

(Model.)

W. HALEY.

Tool for Making Glass Pitchers, &c.

No. 233,672.

Patented Oct. 26, 1880.

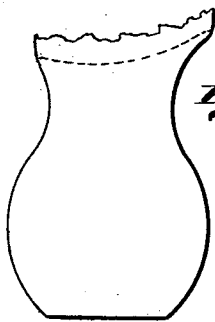
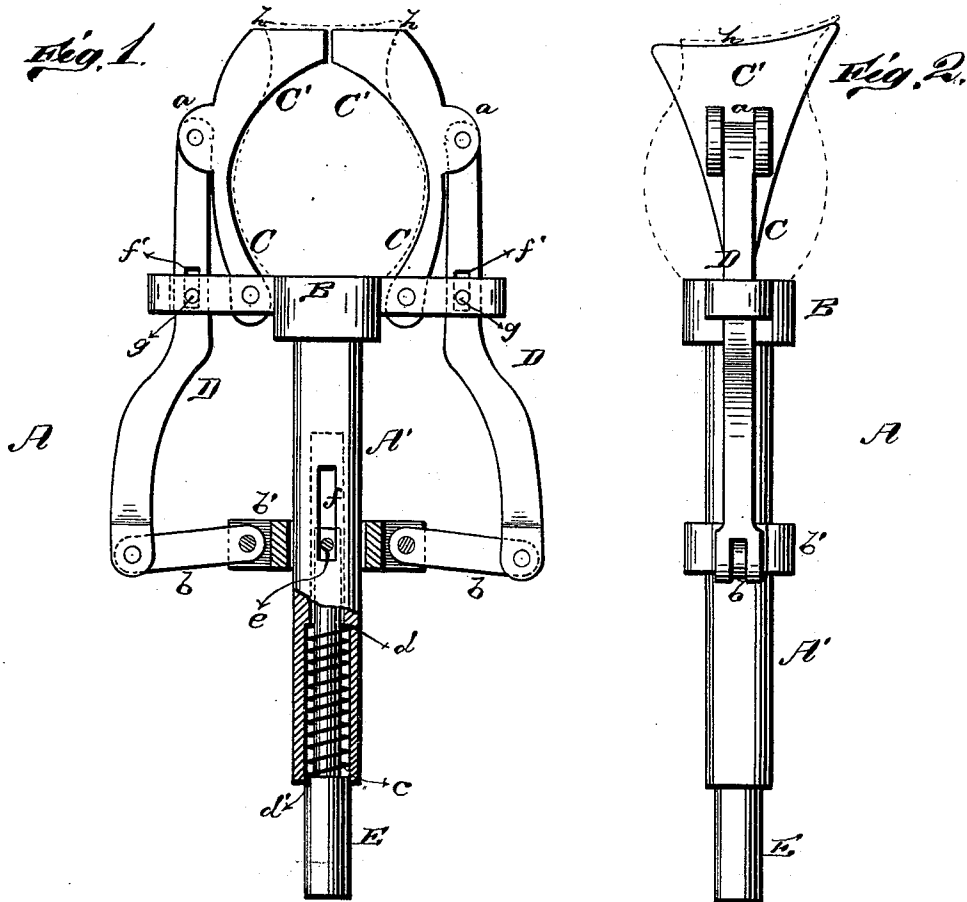


Fig. 3.

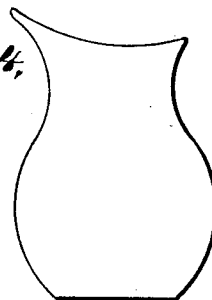


Fig. 4.

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UNITED STATES PATENT OFFICE.

WILLIAM HALEY, OF PITTSBURG, PENNSYLVANIA.

TOOL FOR MAKING GLASS PITCHERS, &c.

SPECIFICATION forming part of Letters Patent No. 233,672, dated October 26, 1880.

Application filed April 24, 1880. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM HALEY, of the city of Pittsburg, Pennsylvania, have invented a new and useful Improvement in the
5 Process of Making Pitchers, &c., which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

Similar letters of reference indicate corresponding parts.

