No. 759,154. PATENTED MAY 3, 1904.

H. S. BREWINGTON.

JAR CLOSURE.

APPLICATION FILED AUG. 27, 1903.

NO MODEL.

Fig. 1.

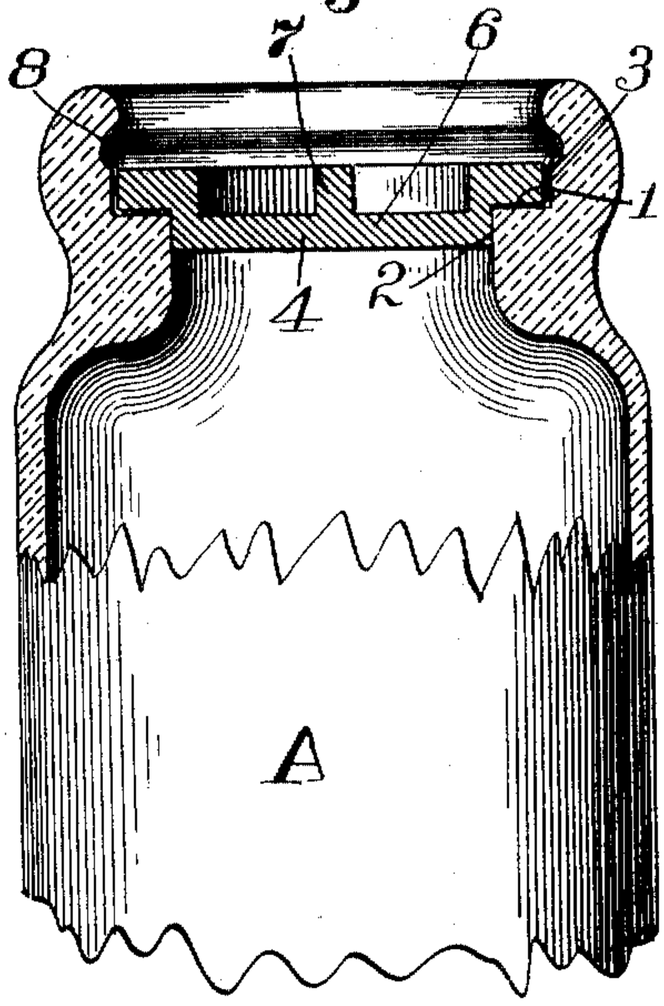
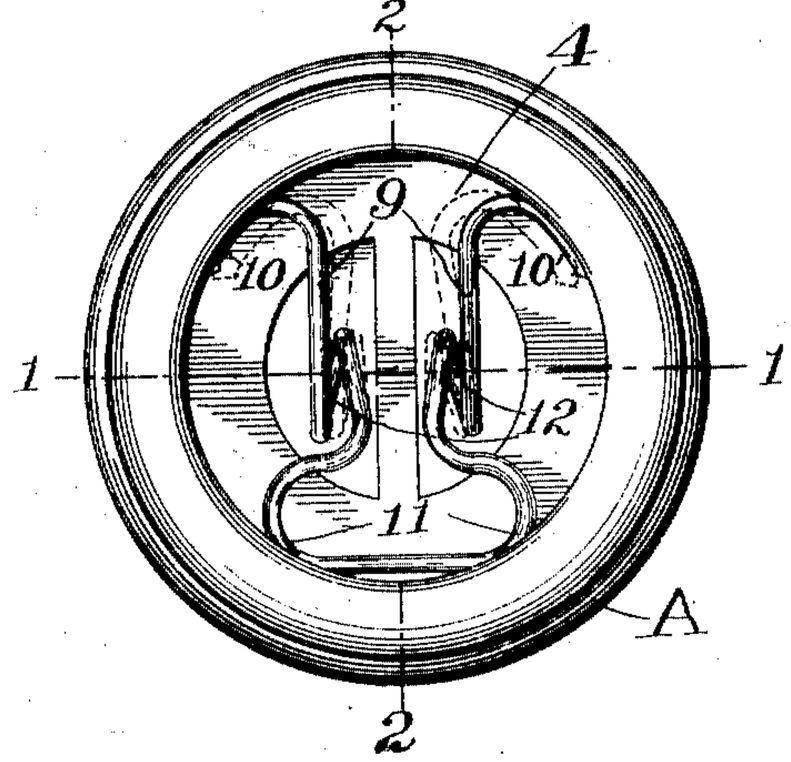


Fig. 2.



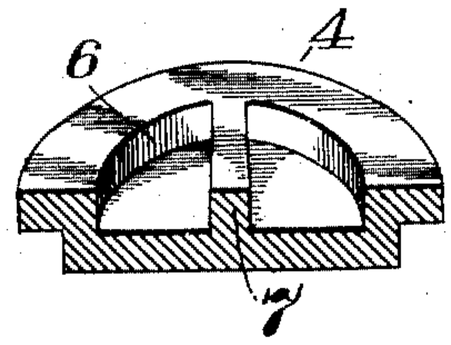


Fig. 3.

