No. 794,849. PATENTED JULY 18, 1905.

E. J. BROOKS.

BOTTLE SEAL.

APPLICATION FILED MAR. 17, 1905.

Fig. 1.

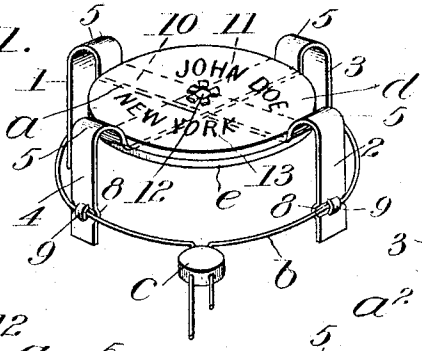


Fig. 2.

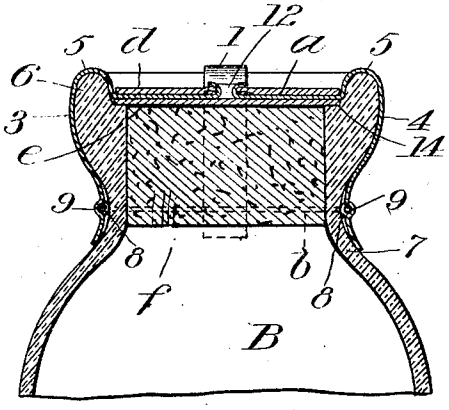


Fig. 3.

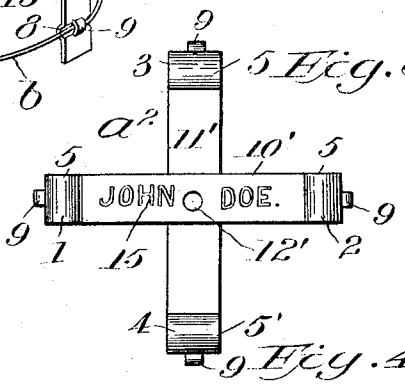


Fig. 4.

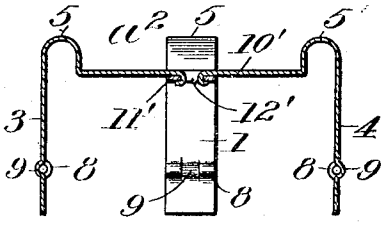


Fig. 5.

Fig. 7.

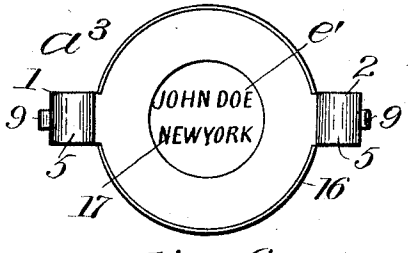


Fig. 6.

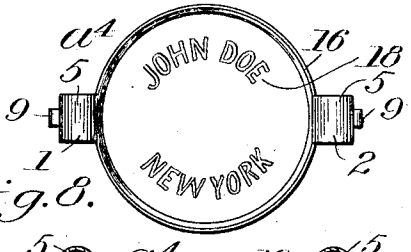


Fig. 8.

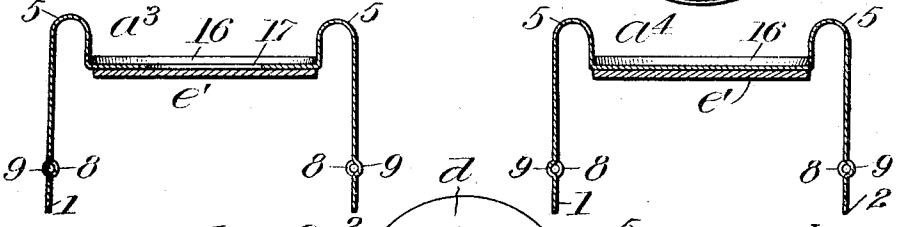
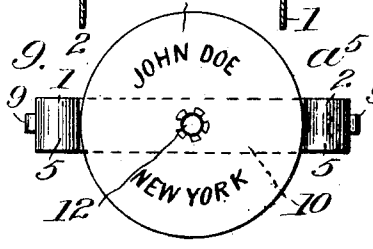


Fig. 9.



