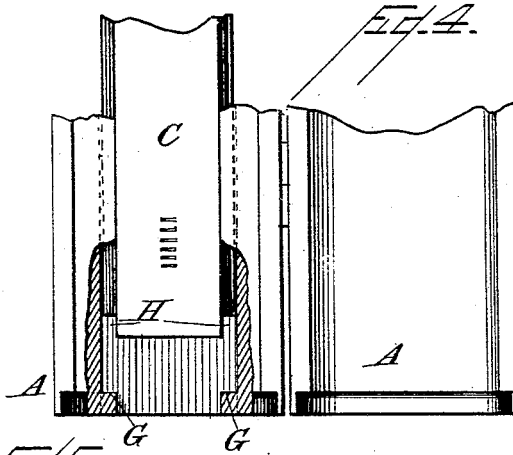
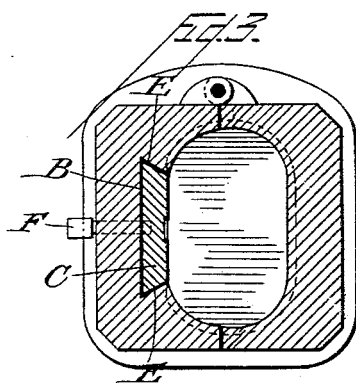
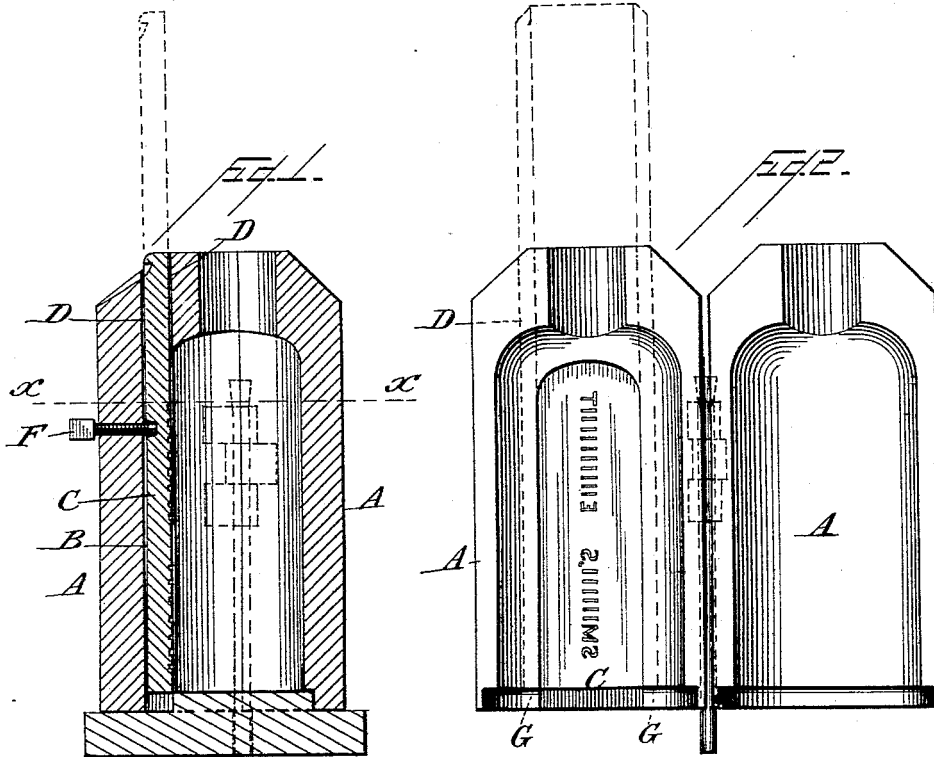


(No Model.)

J. S. IRWIN.  
LABEL FORMER FOR GLASS MOLDS.

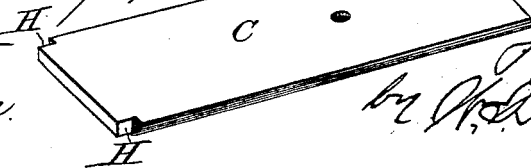
No. 476,649.

Patented June 7, 1892.



Attest:

*H. H. Schott*  
*Alfred T. Gage*



Inventor

*John S. Irwin*  
by *W. B. Anderson*  
his Attorney

# UNITED STATES PATENT OFFICE.

JOHN SAMUEL IRWIN, OF SALTSBURG, PENNSYLVANIA.

## LABEL-FORMER FOR GLASS-MOLDS.

SPECIFICATION forming part of Letters Patent No. 476,649, dated June 7, 1892.

Application filed February 18, 1892. Serial No. 422,029. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN SAMUEL IRWIN, a citizen of the United States, residing at Saltsburg, in the county of Indiana and State of Pennsylvania, have invented certain new and useful Improvements in Label-Formers for Glass-Molds; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to molds for forming hollow articles, more especially of glass, and has particular reference to the means employed for forming letters or characters on the side of the vessel.