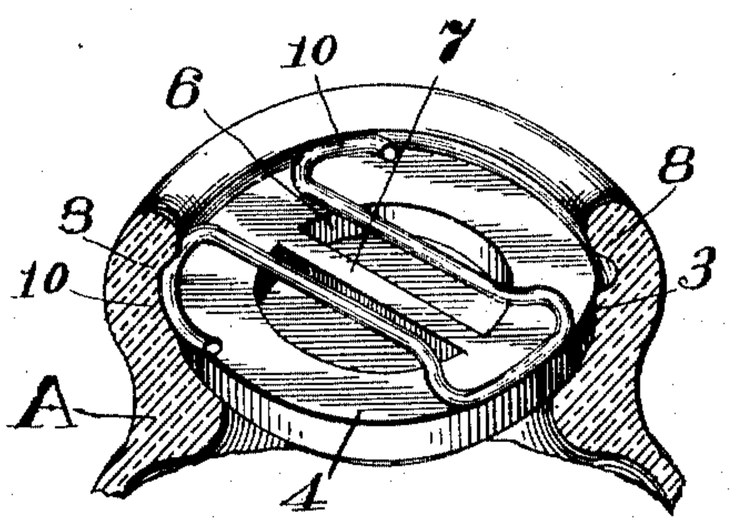


Fig. 5.

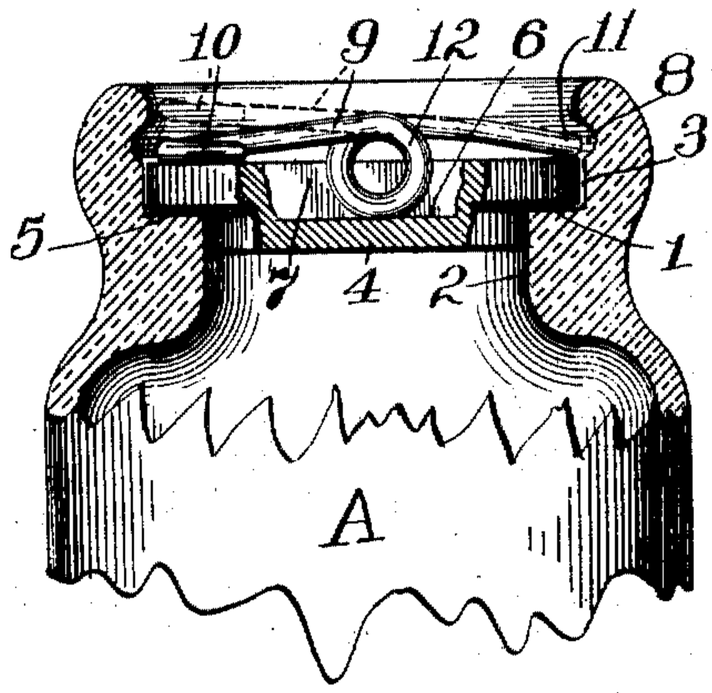


Fig. 4.

Witnesses
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No. 759,154. Patented May 3, 1904.

UNITED STATES PATENT OFFICE.

HENRY S. BREWINGTON, OF BALTIMORE, MARYLAND.

JAR-CLOSURE.

SPECIFICATION forming part of Letters Patent No. 759,154, dated May 3, 1904.

Application filed August 27, 1903. Serial No. 170,989. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. BREWINGTON, a citizen of the United States, residing at Baltimore city, State of Maryland, have invented certain new and useful Improvements in Jar-Closures, of which the following is a specification.

My invention relates to an improvement in jar-closures, one object being to provide a close air-tight sealing of the mouth of the jar by the mere insertion of the stopper and holder.

Another object is to provide a closure in which the cap is not only applied or attached with facility, but also is capable of being easily and quickly removed.

Still another object is to provide a closure having the double function of an air-tight seal and also of a fastening means for the stopper or cover.

With these objects in view my invention consists in a cap adapted to fit the mouth of the jar or bottle in combination with a spring clamp or clip formed of wire the ends of which constitute compressible jaws adapted to be pressed inwardly when the clamp or clip is applied or removed from the jar or bottle and which when released expand into a circumferential groove in the mouth of the jar or bottle, thereby retaining the cap seated close and air-tight in the neck of the bottle or jar.

The invention further consists in certain novel features of construction and combinations of parts, which will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in vertical section, showing the cap or stopper in position. Fig. 2 is a top view. Fig. 3 is a sectional view in perspective. Fig. 4 is a sectional view showing the parts assembled, and Fig. 5 is a view of a modification.

