G. W. WEYMAN.

Plunger for Pressing Glass.

No. 206,157. Patented July 16, 1878.

Fig. 1.

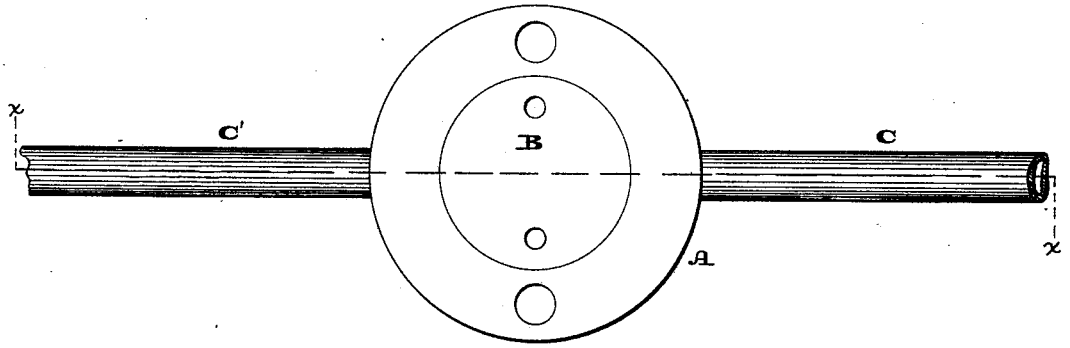


Fig. 2.

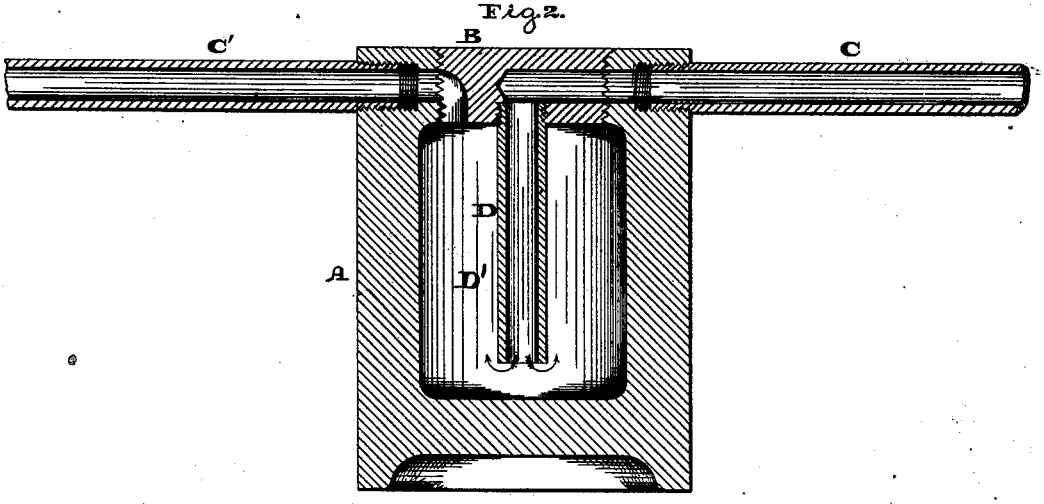
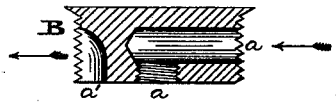


Fig. 3.



Witnesses:

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GEORGE W. WEYMAN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN PLUNGERS FOR PRESSING GLASS.

Specification forming part of Letters Patent No. **206,157**, dated July 16, 1878; application filed June 12, 1878.

To all whom it may concern:

Be it known that I, GEORGE W. WEYMAN, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Plungers for Pressing Glass, &c., which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a top or plan view of the plunger embodying my invention. Fig. 2 is a central vertical section thereof. Fig. 3 is a sectional view of the cap detached.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a hollow plunger, having a cap which closes the top of the same, and is provided with an inlet for cool water or air, an outlet for steam or hot air, and a pipe communicating with the inlet and reaching into the plunger toward the bottom, within the chamber thereof, so as to prevent steam and hot air striking back into the inlet.

Referring to the drawings, A represents a hollow plunger, for pressing articles of glassware and other substances, the same being properly mounted and operated. B represents a screw-cap, which closes the upper end of the plunger, and is formed with channels or ways *a a'*, which enter from the circumference of the cap. C C' represent pipes, which are fitted to the upper end of the plunger A, preferably at opposite points, and when the cap is in position the pipe C communicates with the channel *a*, and the pipe C' with the channel *a'*. Suspended from the cap is a pipe, D, which projects into the space or chamber D' of the plunger, toward the bottom thereof, so as to occupy only a portion of said chamber, and the communication of the pipe C with the interior of the plunger is by means of the channel *a* and said pipe D. The communication of the interior of the plunger and pipe C' is by means of the channel *a'*.

Cool or fresh water is admitted into the plunger through the pipe C, and directed to the bottom thereof, where it flashes into steam, which quickly fills the chamber D' of the plunger, above the bottom of the tube D, and is directed to the channel *a'*, whence it escapes. As the descending pipe D prevents direct communication of the steam with the channel *a*, the steam is prevented striking back into the inlet C, whereby the flow of cool or fresh water is not obstructed. As cool or fresh water is constantly admitted into the plunger, and it escapes as soon as converted into steam, the plunger, as it presses the hot material, is kept comparatively cool, the advantages of which are appreciable by those familiar with the art.

The cap B closing the top of the plunger prevents the escape of steam or hot air thereat, and protects the workmen from scalding and burning. As reciprocating motions are imparted to the plunger, the pipes C C' will be flexible for at least a portion of their length, in order to properly move with the plunger.

I am aware that it is not new to employ a hollow plunger which is occupied by a screw-plug having an inlet and outlet passage; but in the same there is no provision made for preventing the striking back of the steam, as in my case; hence I believe that I have made an improvement in the art.

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

The plunger A, with chamber D' and inlet and outlet C C', in combination with the cap B, having channels *a a'*, and the pipe D, suspended from the cap and occupying a portion of the chamber D', whereby the remaining portion receives the steam or hot air above the bottom of the tube, substantially as and for the purpose set forth.

GEORGE W. WEYMAN.

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