

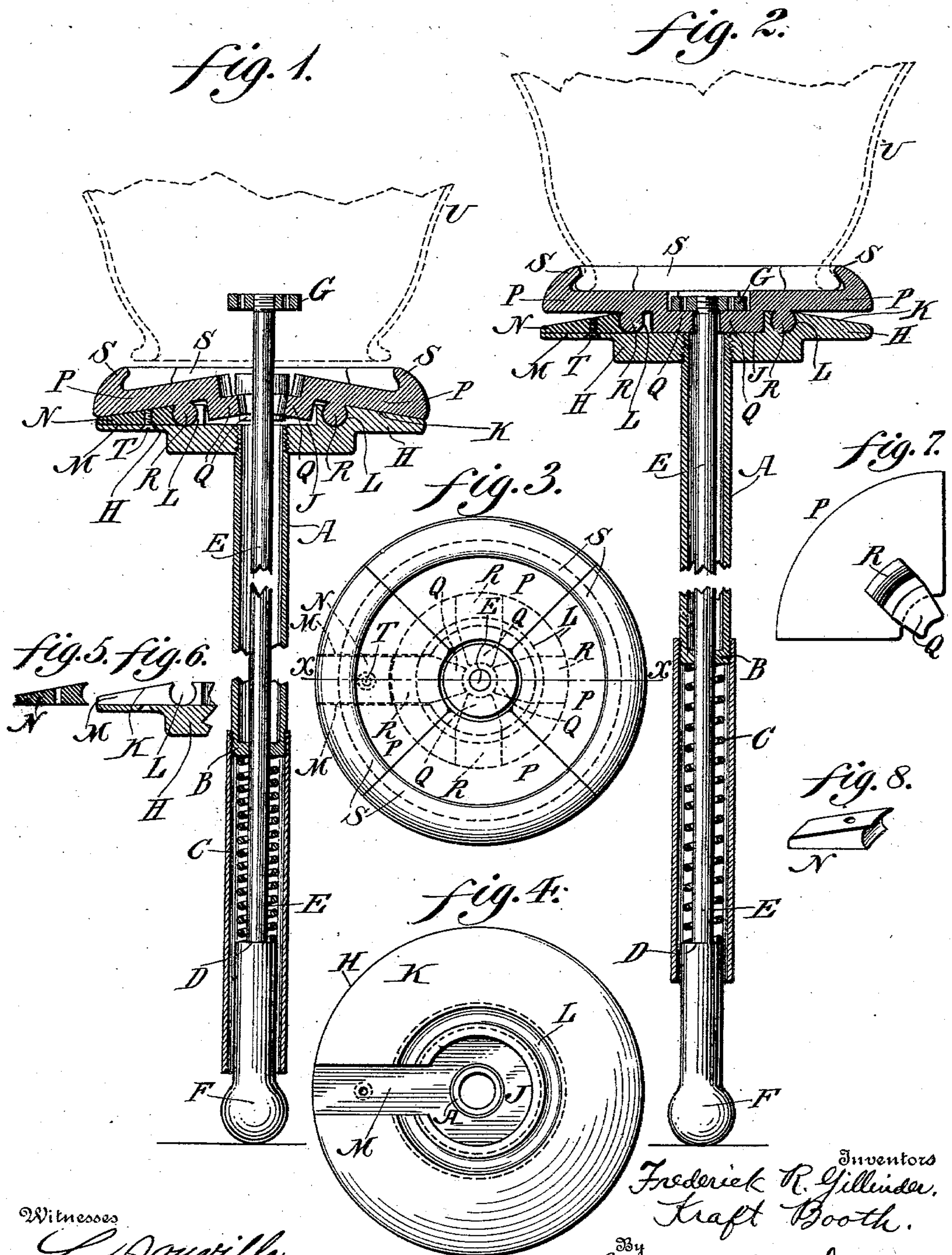
No. 704,790.

Patented July 15, 1902.

F. R. GILLINDER & K. BOOTH.  
SNAP FOR FINISHING GLASSWARE.

(Application filed Nov. 12, 1901.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

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## SNAP FOR FINISHING GLASSWARE.

SPECIFICATION forming part of Letters Patent No. 704,790, dated July 15, 1902.

Application filed November 12, 1901. Serial No. 81,967. (No model.)

*To all whom it may concern:*

Be it known that we, FREDERICK R. GILLINDER and KRAFT BOOTH, citizens of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Snaps for Finishing Glassware, of which the following is a specification.

Our invention consists of an improvement in a snap for finishing glassware, as will be hereinafter fully described and claimed.

