(No Model.)

W. H. JONES.

GLASS MOLD.

No. 490,909. Patented Jan. 31, 1893.

Fig. 1.

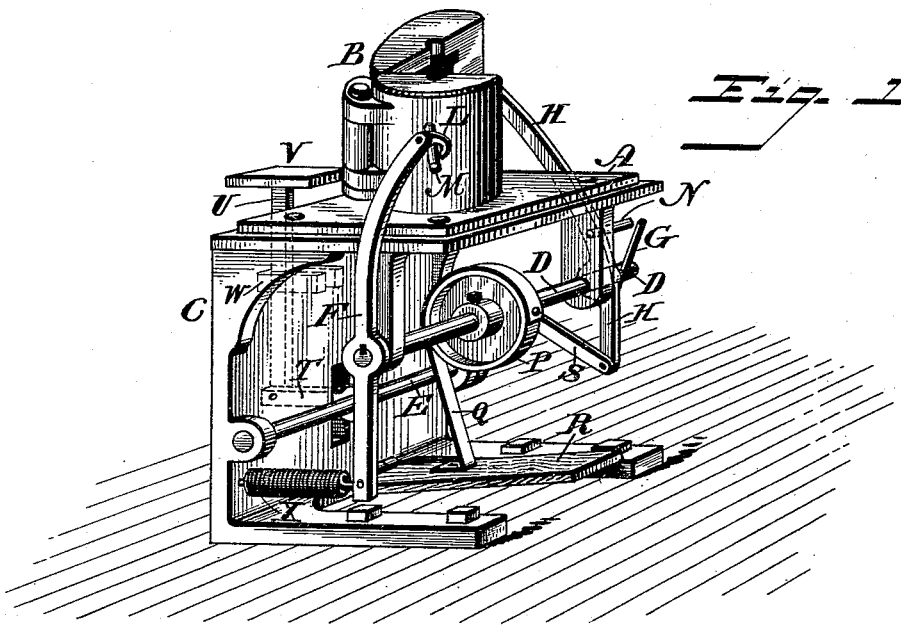


Fig. 2.

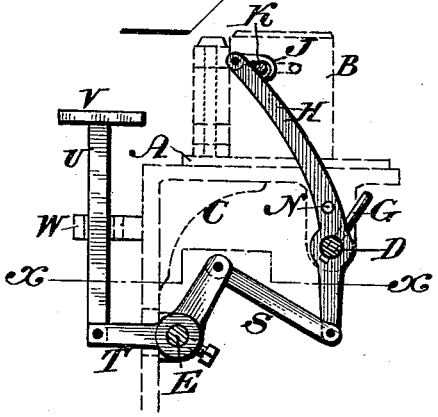


Fig. 3.

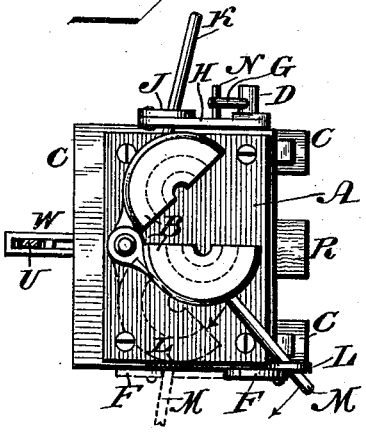
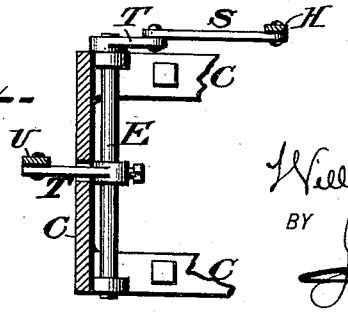


Fig. 4.



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WILLIAM H. JONES, OF GLASSBOROUGH, NEW JERSEY, ASSIGNOR TO THE WHITNEY GLASS WORKS, OF SAME PLACE.

GLASS-MOLD.

SPECIFICATION forming part of Letters Patent No. 490,909, dated January 31, 1893.

Application filed April 18, 1892. Serial No. 429,639. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. JONES, a citizen of the United States, residing at Glassborough, county of Gloucester, and State of New Jersey, have invented a new and useful Improvement in Glass-Molds, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a glass mold provided with means, substantially as described, whereby the same may be readily opened and closed, as will be hereinafter fully set forth.

