

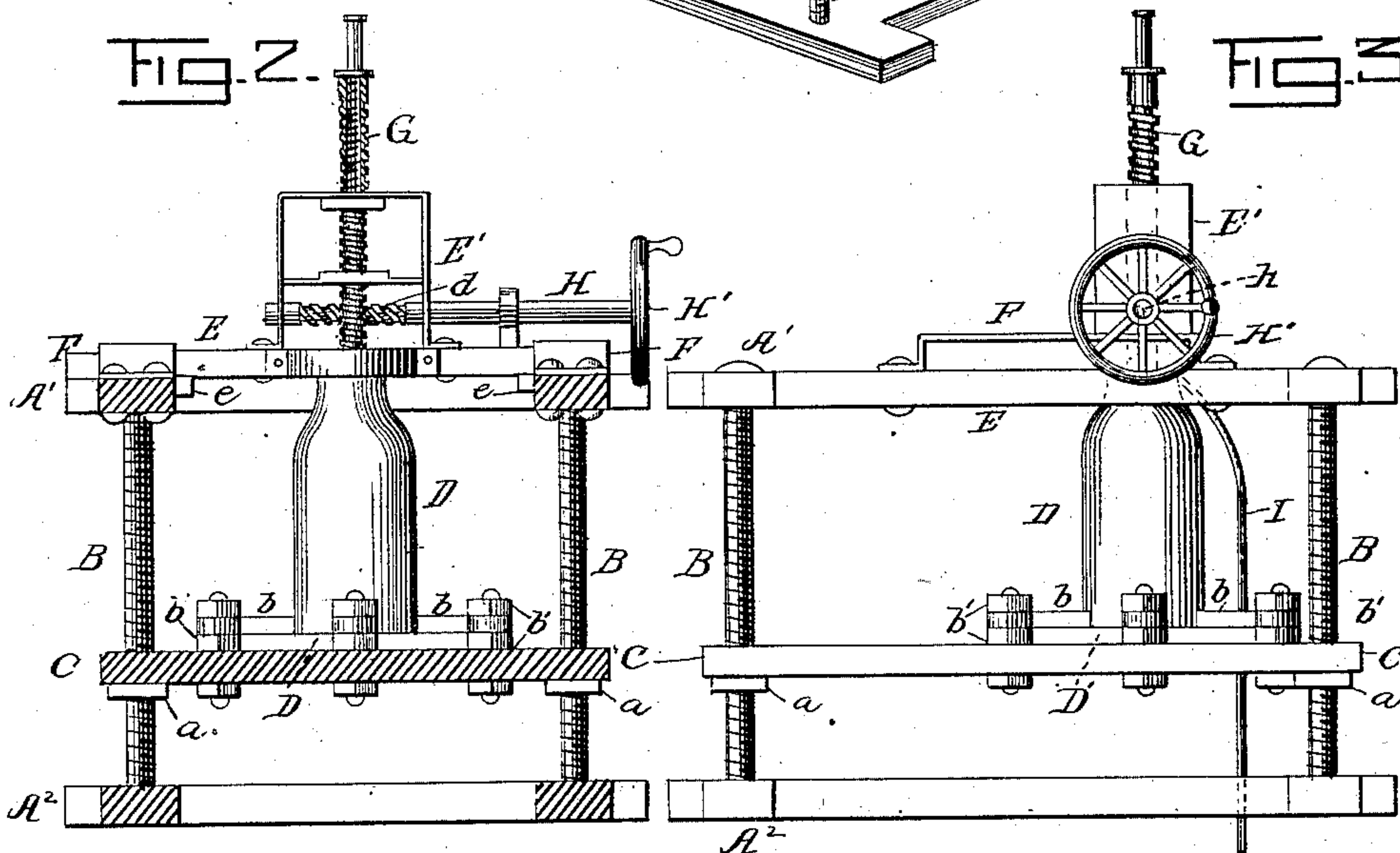
