O. J. W. HIGBEE.

SNAP.

APPLICATION FILED MAR. 11, 1911.

1,004,260.

Patented Sept. 26, 1911.

2 SHEETS—SHEET 1.

FIG. 1

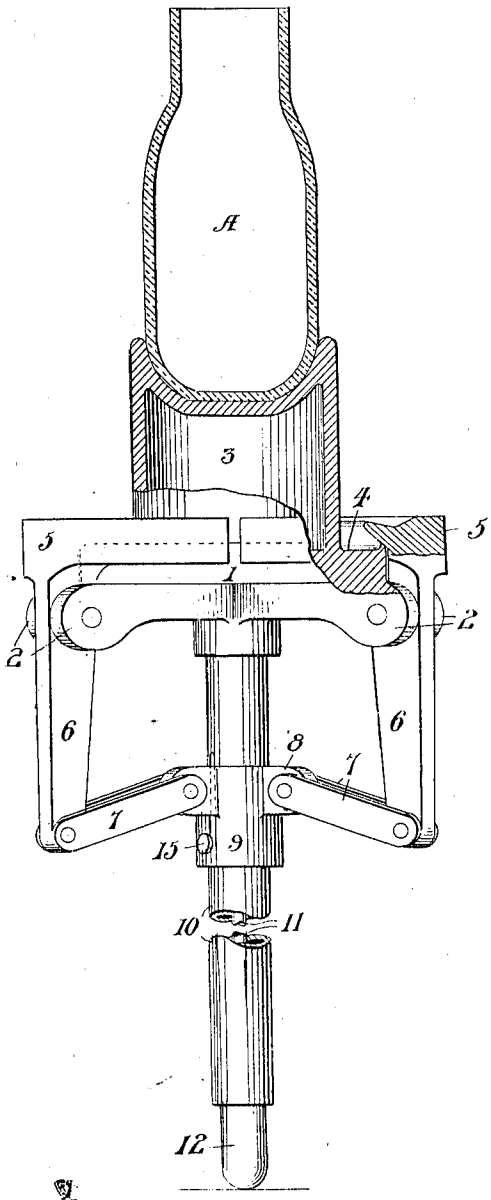
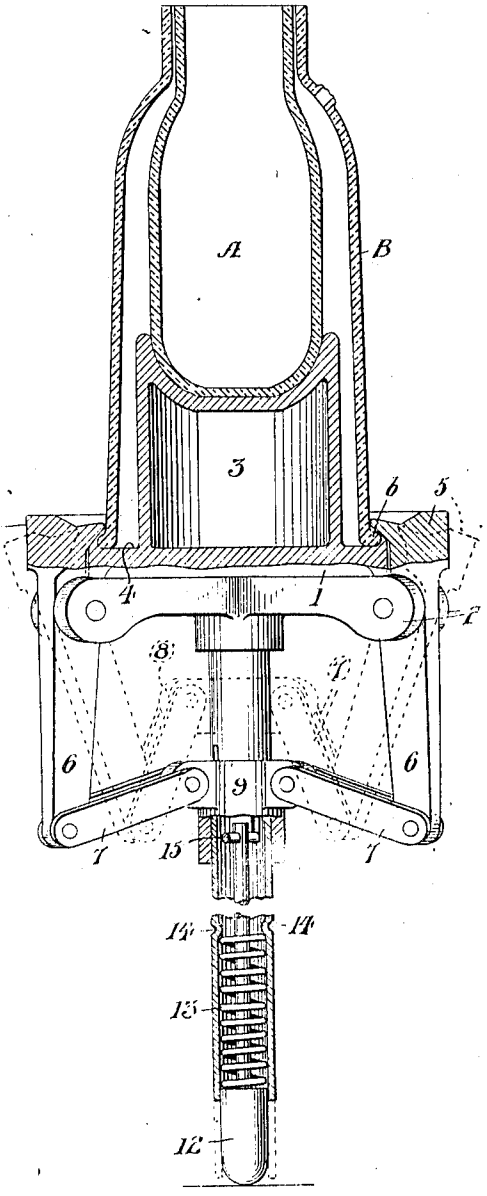


FIG. 2



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2 SHEETS—SHEET 2.

