No. 862,735. PATENTED AUG. 6, 1907.

L. E. HENDRICKSON.

BOTTLE SEAL.

APPLICATION FILED JAN. 4, 1907.

Fig. 1.

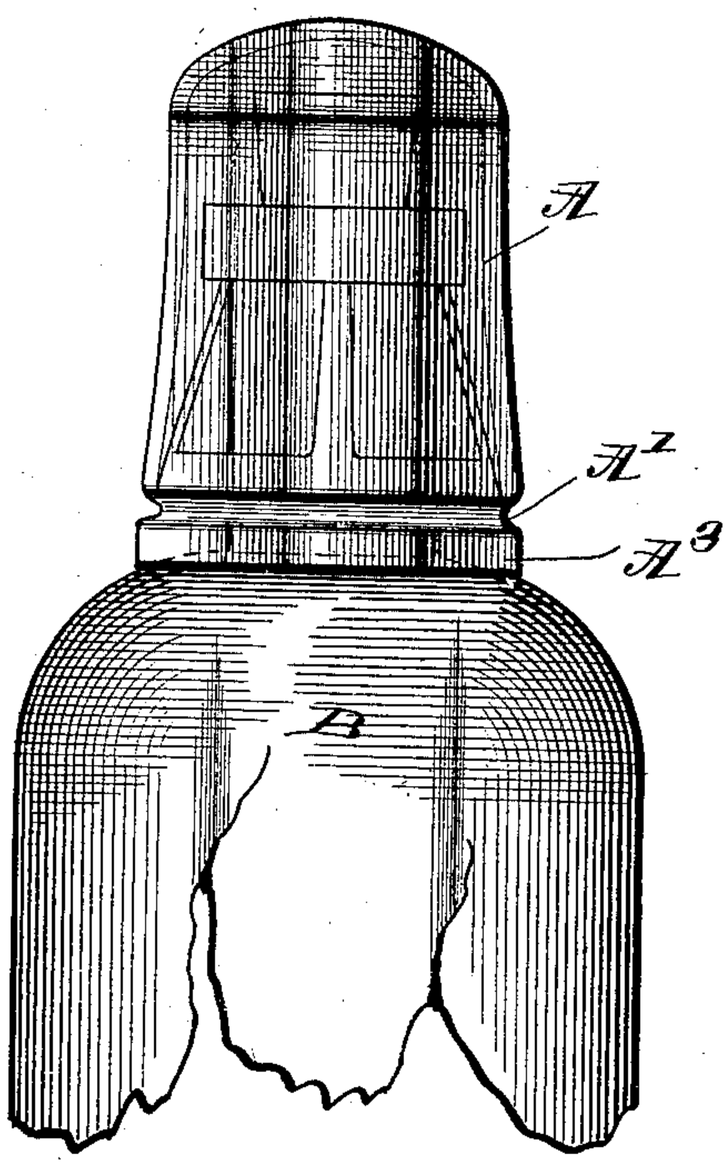


Fig. 2.