A represents the jar or bottle, the neck of which is provided with a horizontal seat 1, at the outer and inner edges of which are the vertical walls 2 and 3, one of which extends outwardly and the other inwardly to the interior of the bottle. Fitted to the seat 1 and walls 2 and 3 is the cap or stopper 4, a rubber gasket 5 being interposed between its horizontal portion and the seat 1, whereby to form an air-tight seal when the cap or stopper is clamped in position. The stopper or cap is preferably hollowed out through the center, as at 6, and provided with a transverse rib molded through the center, which constitutes a handle 7, by means of which the cap or stopper may be conveniently handled either to place or remove it. Just above and adjacent to the vertical wall 3 a circumferential undercut groove 8 is formed at the mouth of the bottle adapted to receive some means by which the cap or stopper is fastened in place and also held air-tight. Different means may be employed for this purpose, two only of which I have illustrated. The preferred form is shown in Figs. 2 and 4 and is composed of a single piece of spring-wire bent to form a pair of compressible spring-jaws at its free ends, as indicated by the numerals 9 9, the extreme ends 10 10 of which have a curvature preferably to conform to the circumferential groove 8, which they and the ends 11 11 of the clamp or clip enter. At an intermediate point the vertical coils 12 12 are formed, they being adapted to bear on the center of the cap or stopper on opposite sides of the handle, while the ends of the clamp or clip are inserted in the circumferential groove and pressed inwardly toward each other and downwardly against the resistance of the intermediate springs 12 12, so that as the ends are depressed from their normal position a pressure is exerted upon the cap or stopper sufficient to seat it firmly and closely in the jar or bottle mouth, so that an air-tight seal is formed. In other words, the main portion of the clip or clamp is normally in a single plane, which plane is above that of the circumferential groove when the spiral springs 12 12 engage the bottom of the recess and the cap or stopper, so that in pressing the ends into the groove a pressure is exerted downwardly at an intermediate point or, in other words, upon the spiral springs, which pressure is exerted upon the cap or stopper.

In the modified construction illustrated in Fig. 5 the springs 12 12 are omitted, and the center of the wire, as well as the ends, is curved to conform to the curvature of the groove 8.

In applying the stopper the latter is grasped by the handle and placed on its seat. The clamp or clip is then taken by the thumb and finger and compressed at the free ends, the opposite end being first inserted in the groove 8, and then the free ends after being sufficiently compressed are pressed inwardly and sprung into the groove. The stopper may be removed by reversing this operation.

Slight changes might be resorted to in addition to what I have already described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact constructions herein set forth; but,

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

1. A jar or bottle closure comprising a cap or stopper adapted to be seated in the neck or mouth of the jar or bottle, and a clip or clamp made of a piece of spring metal, the center and free ends of which are adapted to enter a recess in the mouth of the bottle by pressing the free ends inwardly toward each other and afterward permitting them to expand whereby the clamp or clip engages the bottle-mouth at three different points.

2. A jar or bottle closure comprising a cap or stopper adapted to be seated in the neck or mouth of the jar or bottle, and a clip or clamp composed of spring metal bent to form a pair of compressible jaws, said jaws and the center of the clip or clamp adapted to enter a circumferential groove in the bottle-neck and be retained therein by the expansive action of the metal which tends to force the free ends of the clip or clamp outward.

3. A jar or bottle closure comprising a cap or stopper adapted to be seated in the neck or mouth of a jar or bottle, and a clip or clamp composed of a single piece of spring metal, doubled at the center and made to form compressible spring-jaws at the free ends, and adapted at an intermediate point to bear on the cap or stopper, the ends and the center of the clip or clamp adapted to be pressed downwardly and the free ends inwardly and inserted into a circumferential groove in the bottle-mouth whereby to cause the enlarged intermediate portions to press against the cap or stopper and cause an air-tight seal.

4. A jar or bottle closure comprising a cap or stopper adapted to be seated in the mouth or neck of a jar or bottle, the center of the cap or stopper being hollowed out or recessed, and a clip or clamp composed of spring-wire doubled at the center and the free ends constituting compressible spring-jaws and provided with intermediate vertically-disposed spiral springs, said springs adapted to engage and press upon the bottom of the recessed center of the cap or stopper and the center and free ends to enter recesses formed in the bottle neck or mouth at a plane below the normal position of the center and free ends of the clip or clamp, whereby the cap or stopper is pressed down firmly upon its seat.

5. A jar or bottle closure comprising a cap or stopper adapted to be seated in the neck or mouth of a jar or bottle, said cap or stopper having a hollowed-out or recessed center and a transversely-disposed handle extending across the center, and a clamp or clip made of spring-wire bent at the center to form a pair of compressible spring-jaws at the free ends, the center and ends of the clip or clamp adapted to be fastened in the neck or mouth of the bottle whereby to retain the cap or stopper on its seat.

6. A clip or clamp for jar or bottle closures composed of a piece of spring-wire doubled at the center to form two spring members, the extreme ends of which are bent laterally in opposite directions, said members provided with a spiral spring at an intermediate point between the center of the wire and its ends.

In testimony whereof I have signed my name to this specification in presence of two witnesses.

HENRY S. BREWINGTON.

Witnesses:

E. WALTON BREWINGTON,

ROBT. C. RHODES.