chilling action of the inserted plug, which may also partially shape the article.

Many variations may be made in the form and arrangement of the mold, the handle-sup-  
65 port, and the presser-mold without departing from my invention.

I claim—

1. A blow-mold for handled ware having a pin projecting from one half of the mold and  
70 a recess in the other half arranged to receive the same, said pin being adapted to support the pressed handle against sagging; substantially as described.

2. In the manufacture of handled ware, a  
75 blow-mold, and hand chilling device arranged to enter the mouth of the mold and chill at least a portion of the pressed blank thereon; substantially as described.

3. In the manufacture of handled ware, a  
80 blow-mold and a hand chilling device arranged to enter the mold-opening and chill and press the glass therein; substantially as described.

In testimony whereof I have hereunto set my hand.

ALBERT R. GROTZ.

Witnesses:

JAMES PAINE,  
MINNIE E. LINTON.