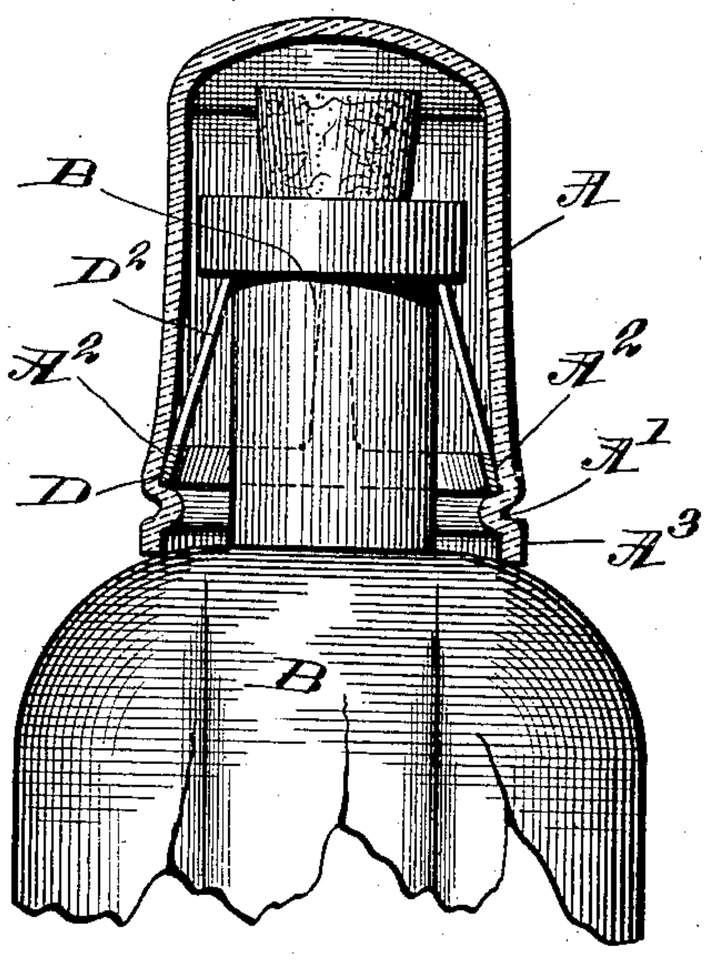


Fig. 3.

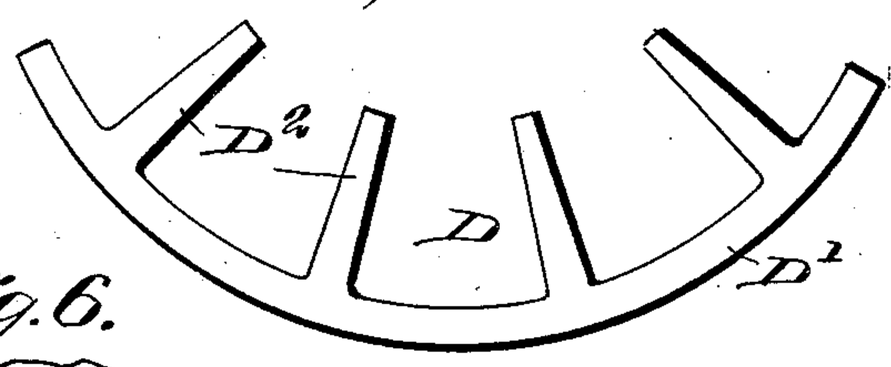


Fig. 4.

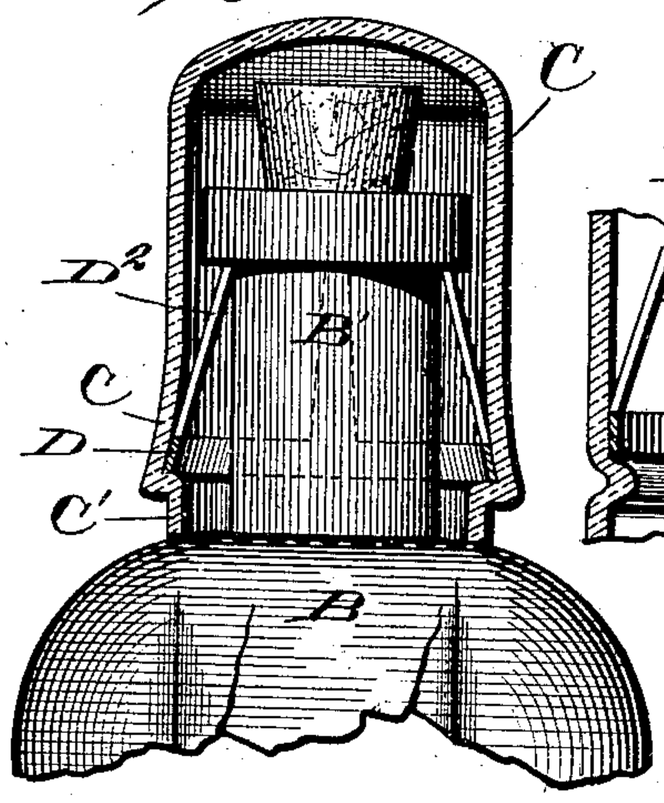


Fig. 6.

