J. SLIM.

MACHINES FOR PRESSING RINGS ON GLASSWARE.

No. 195,411. Patented Sept. 18, 1877.

Fig. 1.

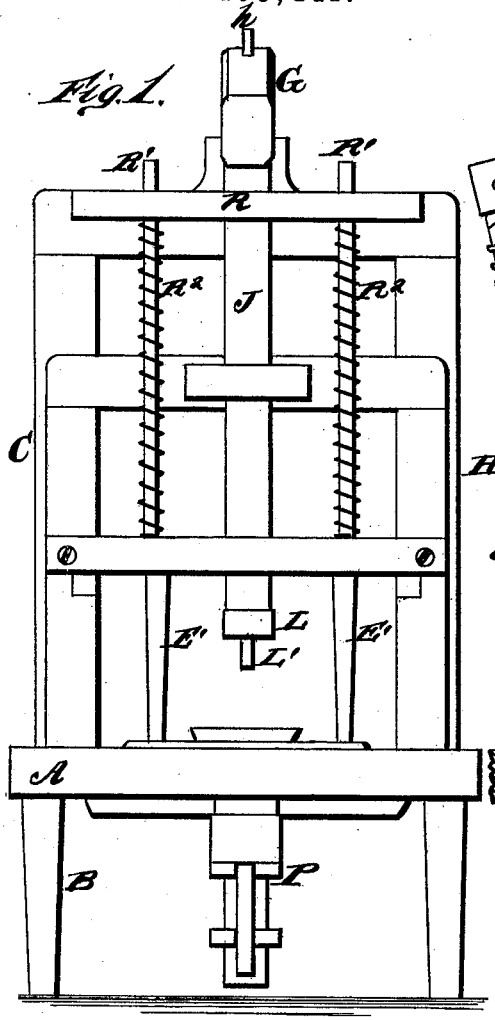


Fig. 2.

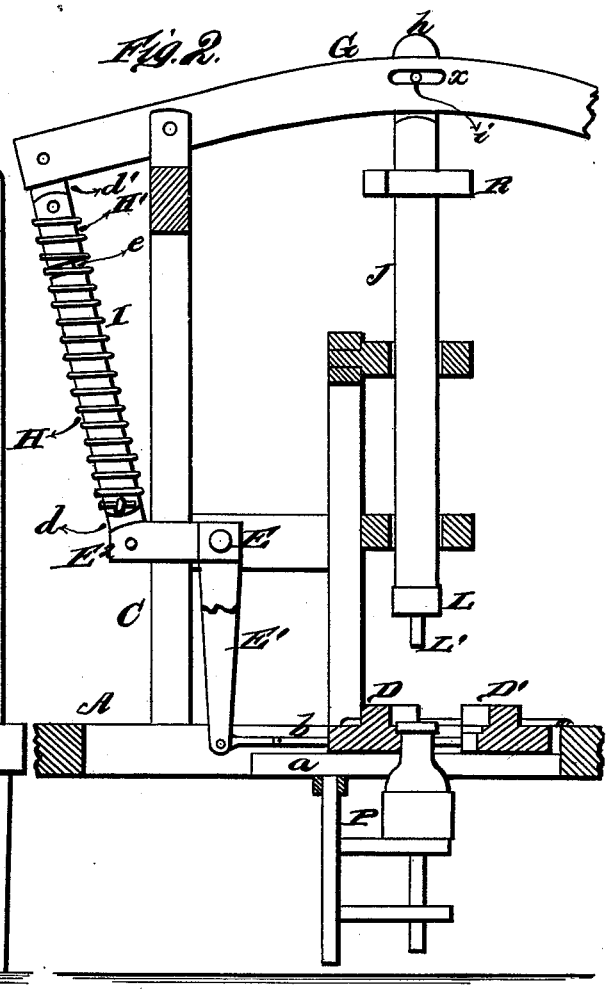


Fig. 3.

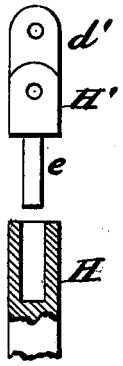
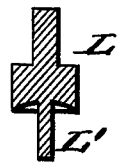


Fig. 4.



WITNESSES

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JOSEPH SLIM, OF LOCKPORT, NEW YORK.

IMPROVEMENT IN MACHINES FOR PRESSING RINGS ON GLASSWARE.

Specification forming part of Letters Patent No. **195,411**, dated September 18, 1877; application filed August 18, 1877.

To all whom it may concern:

Be it known that I, JOSEPH SLIM, of Lockport, in the county of Niagara and State of New York, have invented a new and valuable Improvement in Machine for Pressing Rings, &c., on Glassware; 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 had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a front view of my machine for pressing rings on glassware. Fig. 2 is a longitudinal vertical sectional view, and Figs. 3 and 4 are sectional details thereof.

The nature of my invention consists in the construction and arrangement of a machine for pressing and forming the rings around the mouths of bottles, fruit-jars, and other glassware, as will be hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates my invention.

A represents the bed of my machine, supported upon legs or feet B B, and provided with a frame-work, C, erected on top thereof. In the bed A is a central opening, in which is secured one half, D, of a mold, in which the neck of the article is to fit. The other half, D′, of this mold is movable upon guides *a a*, and connected, by means of rods *b b* passing through the stationary mold, with arms E^1 E^1, which depend from a rocking shaft or bar, E.

This rocking bar has another arm, E^2, connected with one end of the operating-lever G by a connection constructed in the following manner: In the end of the arm E^2 is pivoted a metal ear, *d*, projecting from one end of a bar, H. The other end of this bar is bored out for a suitable distance, and in the same is entered a round stem, *e*, projecting from one end of a bar, H′, while at the other end is an ear, *d′*, pivoted in the end of the lever G.

Around the bars H H′ is placed a spiral spring, I, having its ends attached to said bars, so that the connection becomes, to a certain degree, elastic—that is to say, up to a certain point the connection acts the same as if it were rigid, but after that it yields to the pressure and expands.

The operating-lever G is pivoted on top of the frame C, and has in its front portion a vertical mortise for the passage of a tenon, *h*, on the upper end of a plunger, J, which passes through suitable guides formed in or attached to the frame C. Through the tenon *h* is passed a pin, *i*, the ends of which pass through slots *x x* in the sides of the lever.

The lower end of the plunger J is provided with a die, L, concave on its under side, and having a central downwardly-projecting teat or pin, L′. This die is to correspond in size and shape with the mouth of the article to be operated upon.

The plunger J is also provided with a cross-head, R, which passes over two vertical guide-pins, R^1, surrounded by spiral springs R^2, as shown.

The bottle or other article to be operated upon, as soon as taken from the ordinary mold, is placed in a rest, P, with its neck fitting in the mold D. The lever G is now brought down, which first closes the mold D′, so that the bottle will be held firmly in its place. The connection H H′ I now yields until the die L has descended into the mold, the teat L′ entering the mouth of the bottle, while the concavity of the die forms the ring around the same.

As soon as the pressure is removed from the lever the springs return the parts to their original position.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a stationary mold, a movable mold, and a reciprocating plunger with die, the movable mold and plunger being operated simultaneously by one stroke of the lever, substantially as and for the purposes set forth.

2. The combination of the mold D′, rods *b*, rocking shaft E with arms E^1 E^2, the lever G, and the flexible connection H H′ I, constructed substantially as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOSEPH SLIM.

Witnesses:
JAS. M. CURTIS,
M. E. PERRIGO.