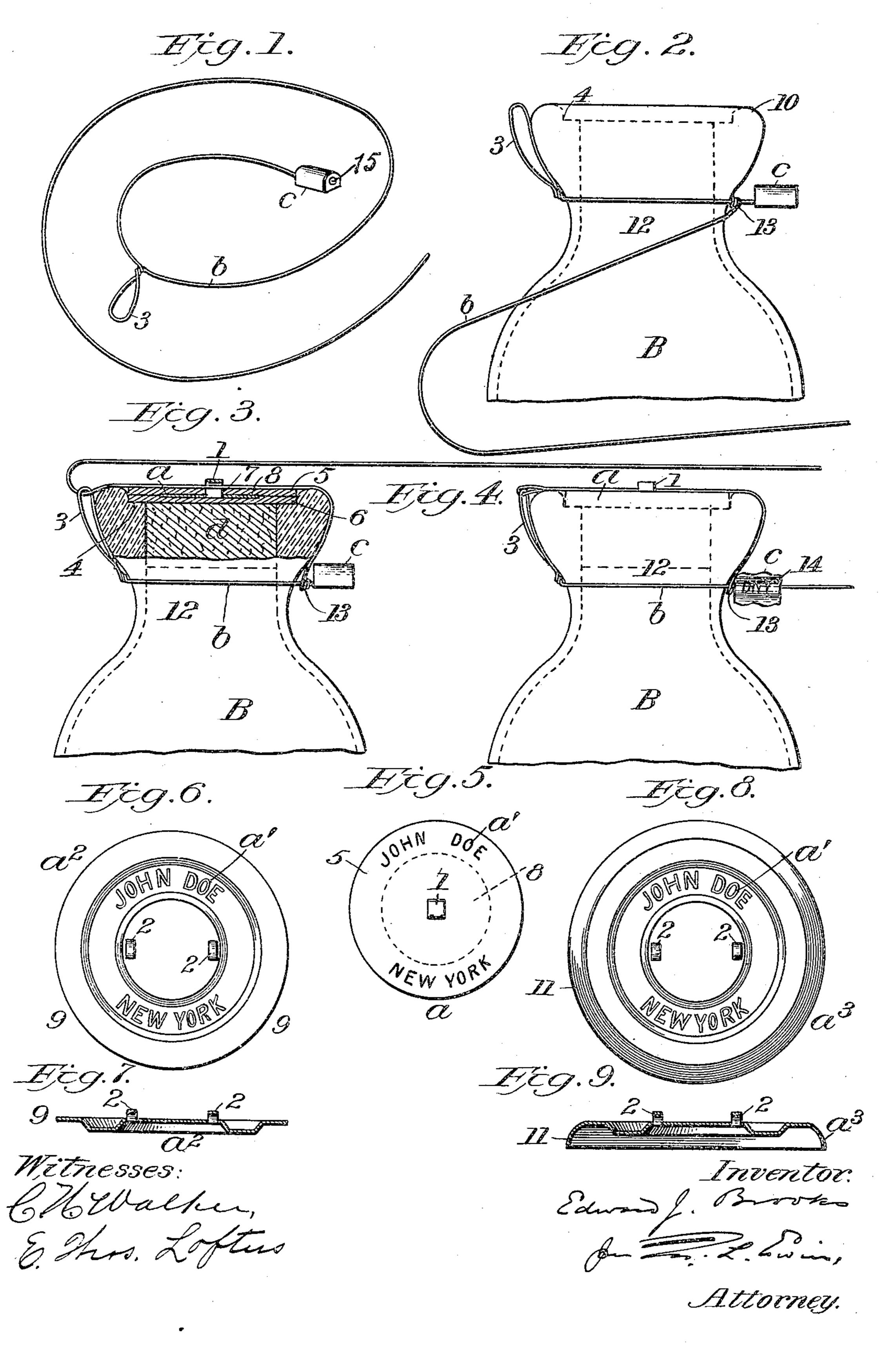
E. J. BROOKS. BOTTLE SEAL. APPLICATION FILED MAR. 18, 1905.



United States Patent Office.

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BOTTLE-SEAL.

SPECIFICATION forming part of Letters Patent No. 792,493, dated June 13, 1905.

Application filed March 18, 1905. Serial No. 250,779.

To all whom it may concern:

Be it known that I, Edward J. Brooks, a citizen of the United States of America, and a resident of East Orange, in the State of New Jersey, have invented a new and aseful Improvement in Bottle-Seals, of which the following is a specification.

This invention relates to means for securely closing or for securing the corks or other closures of bottles, jars, jugs, demijohns, and the like, for all of which the term "bottles" is herein used.

The invention consists in a novel sealing device and in certain novel combinations of parts, as hereinafter set forth and claimed.

The objects of this invention are to form an effective and inexpensive disk-shaped cap wholly or in part of sheet metal for use on ordinary bottles having as characteristics of each a mouth or lip at top and a subjacent relatively contracted neck or groove and to securely wire the same in place with the aid of a seal part attached to the wire and preferably adapted to be press-fastened to complete the sealing operation.

A sheet of drawings accompanies this specification as part thereof.

Figure 1 is a view of the sealing-wire detached. Fig. 2 is a view of the same secured in place around the neck of the bottle. Fig. 3 is a sectional elevation showing a stopper within the mouth of the bottle and a superposed cap and illustrating the continuation of the wiring process. Fig. 4 is an elevation illustrating the completion of the wiring and sealing operations. Fig. 5 is a top view of the cap shown in Figs. 3 and 4 detached.