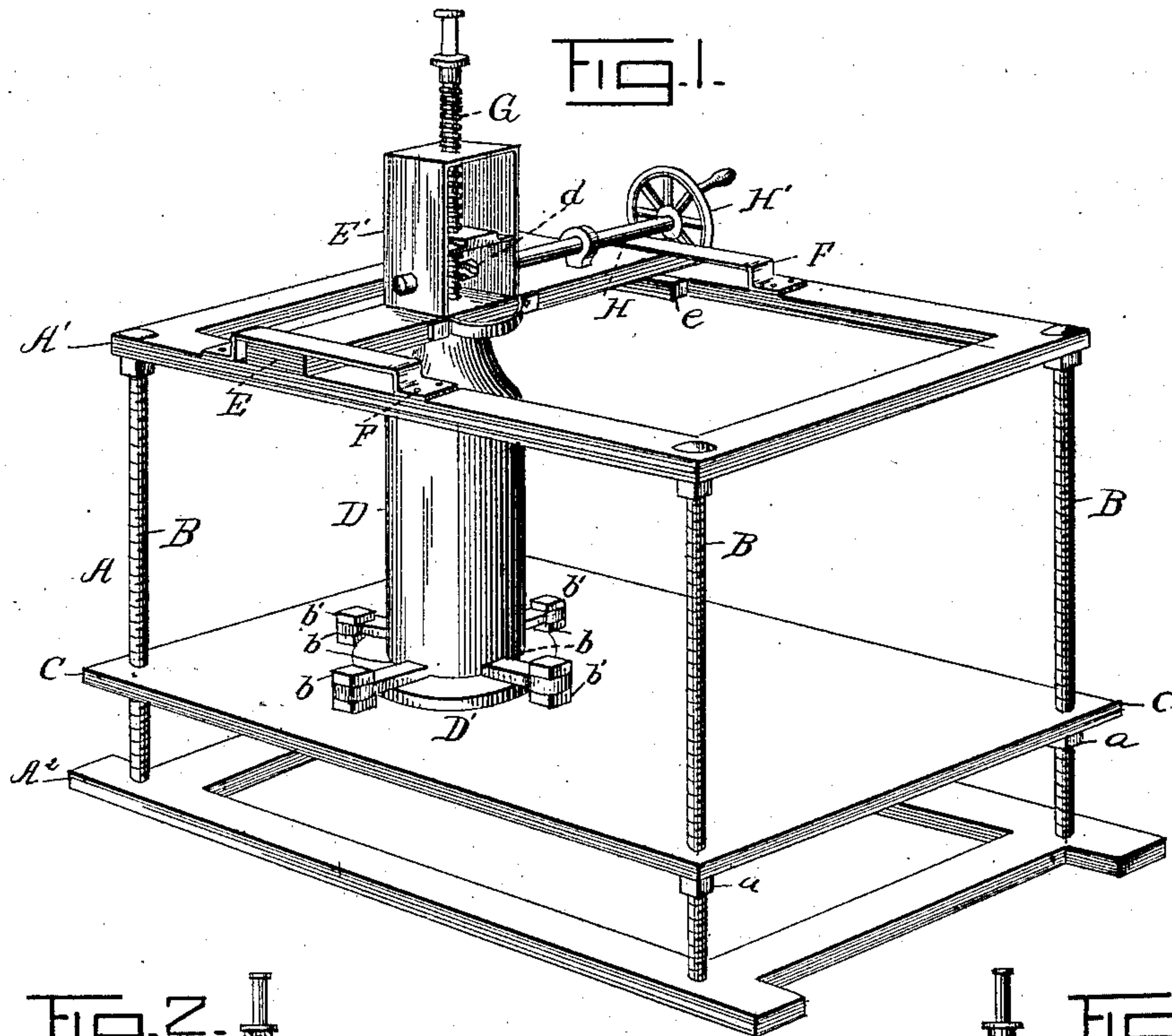
(No Model.)

