(No Model.)

G. W. DAVISON.

SEAL FOR BOTTLES.

No. 588,269. Patented Aug. 17, 1897.

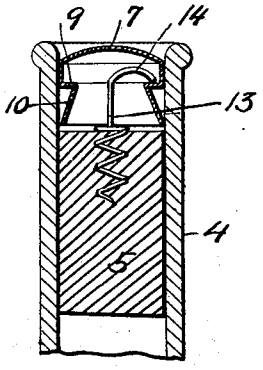


Fig. 3.

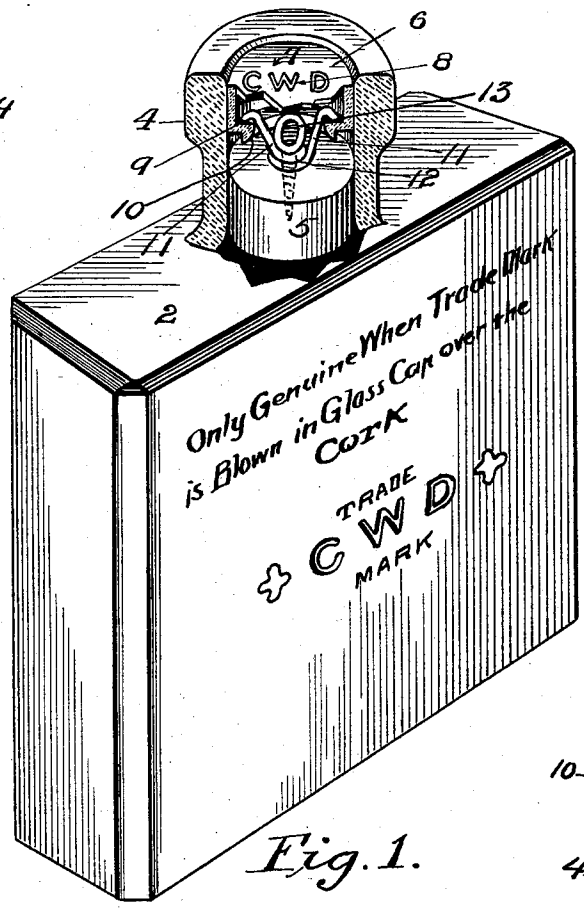


Fig. 1.



Fig. 4.

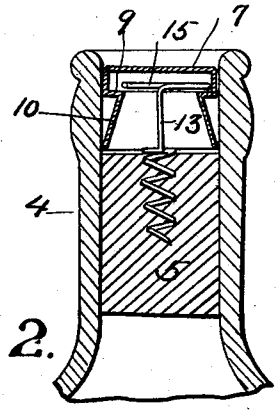


Fig. 2.

Witnesses;
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Inventor
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES WRIGHT DAVISON, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE DAVISON BOTTLE SEAL COMPANY, OF MINNESOTA.

SEAL FOR BOTTLES.

SPECIFICATION forming part of Letters Patent No. 588,269, dated August 17, 1897.

Application filed December 29, 1896. Serial No. 617,320. (No model.)

To all whom it may concern:

Be it known that I, CHARLES WRIGHT DAVISON, of Minneapolis, Hennepin county, Minnesota, have invented a certain new and Improved Seal for Bottles, of which the following is a specification.

My invention relates to that class of bottle-seals which if broken or removed from the bottle show that the same has been tampered with to such an extent that the purchaser cannot be satisfied that the bottle has in it its original contents, and therefore will accept only bottles that have perfect seals and trade-marks.

The object of my invention is to provide a seal of this class which will be very cheap to make, which may be used in any bottle with an ordinary neck, and which will prevent the removal of the cork until the seal is so broken and shattered as to prohibit the use thereof a second time, though the bottle may be used any number of times.

My invention consists in the combination, with the neck, of a cork therein, a thin breakable seal of glass or like material arranged in said neck above the cork, and means in connection with the cork to engage said seal and hold the same in place, said means being accessible and the cork removable only when or after said seal is broken or removed; and the invention further consists in particular constructions and combinations of parts, all as hereinafter described, and pointed out in the claims.