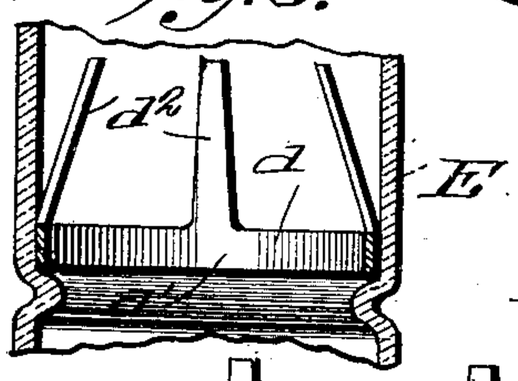
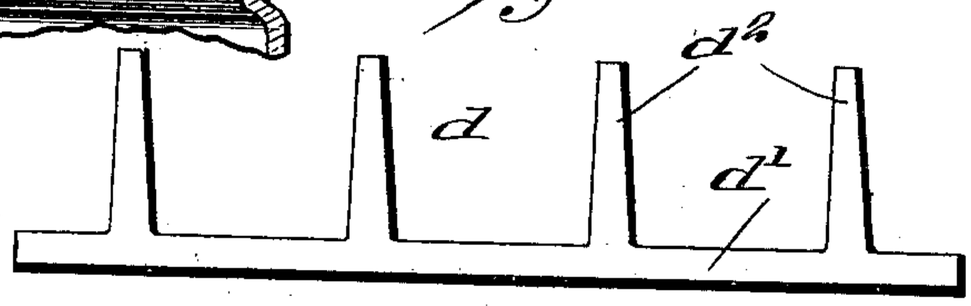


Fig. 5.



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BOTTLE-SEAL.

No. 862,735. Specification of Letters Patent. Patented Aug. 6, 1907.

Application filed January 4, 1907. Serial No. 350,725.

To all whom it may concern:

Be it known that I, LOREN E. HENDRICKSON, a citizen of the United States, and a resident of Osage City, in the county of Osage and State of Kansas, have invented certain new and useful Improvements in Bottle-Seals, of which the following is a specification.

My invention is an improvement in devices for sealing bottles, being designed to prevent the opening of the bottle and dispensing of its contents without first breaking the sealing device; and the invention consists in certain novel constructions and combinations of parts as will be hereinafter described and claimed.

In the drawing Figure 1 is a side view, and Fig. 2 is a vertical longitudinal section of my improvement applied to a bottle. Fig. 3 is a detail side view of the lock before the same is bent into ring form for use, as shown in Fig. 2. Fig. 4 illustrates a somewhat different construction of cap. Fig. 5 is a detail side view of a different form of lock, and Fig. 6 shows the lock illustrated in Fig. 5 bent into ring form for use, a portion of the cap being also shown for purposes of illustration.

My improvement as illustrated in Figs. 1, 2 and 3 comprises a frangible cap A which may preferably be of glass, and is designed to fit over the upper end of a bottle neck and to rest down against the body B of the bottle, and contains locking devices which bear beneath a lip or shoulder B′ on the bottle neck, as shown in the drawing. As illustrated in Figs. 1 and 2, the cap A is provided near its lower end with an inwardly projecting crimp A′, is inclined inwardly at A^2 immediately above said crimp, and is provided below the crimp with a flange or extension A^3 which in practice rests against the body B of the bottle, as shown in Figs. 1, and 2. As illustrated in Figs. 1, 2 and 3, the cap inclines inwardly immediately above the shoulder upon which the lock rests. This is important in connection with the specific form of lock shown in Figs. 1 to 4 because the base strip of said lock coincides with the inclination of the cap as will be more fully described.