Figure 1 represents a longitudinal section of a snap constructed in accordance with our invention with the jaws extended and taken on the line *xx*, Fig. 3. Fig. 2 represents a similar view showing the jaws closed. Fig. 3 represents a plan. Fig. 4 represents a plan of the base of the snap with the jaws removed. Figs. 5 and 6 represent sectional views in detail, hereinafter referred to. Fig. 7 represents a detail plan of one of the jaws, taken from the underside. Fig. 8 represents a perspective view of a block employed to hold the jaws in place.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates the handle of the snap, consisting, preferably, of tubes having a partition or shoulder B in one end, against which one end of the spring C abuts, the other end of said spring abutting against the shoulder D on the operating-rod E. This operating-rod extends beyond both ends of the handle A, being provided at the outer end with a handpiece F and at its other end with a head G, conveniently screw-threaded thereon, so that it can be readily removed.

Mounted upon the end of the handle A adjacent the head G is a base H, conveniently screw-threaded, so as to be readily removed. The said base H is shown in detail in Fig. 4 and consists of a centrally-depressed portion or socket J and the outwardly-inclined face K, in which near the depressed portion J is the annular groove L. Extending from the depressed portion J outwardly is a radial groove M, the bottom of which is flush with the bottom of the depressed portion J. In the detail views, Figs. 5 and 6, this radial

groove M is shown and also a portion of the block N, by means of which it is closed, said block being also shown in detail in Fig. 8, it being noted that the block is of such shape and size as to complete the contour of the base.

The jaws P (shown in detail in Fig. 7) are in sections, preferably quadrants, and are provided on their lower sides near their inner ends with the guide-lugs Q and also with the pivots R, circular in cross-section, as shown in Figs. 1 and 2, that are adapted to enter the annular groove L, which is correspondingly curved in cross-section, so as to cause the same to fit. The lugs Q extend inwardly beyond the inner end of the jaws and encircle the rod E, being also in position to be engaged by the head G. The upper sides of the jaws are provided with the overhanging portions S, which grip the glassware.

The operation is as follows: When the jaws are to be placed upon the base, the block N is removed and each jaw is inserted separately until its pivot R is opposite the annular groove L, whereupon the jaws are moved into the groove, and after the four jaws have thus been successively inserted the block N is then placed in position and secured in place conveniently by means of the screw T, it being noted that the rod E is moved longitudinally—say to the position shown in Fig. 1—against the action of the spring C. Of course when the spring is allowed to expand the head G is thrown in contact with the lugs Q and moves the jaws to the position shown in Fig. 2. The weight of the outer end of the jaws is sufficient to cause them to tilt to the position shown in Fig. 1 when the head is moved away from the same, so that said jaws automatically open when not engaged by the head. The piece of glassware, such as U, (shown in dotted lines in Figs. 1 and 2,) is then placed with the flange thereon within the overhanging portions S of the jaws, and then when the operating-rod is released the spring brings the jaws to the position shown in Fig. 2 to effectually grip the base U.

It is understood, of course, that if it is desired to place upon the handle jaws of different size by first removing the head G the



base and the jaws carried thereby can be removed and replaced by others.

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

1. In a device of the character specified, a handle provided with a base having a face that is outwardly and downwardly inclined when the device is in an upright position, movable jaws upon said base adapted to open automatically and rest upon said inclined face to open the same, and a spring-actuated device for closing said jaw.

2. In a device of the character specified, a handle having a base, a groove in said base, a plurality of jaws having pivots secured in said groove, said jaws being adapted to automatically turn on said pivots to open the same, and a spring-actuated device for closing said jaws.

3. In a device of the character specified, a handle having a base, an annular groove in said base, a plurality of jaws having pivots secured within said annular groove, the weight of the outer end of said jaws being sufficient to cause the same to tilt and open, and a spring-actuated device for closing the same.

4. In a device of the character specified, a handle provided with a base having a face that is outwardly and downwardly inclined when the device is in an upright position, a plurality of jaws pivotally mounted upon said base and provided with inwardly-projecting lugs, a spring-actuated rod within said handle, said rod being provided with a head situated to engage said lugs and close the jaws, said jaws being adapted to open automatic-

ally and to rest upon said inclined face of the head.

5. In a device of the character specified, a handle provided with a head, an annular groove in said head, a radial groove extending outwardly from said annular groove, a plurality of jaws having pivots situated in said annular groove, a block situated in said radial groove, and means for closing said jaws, the latter being adapted to automatically open.

6. In a device of the character specified, a handle provided with a head, said head being provided with a central depressed portion, an annular groove surrounding the same, and a radial groove extending outwardly from said depressed portion, a plurality of jaws having pivots situated within said annular groove, the weight of the outer ends of said jaws being adapted to open the same, lugs on the inner ends of said jaws situated within said depressed portion, and a spring-actuated rod situated within said handle and provided with a head adapted to engage said lugs.

7. In a device of the character specified, a handle provided with a head having a base with a face that is outwardly and downwardly inclined when the device is in an upright position, a plurality of jaws pivoted upon the side of the base having said inclined face, said jaws being adapted to be tilted and thereby opened and closed.

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