This invention relates to improvements in the manufacture of glass pitchers and other articles in glassware; and it consists in the novel construction and arrangement of a snap,
15 which is used for the purpose of holding a pitcher or other articles of glassware, and at the same time facilitate the trimming and forming of the same, as will be hereinafter more fully explained.

In the annexed drawings, to which reference is made, fully illustrating my invention, Figure 1 represents a side view of the apparatus used in carrying out my invention. Fig. 2 designates an edge view of same. Fig. 3 is
25 a view of the pitcher before it has been formed and trimmed. Fig. 4 is a view, showing the pitcher after it has been formed and its edges trimmed.

By reference to the drawings, A designates
30 the snap proper consisting of a hollow standard, A', at the upper end of which, secured thereto or cast therewith, is a cross-head, B, having pivoted therein the arms C of the jaws or former C', which former is provided on its
35 outer face with ears a for the reception of the upper end of a crooked arm, D, passing through a slot in cross-head B, and having their lower ends connected to a link-bar, b. The inner
40 end of the latter is pivoted to a sliding sleeve or collar, b', on the standard A', and is operated by means of a coil-spring, c, placed within said hollow standard and encircling a plunger-rod, E. The upper end of said spring c bears
45 against a shoulder, d, in the standard A', and the lower end of said spring rests against the shoulder d' on the plunger-rod E, as clearly shown in Fig. 1. Through the upper end of the
50 rod aforesaid, and passing through the sleeve or collar b', is a pin, e, playing vertically through a slot, f, in the hollow standard A', which regulates the movement or stroke of the plunger-rod, and thus prevents the sleeve or collar b' from becoming misplaced.

The crooked arms D are further provided near their center with slots f', passing through
55 the same; and also through the cross-head B are pins g, for the purpose of serving as a guide for the vertical and vibrating movement of the crooked arm D aforesaid.

The operation of my invention is as follows: To insert a pitcher or other article of glass-
60 ware in the former or jaws C' C', this is accomplished by pressing the rod E, thereby causing the sleeve or collar b' to move vertically on the standard A', taking therewith the
65 link-bar b, at the same time drawing the lower end of the arms D D inwardly, which has the effect of causing said arms to swing on pins g g. By such movement above mentioned the
70 jaws or formers are separated or opened for the introduction of articles of glassware. The reaction of the spring c causes the jaws C' to close and embrace the pitcher or other article, and securely holds the same while being formed
75 and trimmed.

It will also be observed that the inner faces of the jaws C' C' are shaped to correspond with the upper end or neck of the pitcher.

It will further be seen that the surplus glass usually adhering to all articles of glassware
80 after being blown, as shown in Fig. 3 of the drawings, is placed in the snap, and the upper end is sheared or trimmed off to conform with the shape of the pivoted arms C C and jaws
85 C' C', as at h h. The flaring-tool may then be introduced to impart the proper finish or shape to the upper end of the article to be flared. The flaring is done by pressing a piece of
90 wood of the proper shape against the inner surface of the upper edge of the article, and pressing the same against the faces of the
jaws C' C', in the usual manner well known to glass-blowers.

After the body of the pitcher has been formed and the mouth flared, as described, a
95 pressed handle or handles, or other desirable projections to be used in taking hold of the pitcher or like article, are attached to the body thereof by the ordinary method of cutting a
100 little hot glass and dropping the same on the places, where the pressed handle has to be united to the body of the article.

I am aware that snaps have been made and used of various constructions, and that blow-
105 pipes have been attached to snaps for blowing and forming glass vessels requiring handles,

&c., and therefore do not claim what is contained therein; but

What I do claim is—

1. In a snap for forming glass pitchers, the
5 combination of arms C C, with the jaws C' C',
pivoted to the cross-head B, and provided with
the arms D D, connected to the sliding sleeve
or collar *b'* by links *b*, and operated by means
10 of the coil-spring *c*, for the purpose of opening
and closing said jaws, as and for the purpose
set forth.

2. The method herein described of shaping
the neck and mouth of glass pitchers and
other articles of glassware, by reheating the
same in the snap A, the jaws C' C' of which 15
correspond to the form to be imparted to the
article, then trimming and flaring of the same
to conform to the shape of the jaws, as specified.

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Witnesses:

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