WITNESSES:

C. H. Walker,

E. Thos. Loftus

INVENTOR

Edward J. Brooks

BY

Attorney.

ANDREW B. GRAHAM CO., LITHOGRAPHERS, WASHINGTON, D. C.

No. 794,849. Patented July 18, 1905.

UNITED STATES PATENT OFFICE.

EDWARD J. BROOKS, OF EAST ORANGE, NEW JERSEY.

BOTTLE-SEAL.

SPECIFICATION forming part of Letters Patent No. 794,849, dated July 18, 1905.

Application filed March 17, 1905. Serial No. 250,679.

To all whom it may concern.

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

This invention relates to means for securely closing or for securing the closures of bottles, jars, jugs, demijohns, and the like, so as to insure the detection of any tampering with the contents of the "bottle," as such receptacles are hereinafter termed, and thus to prevent such tampering and to enable users to guarantee the purity and standard quality of such contents.

The present invention consists in a novel cap for such bottles adapted to be cheaply manufactured from small pieces of tin (tin-plate) or other suitable sheet metal and to be used in combination with a lead-and-wire seal or the like.

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

A sheet of drawings accompanies this specification as part thereof.

Figure 1 is a perspective view of one species of the improved seal detached. Fig. 2 is a sectional view of the same applied to a bottle and fastened. Figs. 3 and 4 are respectively top and sectional views of a modified cap part, illustrating a second species. Figs. 5 and 6 are like views illustrating a third species. Figs. 7 and 8 are like views illustrating a fourth species, and Fig. 9 is a top view illustrating a modification of the species first named.

Like reference characters indicate like parts in all the figures.

In each of the species the improved seal includes a cap part a or a^2 or a^3 or a^4 or a^5, of flexible sheet metal, adapted to fit within and to close or amply protect the mouth of an ordinary bottle B and constructed with two or more flexible ears 1, 2, 3, and 4 or 1 and 2, each of them arched at 5 to embrace the lip 6 of the bottle and adapted to extend downwardly at the sides of the neck 7, a flexible shackle b, of wire or the like, inseparably interlocked with each of said ears near its lower end, and a seal part c, preferably of lead or other suitable compressible material, fast on one end of said shackle and adapted to be readily threaded by the other end and to serve as a sheave in tightening the shackle b around the neck of the bottle and to be then press-fastened by a suitable seal-press to complete the sealing operation.

In all the species the means for interlocking the shackle with the several ears 1, 2, 3, and 4 or 1 and 2 of the cap part preferably and conveniently consists of a transverse or horizontal indentation 8 in each ear and a central staple 9, integral with the metal of the ear and projecting outwardly.

In the species represented by Figs. 1 and 2 four ears 1, 2, 3, and 4, as above described, are formed by the several extremities of two crossed pieces 10 and 11, of sheet metal, permanently united with each other by a central eyelet 12, integral with one or both of the strips, or by an equivalent central fastening, and a pair of circular disks d and e, of suitable "paper" or cardboard, are attached, respectively, above and beneath the body portions of said sheet-metal pieces 10 and 11, the uppermost, d, being conveniently united therewith by said central fastening 12 and the lowermost, e, attached by suitable cement. The upper disk d may conveniently be provided with suitable lettering or other distinguishing-marks, as represented at 13 in Fig. 1, and the body portion formed by the two disks and the sheet-metal parts between them is adapted to close down upon an annular shoulder 14 within the bottle-mouth above or as a substitute for a cork f or other closure.