It has for its object to provide for the insertion and withdrawal of a plate bearing the lettering to be formed upon the vessel without the necessity of removing the mold from its bed or changing the position of the mold in order to introduce or withdraw said plate.

It has further for its object to provide for securely holding the plate in position and for effecting close contact between it and the portion of the mold next to the article to be formed, so as to avoid the formation of fins along the vessel where the said plate and mold or "former" come in contact with each other.

It has further for its object to generally improve the manner of introducing and securing this plate in position, whereby the manipulation of the parts is greatly facilitated and better results obtained than heretofore, while at the same time there results great saving in time and labor.

To the accomplishment of the foregoing and such other objects as may hereinafter appear, the invention consists in the construction and the combination of parts hereinafter particularly described, and then specifically defined by the claim.

Figure 1 of the accompanying drawings is a vertical section through the mold and its base-plate with the two parts of the molds closed. Fig. 2 is a side elevation of the mold with its sections thrown open and showing the impression-plate in position. Fig. 3 is a cross-section through the mold and plate.

Fig. 4 is a side elevation of the mold and plate with parts broken away. Fig. 5 is a perspective of the impression-plate looking at the rear of it.

In the drawings, which contain an illustration of my invention, the letter A designates a two-part former adapted for the making of bottles in the ordinary way with the two sections of the former hinged together in the usual manner by the pin illustrated as extending below the body of the mold and entering the base-block. In the section of the former which will contain that portion of the bottle on which is usually impressed the name of the person for which the same is made is formed a recess B, extending lengthwise of the former, which recess is of a depth sufficient to receive a plate on which is inscribed the name of the person for whom the bottles are made and such other matter as it may be desired to impress upon the bottle. This plate is designated by the letter C, and when placed in the aforesaid recess forms a portion of that side of the former.

It has been customary to use plates for the purpose stated and which constitute a portion of the former, the said plate working in suitable guides, which hold it in place and permit it to be slid into and out of position; but the plate so employed has been introduced from the bottom of the former, which necessitates the removal of the former from its bed when it is desired to introduce the plate or to remove the same in order that it may be replaced by another, and this has involved the loss of time and labor, as well as the removal or disturbance of the former.

To overcome the objections and inconvenience experienced from constructions heretofore employed, I form a passage-way D in the body of the former, preferably through the top of the former and longitudinally with the recess B and cause the same to communicate with the recess B, so that it will be a continuation thereof, but inclosed on all sides instead of having an open face next to the bottle, as the recess B has. This allows the plate to be slid into and out of place without moving the former from off its bed or support, while the four walls which inclose the passage-way D and also the plate C, which slides therein, serve to accurately guide and hold

the plate in position, and by forming a passage-way through the top of the former it permits the plate to be quickly dropped into position and lifted therefrom when it is to be replaced by another.

5 In the body of the former and to each side of the recess B, I form dovetail guideways E, which are also preferably extended through the passage-way D, which beveled guideways  
10 permit the plate to be pressed closely up against the inside face of the former, as by a wedge action, so that close contact can always be maintained between the plate and the edges of the recess B, and thus the tendency  
15 to the formation of a fin along the line of the recess be reduced to the minimum, if not practically entirely overcome. These dovetail guideways also tend to more securely hold the plate against shifting or movement. A set-  
20 screw F, passed through the body of the former, with its end bearing against the plate, serves as a means for pressing the plate firmly against the dovetail wall of the guideway, and by forming a slight depression in the outside  
25 face of the plate to receive the end of the set-screw the plate will be held by the set-screw against any longitudinal movement in its ways.

I prefer to form shoulders or stops G at the  
30 lower ends of the dovetail guideways E, so as to limit the downward movement of the plate and prevent the same from dropping below the bottom of the former. These stops or shoulders also tend to keep the plate in alignment, even though there should be any un-  
35 evenness in the bed on which the mold is supported. The edges of the plate at its lower end are cut away, as shown at H, or reduced in dimensions at that end, so that the lower

end of the plate may extend down to the end 40 of the former, while portions of the plate will bear against the shoulders or stops at the lower ends of the guideways.

The construction described not only possesses the advantages set forth in the detailed 45 description of the several parts, but also greatly facilitates the introduction and removal of the impression-plate and saves much labor and time in the manipulation of the parts, besides insuring accuracy of adjust- 50 ment of the plate and giving better results in the character of the work done.

I have described with particularity the construction of the several parts; but it is obvious to the skilled in the art that changes 55 may be made in the details of the several parts without departing from the spirit of my invention.

Having described my invention and set forth its merits, what I claim is— 60

The former for making hollow vessels, constructed with a recess to receive an impression-plate which will constitute a portion of the molding cavity of the former and formed with a passage-way through the upper portion 65 of the body of the former for the impression-plate to slide in, said passage-way forming a continuation of said recess and serving to guide and steady the impression-plate and to allow the plate to be inserted and removed 70 from the upper portion of the mold, substantially as and for the purposes described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN SAMUEL IRWIN.

Witnesses:

E. W. KIRKPATRICK,  
H. MCBANE.