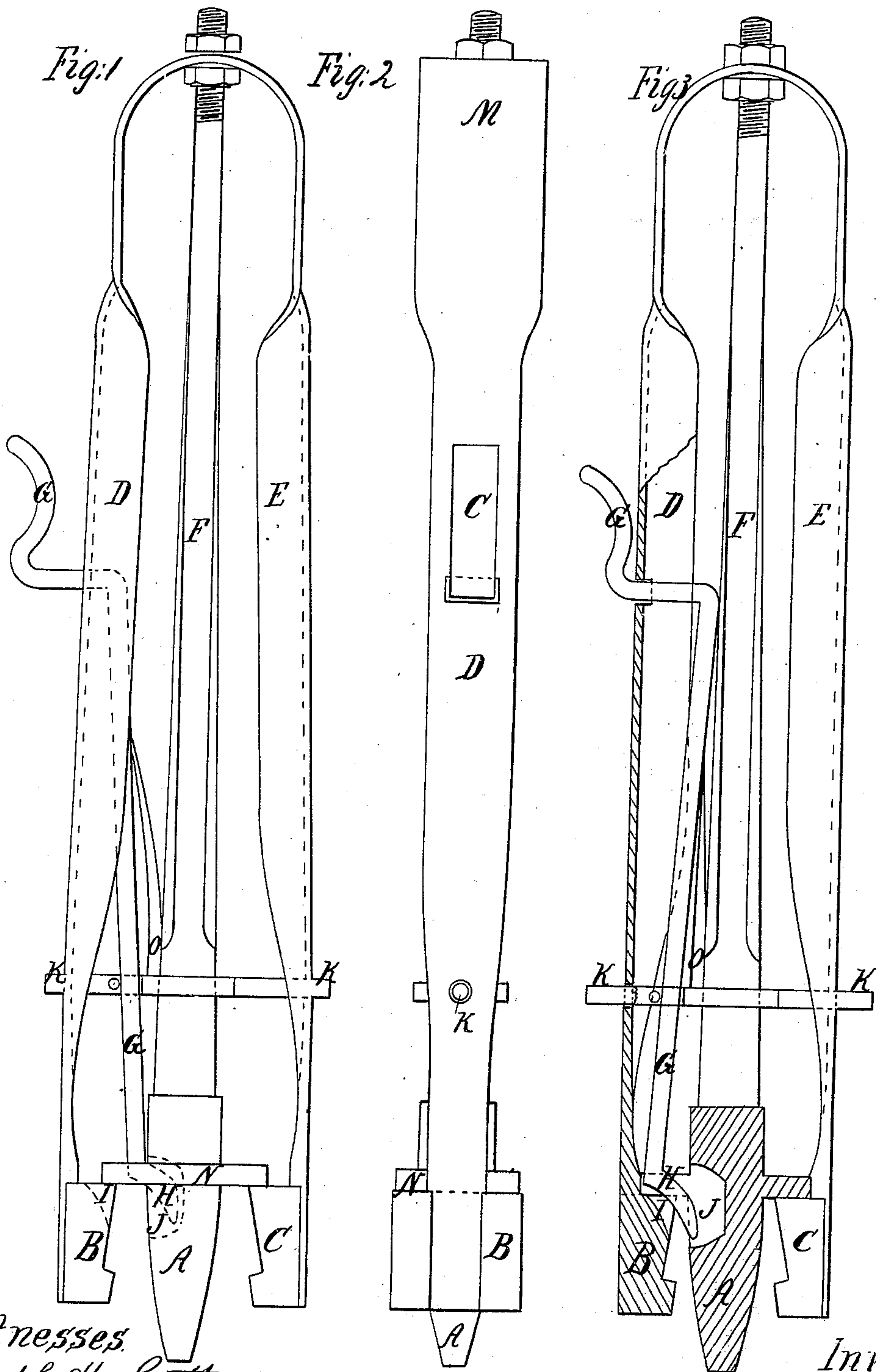


I. Barrett.
Glass Tool.

Nº 93,039.

Patented Jul 27, 1869.



Witnesses.
Joseph H. Cotton
George A. Murphy

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THOMAS BARRETT, OF CHARLESTOWN, MASSACHUSETTS.

Letters Patent No. 93,039, dated July 27, 1869.

IMPROVEMENT IN TOOL FOR FORMING LIPS ON THE NECKS OF BOTTLES.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern :

Be it known that I, THOMAS BARRETT, of Charlestown, in the county of Middlesex, and State of Massachusetts, have invented a new and useful Machine or Tool for Forming Lips on the Necks of Bottles, when the neck is shaped; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being made to the annexed drawings, making part of this specification, in which—

Figure 1 is a side elevation;

Figure 2, an edge elevation; and

Figure 3, a side sectional elevation, exhibiting the tool when used.

In fig. 1 is shown a general view of the tool when open and ready for use, in which—

A is a conical plug, to be inserted in the neck of the bottle to be shaped.

B and C are dies for shaping the exterior of the neck.

D and E are the handles.

F is a rod, to which plug A is secured, and which passes through the spring-bow M, and is there secured and adjusted by the screw and nuts, as shown.

G is the lip-forming lever pivoted on the guide-stem K. The upper end is bent and passes through handle D. The lower or lip-forming end H, passes through shoulder N, on plug A, and is held in the recess J, in the plug A, by means of spring O.

In die B is recess I, which is made of the shape of the lip to be formed.

K K are guide-stems which encircle rod F, and pass through handles D and E, and are used to preserve the plug in a central position.

The manner of forming lips on bottles heretofore and now, has been, and is to first shape the neck by a tool similar to the one shown, and, after removing

the tool, to insert a rod in the neck, and pull the flexible glass or ware to one side, into a rudely-shaped lip. In so doing, the neck is always more or less misshapen; the hole in the neck is also distorted. To remedy this, the tool is again applied to restore the shape, which cannot be well done because of the presence of the lip.

In the tool which I have invented, and here shown, a symmetrical neck and perfectly formed lip are invariably secured, by reason of the fact that the tool has not to be withdrawn, and that the neck is within the tool while the lip is formed.

In operation, the tool is held in the right hand; the bottle to be shaped is suitably held, and rotated by the left. When plug A is inserted in the bottle, the dies B and C are gradually brought together, while the bottle revolves, till they come in contact with shoulder N. The neck is now formed, and the revolving ceases.

The operator now presses his forefinger on the upper end of the lever G, forcing it into the position shown in fig. 3, by which means H has been forced out of recess J, driving before it the pliant glass or ware into the lip-forming recess I.

This completes the operation of shaping the neck and forming the lip. The tool is now removed, and the bottle is finished.

What I claim as my invention, and for which I desire Letters Patent, is—

1. The combination of a neck-shaping and lip-forming tool, substantially as shown.

2. The retractile lip-former and lip-forming recess in the die, substantially as shown, and for the purpose set forth.

THOMAS BARRETT.

Witnesses:

JOSEPH H. COTTON,
GEORGE O. MURPHY.