Figs. 6 and 7 are respectively a top view and an axial section representing a sheet-metal cap adapted to rest on the lip of the bottle, and Figs. 8 and 9 are like views of another sheet-metal cap adapted to embrace the lip of the bottle.

Like reference characters indicate like parts in all the figures.

The improved sealing device is composed of a disk-shaped cap a or a^2 or a^3 , adapted to be provided with appropriate lettering a' and having upwardly-projecting means 1 or 2 for attaching a wire thereto, a long flexible

wire b, of annealed iron or other suitable metal, and a seal part c, fast on one end of said wire. The wire b is further provided at the factory with a permanent loop 3, located at a distance from the seal part c somewhat more 55 than half the circumference of the bottle-neck for which it is intended.

The cap a (shown in Figs. 3, 4, and 5) is adapted to fit within the mouth of the bottle B upon an annular shoulder 4, as shown in 60 Fig. 3, and is composed of two thicknesses 5 and 6, of suitable thick paper or cardboard, the uppermost thickness 5 having a central hole 7 and a relatively small piece 8, of sheet metal, having a staple 1 integral therewith 65 which projects upward through said hole 7 and is adapted to freely admit two thicknesses of the wire b above the top of the cap. The parts of this cap a may be secured to each other by a suitable cement or in any preferred 70 way, and a cap of this description is adapted to be used either in connection with a subjacent cork d or other closure, as in Fig. 3, or alone as a temporary closure for milk-bottles and the like.

The cap a^2 (represented by Figs. 6 and 7) is made wholly of sheet metal, with a pair of upwardly-projecting staples 2 integral with its central portion and with a flat outer edge 9, adapted to rest upon the lip 10 of the bot-80 tle. The cap a^3 (represented by Figs. 8 and 9) has a like central pair of upwardly-projecting staples 2 and is distinguished by a downwardly-projecting rim 11, adapted to embrace the lip 10 of the bottle to which it is fitted.

The bottle B, as hereinbefore indicated, may be of any known or improved kind having an ordinary mouth or lip and an ordinary neck or an equivalent circumferential groove. The upper end of an ordinary milk-bottle is 90 shown by way of illustration.

The wire b is preliminarily attached to the bottle B by passing it around the neck 12 and twisting it tight, as represented by Fig. 2. The bottle may then be filled and, if necessary 95 or desirable, may be closed by means of a cork d or any known or improved closure that does not project above the lip of the bottle. The wire b is then stretched from the twist 13, by which it is fastened around the neck of 100

the bottle, and is passed through the staple or staples 1 or 2 at the top of the cap a or a² or a³ and through the permanent loop 3, as in Fig. 3. It is then passed back through the staple or staples 1 or 2 and then through the seal part c and drawn tight. It may be temporarily secured in this condition by bending the wire and is permanently fastened against withdrawal by press-fastening the seal part c by means of a suitable seal-press, so as to provide it with suitable distinguishing-marks 14, as represented in Fig. 4.

A small oblong seal part c, of lead or other suitable compressible material, having a longitudinal threading-hole 15, is represented in Figs. 1 to 4, inclusive, and is preferred; but the shape is obviously immaterial, and the seal part may be in the form of a self-fastening seal or of any approved kind.

The staples 1 and 2 or their equivalent of the caps a, a^2 , and a^3 may be one or more in number in each of the species, and other like modifications will suggest themselves to those skilled in the art.

Having thus described said improvement, I claim as my invention and desire to patent under this specification—

1. A bottle-seal composed of a cap having upwardly-projecting means for attaching a wire thereto, a long flexible wire and a seal part attached to one end of said wire, said wire being provided with a permanent loop at a suitable distance from said seal part and adapted to be passed around the neck of the bottle and fastened in place by a twist of itself, and to extend from such twist over said cap and through said attaching means, then through said loop and again through said attaching means, and then into said seal part.

2. A bottle-seal composed of a cap having an upwardly-projecting staple for attaching a wire thereto, a long flexible wire and a seal part attached to one end of said wire, said wire being provided with a permanent loop

at a suitable distance from said seal part and 45 adapted to be passed around the neck of the bottle and fastened in place by a twist of itself, and to extend from such twist over said cap and through said staple, then through said loop and again through said staple, and then into 50 said seal part.

3. The combination, in a bottle-seal, of a disk-shaped cap composed of two thicknesses of suitable paper, the uppermost having a central hole, and a relatively small piece of 55 sheet metal secured between said thicknesses and provided with a central staple integral therewith projecting upwardly through said hole, a long flexible wire having a permanent loop at a suitable distance from one of its 60 ends and a seal part attached to this end of the wire, said wire being adapted to be passed around the neck of the bottle and fastened in place by a twist of itself, and to extend from such twist over said cap and through said 65 staple, then through said loop and again through said staple, and then into said seal part.

4. The combination, in a bottle-seal, of a disk-shaped cap having upwardly-projecting 7° means for attaching a wire thereto, a long flexible wire, and a compressible seal part attached to one end of said wire, said wire being provided with a permanent loop at a suitable distance from said seal part and adapted to be 75 passed around the neck of the bottle and fastened in place by a twist of itself, and to extend from said twist over said cap and through said attaching means, then through said loop and again through said attaching means, and 80 then into and through said seal part, the latter being adapted to be press-fastened to complete the sealing operation, substantially as hereinbefore specified.

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Witnesses:

Ellen J. Brooks, Theodore D. Gottlieb.