G. W. YOST.

FINISHING THE MOUTHS OF GLASS BOTTLES, &c.

No. 317,269.

Patented May 5, 1885.



WITNESSES:

Storris A. Clark.

Jno. C. Schroeder.

INVENTOR,

George W. Bost.

by Geo W. Dyer atty

UNITED STATES PATENT OFFICE.

GEORGE W. YOST, OF BELLAIRE, OHIO.

FINISHING THE MOUTHS OF GLASS BOTTLES, &c.

SPECIFICATION forming part of Letters Patent No. 317,269, dated May 5, 1885.

Application filed March 16, 1885. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. YOST, of Bellaire, in the county of Belmont and State of Ohio, have invented a new and useful Improvement in Finishing the Mouths of Glass Bottles and Similar Articles; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to means for finishing the mouths of glass bottles or other similar glass vessels before they are removed from the mold in which they are blown, and it is designed as an improvement upon the means for doing this work described in Letters Patent No. 306,670, granted to myself October 14, 1884, wherein a rotary plunger backed by a spring is run down into the neck of the bottle or vessel before the same is removed from the mold, and before it has had time to cool.

The present improvements are confined mainly to the frames for supporting the mold and finishing-tool, and to heating appliances arranged at the neck of the bottle or vessel to be finished; and the novelty of my invention consists in the combined construction and arrangement of these parts, whereby better facilities and greater conveniences are afforded, all as more fully hereinafter described and set forth.

For a more perfect understanding of these improvements, in connection with the following description, attention is invited to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved machine; Fig. 2, a vertical transverse section of the same, and Fig. 3 a side elevation.

Like letters of reference indicate corresponding parts in the several views.

A denotes a frame, preferably rectangular, composed of a top and bottom open framework, A' and A², respectively, connected by intermediate externally-screw-threaded rods, B, passing through the same at each corner, and properly secured at their ends. These rods also pass through the corners of an intermediate plate, C, below which upon the rods are internally-screw-threaded nuts a a, by

which this plate can be adjusted vertically upon said rods, between the top and bottom of the frame, to accommodate different-sized molds. This plate C supports and carries the mold D, which has a base, D', provided with lateral arms b b, removably secured to the plate C by bolts or rivets b' b'.

Upon the top A' is mounted the frame for supporting and carrying the finishing-tool and the devices for advancing and rotating the same. This frame consists of a straight transverse bar, E, the ends of which terminate between this plate and two raised guide-plates, F F, secured upon the top A' at opposite points. This bar is provided centrally between its two ends with a raised frame, E', rigidly secured at its bottom by bolts or rivets passing through suitable flanges and through the bar E, as shown in Fig. 2.

G indicates an externally-screw-threaded tube working vertically through screw-threaded sockets in the cross-beams of said frame E'. This tube, together with a plunger working in its lower end and carrying a vertically-adjustable finishing-tool, and a spiral spring encircling the stem of the plunger intermediate the upper ends of said plunger and tube G, constitute the finishing devices, all operating and of a similar construction and arrangement to the like parts described in the patent referred to. This tube G is rotated and moved up and down by an engaging screw, d, provided on a horizontal shaft, H, mounted upon the bar E, and passing through opposite sides of the frame E', with a hand-wheel, H', provided on its outer end.

The bar E, with its frame E' and finishing devices, is adapted to be moved by hand, or by any suitable screw-rod connection, back and forth in a horizontal plane upon the top plate, A², and to secure this bar against lateral movement upon said plate it is provided on its bottom near each end with a guide-block, e, which fits against the inside of the top A'.

At opposite points upon the neck of the bottle or vessel to be finished I apply heat to keep the same from cooling and in a state of flexibility best suited for the operation of polishing and finishing. The heat may be applied by any appropriate heating device, but

preferably by means of gas-jets on the ends of a gas-pipe, I, brought up through the floor to the top of the mold, and there divided so that the flame will be directed upon the neck at 5 opposite points.

No special mention need be made of the advantages of my improved machine, as to those acquainted with the art of making glassware its utility as well as conveniences it affords 10 will be fully comprehended.

I am aware of the construction and arrangement of the heating devices shown in the patent to Cook, No. 238,090, of February 22, 1881, and lay no claim to such; but,

15 Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. In a machine of the character described, the combination of a vertically-adjustable 20 plate carrying the mold and a horizontally-adjustable frame carrying the finishing-tool, substantially as described.

2. In a machine of the character described,

the combination, with the mold, of a gas pipe or pipe supplying heat at two opposite points 25 upon the top of the mold, substantially as described.

3. In a machine of the character described, the frame A, composed of the bottom A² and top A', the intermediate connecting screw-rods, 30 B, and the vertically-adjustable plate C, provided with a removably-secured mold D, substantially as described.

4. In a machine of the character described, the combination, with the frame and its guide- 35 plates F F', of the transverse bar E and its guide-blocks e e, the frame E', the screw-threaded tube G and its finishing-tool, and the horizontal screw-shaft H, substantially as described.

In testimony whereof I affix my signature in 40 presence of two witnesses.

GEORGE W. YOST.

Witnesses:

THOS. K. SMITH,
JOHN B. WHITE.