

(No Model.)

H. T. WINTERS.
MOLD COOLER.

No. 523,062.

Patented July 17, 1894.

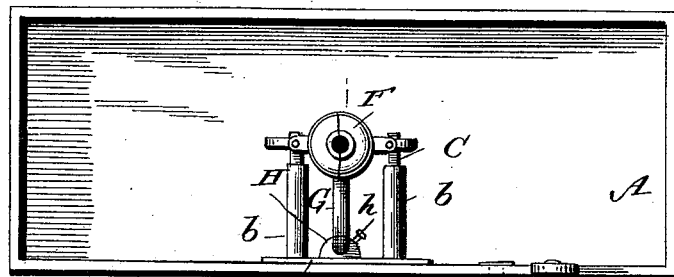
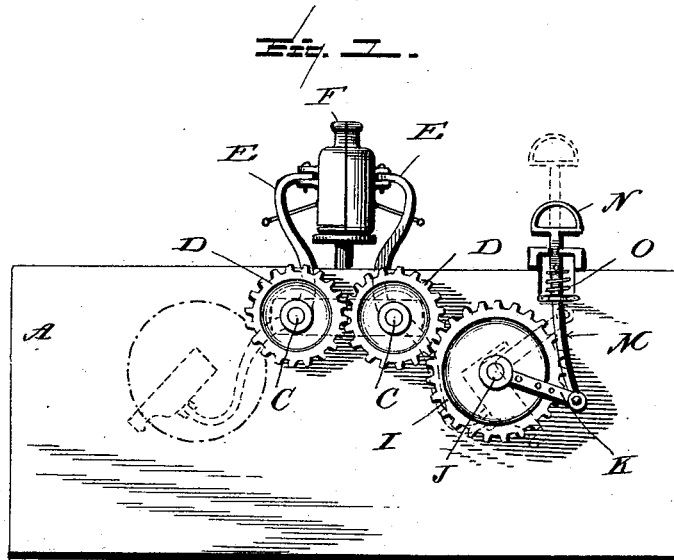


Fig. 3.



Fig. 4.

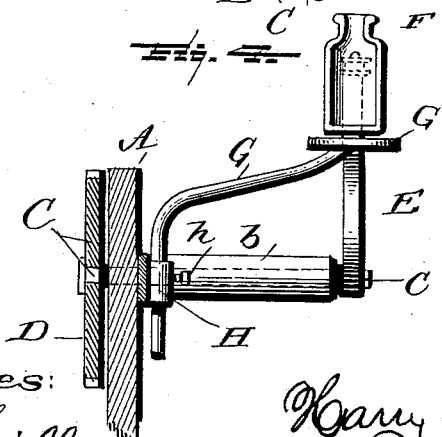
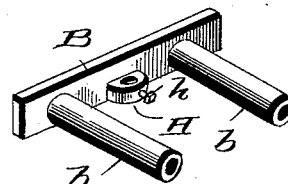


Fig. 5.



Witnesses:
L. C. Hill,
Morris Thompson

Inventor:
Harry Thomas Winters,
Franklin A. Hong
by Atty.

UNITED STATES PATENT OFFICE.

HARRY THOMAS WINTERS, OF WHEELING, WEST VIRGINIA.

MOLD-COOLER.

SPECIFICATION forming part of Letters Patent No. 523,062, dated July 17, 1894.

Application filed March 6, 1894. Serial No. 502,512. (No model.)

To all whom it may concern:

Be it known that I, HARRY THOMAS WINTERS, a citizen of the United States, residing at Wheeling, in the county of Ohio and State of West Virginia, have invented certain new and useful Improvements in Mold-Coolers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in what is popularly known as "dummies," employed in holding molds for blowing paste mold tumblers, &c., such as are adapted to be used in glass factories, and designed to dispense with labor of an extra person, which extra work is easily and quickly accomplished by the person blowing the tumblers or other articles.

My invention consists of a tank designed to hold water, to the sides of which are attached gearing communicating motion to the two part mold, which parts can be readily swung into the water by the manipulation of a lever operated by the foot of the blower, and when immersed, by a reverse motion of the foot lever, the parts of the mold are returned to a closed relation.

To these ends and to such others as the invention may pertain, the same consists in the novel construction, combination and adaptation of the parts as will be hereinafter more fully described, and then specifically defined in the appended claims.

I clearly illustrate my invention in the accompanying drawings in which drawings similar letters of reference indicate like parts throughout the several views, and in which—

Figure 1 is a side view of the apparatus. Fig. 2 is a top plan view. Figs. 3, 4 and 5 are detail views of parts of the arms supporting the mold, transverse view through the center of the mold, and the shaft supports, respectively.

Reference now being had to the details of the drawings by letter, A represents a tank supposed to contain water and to the side of the tank at any convenient distance from the

upper edge is secured the metallic shaft supporting block B, carrying the integral tubular extensions *b b*, and in these tubular bearings pass the shafts C, C, provided with cogged wheels D, D, which are located on the outside of the tank, and mesh with each other. To the inner ends of these shafts are attached the arms E, E, which hold each a one half section of the mold.

G is a standard on which the mold may rest, and is supported in the apertured lug H integral with the bar B, and the said standard may be raised or lowered being held in a fixed position by means of a set screw *h*.

To the outside of the tank is a geared wheel I, which is journaled on a shaft J, and disposed so as to mesh with the wheels C, C.

K is a lever arm secured to the wheel I, and at its free end is pivoted to a foot lever M, extending up to just above the edge of the tank where its end forms the stirrup N within convenient reach of the foot of the glass blower.

O is a coil spring about the lever M which is provided to bring the two part sections of the mold together gently when the sections have been immersed and again brought together by the operator pressing down on the lever M.

The operation of my invention will be readily understood.

The operator who is manipulating the mold, when it is desired to immerse the parts into the water, the foot of the operator catches into the stirrup, and lifting slightly, the parts of the mold, connected to the geared wheels, are swung down into the water and when sufficiently cooled, the parts of the mold may be readily returned to their original position by forcing down on the stirrup, which, through the medium of the gearing, causes the parts to swing up out of the water and close together.

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

1. An apparatus for blowing paste mold tumblers, comprising in combination a water tank, a two part mold secured to arms keyed to the ends of shafts which have connection with geared wheels on the outside of the tank, which mesh with each other, and a driving

wheel meshing with one of the shaft carrying wheels, and means to swing the mold parts into and out of the water tank, substantially as shown and described.

- 5 2. The apparatus described having in combination with a water tank the bar B, having the two cylindrical shaft supporting extensions *b*, secured to the inner side wall of the tank, shafts carried in the said cylindrical
10 extensions, provided on their outer ends with geared wheels C, C, meshing with each other, and carrying on their inner ends arms which each engage with a half section of a tumbler mold, and means, as described for opening
15 and closing the mold, substantially as shown.

3. In combination the tank, shaft support, shafts, having geared wheels on the outside of the tank, their inner ends carrying arms which have their upper ends secured to lugs

on the sides of the mold parts, a standard G, 20 adjustably held to an integral portion of the bar B, substantially as shown and described.

4. The combination with the tank and mold operating mechanism, of a driving wheel jour- 25 naled on the side of the tank, a foot lever pivoted to an arm of said wheel and having a stirrup shaped upper end, and a coiled spring abutting against a lug secured to the lever M, which is provided to allow the mold parts to come together gently, all substantially as 30 shown and described.

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

HARRY THOMAS WINTERS.

Witnesses:

JOHN T. HERNEY,
JOSEPH T. SACHER.