FIG. 3

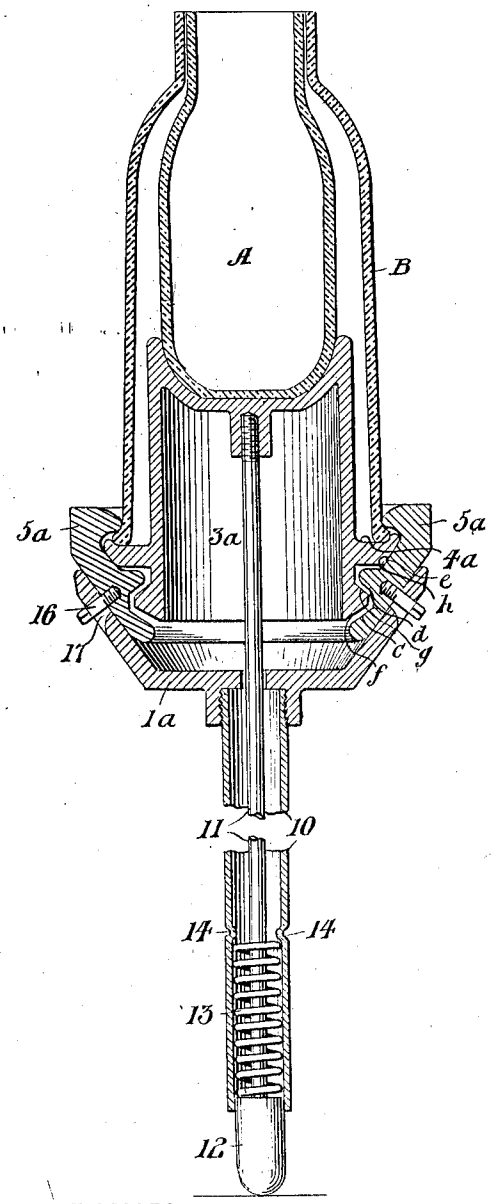
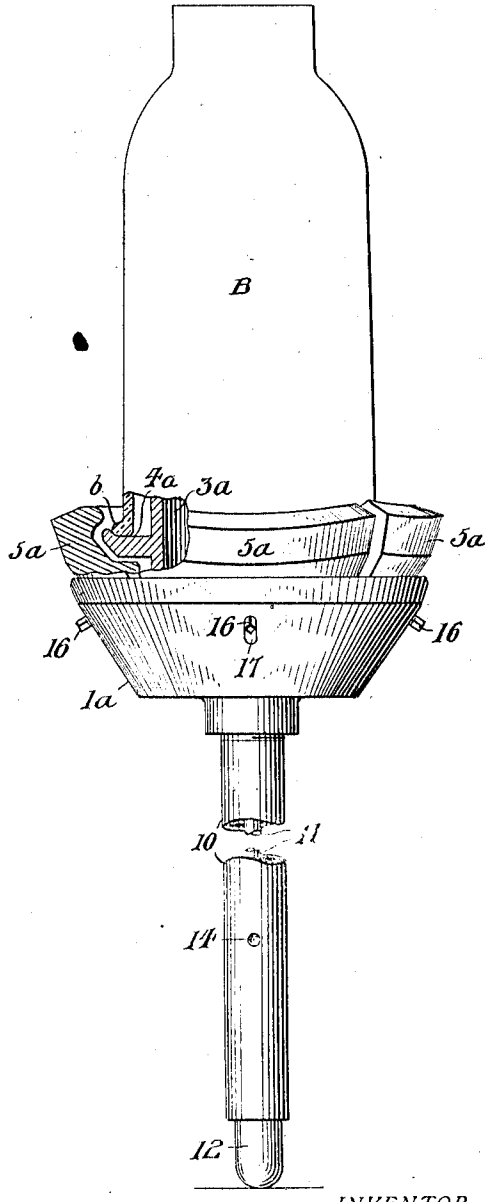


FIG. 4



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SNAP.

1,004,260. Specification of Letters Patent. Patented Sept. 26, 1911.

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To all whom it may concern:

Be it known that I, ORLANDO J. W. HIGBEE, a citizen of the United States, and residing in the city of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered new and useful Improvements in Snaps, of which the following is a specification.

My invention consists of a new and improved snap or tool for holding glassware or other articles. It is particularly intended for supporting and holding the inner and outer blanks or bottles of a vacuum wall receptacle during the operation of fusing or attaching together the necks of the blanks.

It consists of a central seat, preferably raised, upon which the inner blank is placed, and a second seat, concentric therewith, for the support of the outer blank, and retractable jaws adapted to seize said outer blank.

In the accompanying drawings, Figure 1 is an elevation partially broken away in section showing the inner blank seated on the snap and the jaws in their operative position; Fig. 2 is a similar view, broken away in section to a greater degree, showing the inner and outer blanks seated on the snap, the jaws being shown in solid lines grasping the outer blank and in dotted lines in their retracted position; Fig. 3 is a vertical section of a modified form of the snap with the inner and outer blanks mounted thereon, while Fig. 4 is a similar view in side elevation, the jaws being shown retracted.