In the species represented by Figs. 3 and 4 the seal is made without the paper disks d and e of the first species, the cap part a^2 consisting wholly of crossed pieces 10′ and 11′, of sheet metal, united with each other by a central eyelet 12′, which in this species is conveniently formed integral with the upper piece of sheet metal and clenched beneath the other piece, as shown in Fig. 4. Otherwise the improved seal constructed according to this species will or may be identical with the seal first described. In this form the seal is

intended to be used with or without a supplemental loose disk or a pair of such disks to secure a known or improved closure *f*. The cap part a^2 itself may carry suitable distinguishing-marks 15.

In the species represented by Figs. 5 and 6 the sheet-metal cap part a^3 comprises a ring 16, adapted to fit within the mouth of the bottle and formed integral with a pair of ears 1 and 2. A paper disk e' is cemented to the lower surface of said ring, and lettering or distinguishing-marks 17 on the paper are exposed to view by the central opening of said ring.

In the species represented by Figs. 7 and 8 the improved seal is or may be identical with that of the third species last described, except that its lettering and distinguishing-marks 18 as a whole are carried by a disk portion 19 of the sheet-metal cap part a^4.

The modification represented by Fig. 9 consists in making the improved seal of the first species with only one sheet-metal part 10 instead of two, where a single pair of ears 1 and 2, in connection with the shackle *b* and seal part *c*, afford sufficient security.

The lower paper disk *e* or e' in said first, third, and fourth species and in the modification last described may obviously be loose, if preferred, or, in other words, the improved seal may be used in connection with the paper disks that are now or may hereafter be used by milk-dealers and others. The seal part *c* may be self-fastening, if preferred, 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. The combination, in a bottle-seal, of a cap part composed of strips of sheet metal crossed at the center of the cap and permanently united with each other by a central fastening and terminating in flexible ears projecting downwardly at the sides of the neck of the bottle, a flexible shackle of wire or the like extending around the neck of the bottle and interlocked with said ears, and a seal part adapted to unite the ends of said shackle with each other.

2. The combination, in a bottle-seal, of a cap part of sheet metal having a body portion adapted to fit within the mouth of the bottle and flexible ears having arches to fit over the lip of the bottle and adapted to extend downwardly at the sides of the neck, a labeling-disk attached to the top of said body portion, a flexible shackle of wire or the like interlocked with said ears and adapted to extend around the neck of the bottle, and a seal part adapted to unite the ends of said shackle with each other.

3. The combination, in a bottle-seal, of a cap part of sheet metal having a body portion adapted to fit within the mouth of the bottle and flexible ears having arches to fit over the lip of the bottle and adapted to extend downwardly at the sides of the neck, a paper disk attached to the bottom of said body portion, a flexible shackle of wire or the like interlocked with said ears and adapted to extend around the neck of the bottle, and a seal part adapted to unite the ends of said shackle with each other.

4. The combination, in a bottle-seal, of a cap part composed of two strips of sheet metal crossed at the center of the cap and permanently united with each other by a central fastening, said cap having a body portion adapted to fit within the mouth of the bottle and flexible ears having arches to fit over the lip of the bottle and adapted to extend downwardly at the sides of the neck, a labeling-disk attached to the top of said body portion by said central fastening, a flexible shackle of wire or the like interlocked with said ears and adapted to extend around the neck of the bottle, and a seal part adapted to unite the ends of said shackle with each other.

5. The combination, in a bottle-seal, of a cap part composed of two strips of sheet metal crossed at the center of the cap and permanently united with each other by a central fastening, said cap part having a body portion adapted to fit within the mouth of the bottle and flexible ears having arches to fit over the lip of the bottle and adapted to extend downwardly at the sides of the neck, a pair of paper disks attached to the top and bottom of said body portion, the uppermost attached to the top of said body portion by said central fastening, a flexible shackle of wire or the like interlocked with said ears and adapted to extend around the neck of the bottle, and a compressible seal part adapted to unite the ends of said shackle with each other and to be pressfastened to complete the sealing operation, substantially as hereinbefore specified.

EDWARD J. BROOKS.

Witnesses:
ELLEN J. BROOKS,
ELINOR BROOKS.