Figure 1 represents a perspective view of a glass mold embodying my invention. Fig. 2 represents a side view of a portion thereof, the shafts therein being in section. Fig. 3 represents a top view thereof partly sectional. Fig. 4 represents a horizontal section on line *x*, *x*, Fig. 2.

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

Referring to the drawings:—A designates a table on which is mounted the mold B, the same being formed in sections hinged together, so as to be opened and closed.

C designates a frame which supports said table, and has the horizontal shafts D and E mounted thereon. The shaft D has secured to it at one end the lever F, and at the other end the arm G.

Loosely mounted on the shaft D adjacent to the arm G, is a lever H, the upper end whereof carries a pivotal link or hook J, the latter engaging with the handle K of one of the sections of the mold, said lever also abutting against said handle, as most plainly shown in Fig. 2.

The upper end of the lever F, carries a pivotal link or hook L, which engages with the handle M of the other section of the mold, said lever F also abutting against said handle, all as will be seen most plainly in Fig. 3.

Projecting from the lever H, is a pin N, which is adapted to be engaged by the arm G, so as to impart motion to said lever in one direction.

To the shaft D, is screwed or otherwise secured the crank-wheel P, to the periphery of which is attached a strap Q, the lower end whereof is connected with a foot treadle R, whereby rotation may be imparted to said shaft D, but to this mechanism for rotating the shaft D I do not limit myself, as a crank-shaft or power wheel or other suitable means may be adopted to effect said rotation.

To the lower end of the lever H, is pivoted one limb of the toggle lever S, the other limb thereof is secured to the shaft E, the latter also carrying an arm T, which is pivoted to the stem U of a follower or foot piece V, said stem being vertically movable in a suitable guide W on the frame A.

Connected with the lever F, and a proper part of the frame C, is a spring X, for returning said lever and connected section of the mold to their normal positions.

The operation is as follows:—An attendant depresses the treadle R, whereby the shaft D is rotated, and motion is imparted to the lever F, in such manner that the connected mold section is opened. The arm G on the shaft D also strikes the pin N, whereby the arm H is moved so as to open the mold section connected with the same. The treadle is let go, when the spring X causes the return of the lever F, and consequent closing of the mold section attached thereto, and the glass is now placed in said section. Another workman now depresses the follower V, whereby, owing to the operation of the arm T, shaft E, and toggle lever S, the other mold section is closed, the metal or glass then being blown, the effect of which is evident. When the treadle is again depressed, the operation of opening the mold is repeated, when the molded glass may be removed, fresh metal supplied to the mold, and the sections again closed, and so the operations may be continued.

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

1. A glass mold formed in hinged sections, a rotatable shaft, levers connected with said shaft and said sections, a closing spring for one of said sections, and separate means for closing the other section, said parts being combined substantially as described.

2. A glass mold having levers connected with the sections thereof, a rotary shaft to which one of the levers is secured, and on which the other lever is loosely mounted, and an arm secured to said shaft and adapted to

engage with said loose lever, whereby both sections of the mold may be simultaneously opened when the shaft is rotated, the parts named being combined substantially as described.

3. A glass mold having levers connected with the sections thereof, a rotary shaft having one of said levers fixed thereto, and the other lever loosely mounted thereon, a spring attached to the fixed shaft, a toggle lever connected with the loosely mounted lever, a shaft having one limb of the toggle lever pivoted thereto, and means for rotating said shaft, the parts named being combined substantially as described, whereby the sections of the mold may be opened as stated.

4. In a glass mold, a shaft having a lever fixed thereto, another lever freely mounted thereon, and a projecting arm adapted to engage with said freely mounted lever, said levers being attached to the sections of the mold, a returning spring connected with the fixed lever, a toggle lever pivoted to freely mounted lever, a rotary shaft to which the latter is pivoted, and means to operate said shafts, the several parts being combined substantially as described, whereby the mold may be opened and closed as stated.

5. A frame with a table thereon, a hinged sectional mold supported on said table, two shafts mounted in said frame, levers on one of said shafts and connected with sections of the mold for opening the same, a spring connected with one of the levers for closing its section, and a lever mounted on the other shaft and connected with the other lever of the first shaft for closing its section, said parts being combined substantially as described.

WILLIAM H. JONES.

Witnesses:
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