The following is a description of the drawings, reference being first had to Figs. 1 and 2. 1 is a circular plate provided with a plurality of pairs of pierced ears 2—2 spaced apart at equal distance about the perimeter of the plate 1. 3 is a seat, preferably raised, on the upper surface of plate 1 and provided with a concaved upper surface for the reception of the inner blank A. 4 is the annular seat for the outer blank B, surrounding the base of seat 3 and preferably formed by the top surface of plate 1. 5—5 are a plurality of arc-shaped snap-jaws, which when in their operative position complete a circle. Each jaw 5 is provided with an integral arm 6 which is pivoted between a pair of ears 2—2 and is pivotally connected to twin bars 7—7 whose other ends are pivoted to one of the radial ears 8 of the collar 9. 10 is a tubular handle one of whose ends is assured, as by threaded attachment to the under surface of plate 1 and collar 9 is slidingly mounted on said handle 10. 11 is a rod inserted in handle 10 and provided on its butt end with a toe-piece 12. 13 is a spring coiled about rod 11 and bearing at its lower end against toe piece 12 and at its upper end against projections or indentations 14—14 in the interior of handle 10. The action of the spring 13 causes the toe-piece 12 to normally protrude from the butt end of said handle 10. The upper end of rod 11 is provided with a cross-head or pin 15 which extends through slots in handle 10 and having the ends secured in holes in the collar 9, so that when the rod 11 is normally depressed by the spring 13 the jaws 5—5 are thrown inwardly over the seat 4 but when the spring 13 is compressed, as by dropping the tool vertically so that the toe-piece 12 strikes the floor, the jaws 5—5 are retracted into the position shown in dotted lines in Fig. 2.

The outer blank B is preferably provided with an outwardly extending bead or lip *b* on its lower open end and the jaws 5—5 are recessed to fit down over said bead as shown.

The manner of using the snap is as follows: The snap is placed upwardly on the floor, the weight of the tool serving to force the toe piece 12 upwardly into the handle 10, compressing the spring 13 and retracting or opening the jaws 5—5. The inner blank A is placed upright on the seat 3 and the outer blank B slid down over the same until its lower beaded edge rests on the seat 4. The tool is now raised to permit the spring 13 to depress the rod 11 and throw the jaws 5—5 inwardly against the beaded end of the blank B, thus holding the blank B firmly in place. The necks of the two blanks A and B telescope, as shown, and may now be introduced into a glory hole for heating so that they may be fused or attached together. After the necks have been attached, the tool is again allowed to strike the floor vertically thus driving the toe-piece 12 up into the handle 10, releasing the jaws 5—5 from the blank B and permitting the united blanks to be removed from the tool for the finishing operations.

Figs. 3 and 4 show my invention applied to a modified form of snap wherein the plate 1^a is cupshaped, having inclined inner walls upon which are mounted the jaws 5^a—5^a by means of pins 16—16 fixed in said jaws and engaging vertical slots 17—17 in the side of plate 1^a. The seat member 3^a is

separate from the plate 1^a and is mounted on the upper end of the rod 11. The annular seat 4^a for the outer blank B is formed by means of a circumferential flange on the seat member 3^a. The jaws 5^a—5^a and the seat member 3^a are provided with coacting incline surfaces *c*, *d* and *e* and *f*, *g* and *h* whereby, when the seat member 3^a is held in its lower position, as shown in Fig. 3, by the spring 13, the jaws 5^a—5^a are forced or rocked into their operative position, as shown in Fig. 3, to clasp and hold the blank B on the tool but when the tool is dropped vertically on the floor and the spring 13 is compressed, the jaws 5^a—5^a are retracted into their open or inoperative position, to admit the mounting of the blank B on the tool or to permit the dismounting of the united blanks from the tool, as the case may be. The use of the tool is similar to that described in connection with Figs. 1 and 2.

It is evident from the above that my improved snap permits the ready attachment of the two blanks A and B by their necks, which attachment may be by fusing together the necks of the two blanks for their entire length or by attaching the necks together at the ends only, as may be desired.

What I desire to claim is—

1. A snap composed of a seat for the inner blank, a second seat for the outer blank concentric with said first seat, and retractable jaws adapted to retain the outer blank on said second seat.

2. A snap composed of a seat for the inner blank, a second seat for the outer blank concentric with said first seat, retractable jaws adapted to retain the outer blank on said second seat, and resilient means for holding said jaws in their operative position.

3. A snap composed of a seat for the inner blank, a second seat for the outer blank concentric with the base of said first seat, retractable jaws adapted to retain the outer blank on said second seat, resilient means for holding said jaws normally in their operative position, and means for retracting said jaws into their inoperative position against the action of said resilient means.

4. A snap composed of a raised seat for the inner blank, a second seat concentric with the base of said first seat for the outer blank, jaws adapted to clasp the outer blank to retain it on said second seat, and means for normally retaining said jaws in their operative position.

5. A snap composed of a central raised seat for the inner blank, a second seat of annular form for the outer blank and concentric with the base of said first seat, jaws adapted to clasp the outer blank to retain it on said second seat, resilient means for normally holding said jaws in their operative position, and means for retracting said jaws into their inoperative position against the action of said resilient means.

Signed at Pittsburg, Pennsylvania, this 2nd day of March, 1911.

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