The invention will be more readily understood by reference to the accompanying drawings, in which—

Figure 1 is a partial section of a bottle with a seal embodying my invention. Fig. 2 is a sectional view showing a modified form of the locking device. Fig. 3 is a similar view of still another locking device, and Fig. 4 is a perspective view of the lock by itself.

As shown in Fig. 1, the bottle 2 is provided with a trade-mark or other designating or qualifying character, by which the contents of the bottle is known or the name of the maker advertised. The neck 4 of the bottle is sufficiently long to take in not only the cork 5, but also the seal 6, which last is protected by the end of the neck and cannot be gotten at to be removed without breaking it. This seal 6 is preferably made of glass, though other materials may be substituted. It is primarily a thin easily-breakable part, particularly its top, which bears a mark 8, corresponding or correlative to that on the bottle. Both marks must be on the package as a guarantee of its genuineness. If either mark is absent or mutilated, the inference is that fraud is intended.

The sides of the seal may be frangible or not and are provided with an internal shoulder, recess, or groove 9, preferably annular, but not necessarily so. Beneath the shoulder I preferably provide the inclined or tapered surface 10, so that the seal may be easily pushed down and snapped into place over the lock which is on the cork.

The locking device shown in Fig. 1 comprises one or two spring wires or hooks 11, at the lower end of which are the eyes 12 to admit the shank of the little corkscrew 13. The corkscrew is set firmly into the cork and thus secures the springs 11. These springs engage the shoulder of the seal when it is pushed down.

This seal is designed for non-effervescent liquids; but, if desired, the whole seal may be wired, as an ordinary cork is secured.

Instead of making the lock in two or three parts the locking portion may be integral with the corkscrew, as shown in Figs. 2, 3, and 4.

Fig. 2 shows a spring-ring 15, formed on the upper end of the corkscrew-shank 13 and adapted to snap out over the shoulder 9 in the seal when the same is put in place. After the seal is broken the ring may be used to draw the cork.

A still simpler form of lock is illustrated in Figs. 3 and 4. The same comprises the lower screw end, a straight shank, and a turned or curved upper end to engage the seal or cap.

Various modifications of the interior form of the seal and of the locking device will suggest themselves to one skilled in the art, and therefore, while preferring an annular internal shoulder in the seal or cap and the integral corkscrew and lock used in the cork, I do not confine my invention to any of the specific constructions herein shown and described.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. The combination with a bottle-neck of a cork provided therein, a hollow internally-shouldered frangible seal, provided in the neck over said cork and means arranged in connection with the cork and the shoulder of the seal to secure said seal in place, substantially as described.

2. The combination with the neck of the bottle of an internally-shouldered hollow seal or cap, having a thin, easily-breakable top, and a locking device arranged within the seal and in the cork, engaging the shoulder of said seal, substantially as described.

3. The combination of the bottle bearing a suitable mark or design of a cork provided in the neck of said bottle, an internally-shouldered cap or seal, also, arranged in the neck of the bottle, over the cork, means in connection with the cork for securing said seal, and said seal having a thin or paneled top, bearing a suitable trade-mark or design, known as an accompaniment to that upon the bottle, said cork being removable from the bottle only when or after the top of said seal is broken or shattered to destroy the mark thereon, substantially as described.

4. The combination with the bottle-neck of the cork therein, an internally shouldered or recessed hollow cap or seal, and a corkscrew and lock on the cork to secure said seal, substantially as described.

5. The combination with the bottle of a cork provided in the neck thereof, a hollow and easily-breakable cap or seal, and a corkscrew in said cork and having an upwardly-projecting and integral part to secure said cap or seal, substantially as described.

6. As an article of manufacture, the bottle cap or seal having a thin or paneled top and an internal shoulder and made of frangible material substantially as and for the purpose described.

7. As an article of manufacture, the lock for bottle-seals comprising the corkscrew, having a shank with a turned or bent upper end, substantially as described.

In testimony whereof I have hereunto set my hand this 28th day of November, A. D. 1896.

CHARLES WRIGHT DAVISON.

In presence of—
B. N. DUNBAR,
A. C. PAUL.