In Fig. 4, the shoulder C for the lock is secured by forming an inwardly deflected flange on the cap and below said shoulder. The cap has a cylindrical extension C′ to rest against the body of the bottle.

The lock D, as shown in Figs. 1 to 4 comprises a base strip D′ which curves from end to end and tongues D^2, which extend inwardly from the said strip. This base strip D′ is bent into ring form, as shown in Figs. 1, 2 and 4, and when so bent is pressed into the open end of the bottle cap and permitted to spring out and expand above the crimp A′ therein, and which forms a seat for the said strip, and the strip when so fitted to the cap will be frusto-conical as shown in Fig. 2, and will coincide with the inclination A^2 of the cap immediately above the seat for the lock. This curvature of the base strip also causes the tongues D^2 when the lock is applied, to incline inwardly without necessitating any bending of said tongues at their juncture with the base strip, and the said tongues bear at their free ends beneath the lip or shoulder B′ of the bottle neck and operate to prevent any withdrawal of the cap after the latter has been forced to the position shown in Figs. 1 and 2. I may in some instances desire to make the bottle cap cylindrical or straight on its sides as shown at E in Fig. 6, and this may be desirable in making long caps for use on long slim bottle necks. When the sides are made straight as shown at E in Fig. 6, I may employ the form of lock *d* shown in Figs. 5 and 6, in which the base strip *d′* is made straight from end to end and the tongues d^2 project upwardly from said strip and are deflected inwardly by the bend at their juncture with the strip as will be understood from Fig. 6.

It will be understood that in defining my invention as an improvement in bottle seals I intend to include under the term bottle, jugs, demijohns and other containers having their necks provided with a downwardly facing lip or shoulder for engagement by the tongues of the lock.

In carrying my invention into use it will be noticed that it is applicable to all bottles, and does not require an especially made bottle for its application.

It may be desirable in marketing the invention to make the caps in different lengths so they may be fitted to different bottles or this adaptation may be effected by varying the lengths of the tongues D^2, and in some instances the tongues may be adapted to different bottles by clipping the ends of the tongues to adapt them to the distance between the inwardly projecting seats on the cap A and the lip or shoulder B′ to suit the bottle to which it is desired to apply the seal.

Manifestly the caps may be made with their sides curved or inclined as shown in Figs. 1, 2 and 4 or straight as shown in Fig. 6, or in any other suitable design without departing from some of the broad features of my invention. When the cap is applied and locked as shown in Figs. 1 and 2 it will be noticed the contents of the bottle cannot be dispensed without first breaking the cap and thus destroying the seal.

I claim—

1. A frangible cap to fit over a bottle neck and provided near its lower end with an inwardly projecting crimp, inclining inwardly above the crimp and having a flange below the crimp to rest upon the body of the bottle, and a lock within said cap and composed of a base strip curved from end to end and adapted to be bent into ring form and to rest against the upper side of the inwardly crimped portion of the cap, and tongues projecting upwardly from the said base strip to bear at their free ends beneath the lip or shoulder on the bottle neck, the curved line of the base strip causing the same to coincide with the inward inclination of the cap above the crimp and also giving an inward direction to the tongues when the lock is bent into ring form without bending said tongues at their juncture with the base strip, substantially as set forth.

2. A bottle seal comprising a frangible cap having an interior upwardly facing seat for a lock, and a lock fitting within said cap and having a base strip curved from end to end whereby it will incline inwardly when bent into ring form, and tongues projecting from said base strip to bear beneath a lip or flange on a bottle neck, the curvature of the base strip giving an inward direction to the tongues when the lock is bent into ring form without bending such tongues at their juncture with the strip, substantially as set forth.

3. A bottle seal comprising a frangible cap to fit over a bottle neck and having a seat for a lock, and a lock composed of a base strip curved from end to end, and tongues projecting from said base strip, the curvature of the base strip giving an inward direction to the tongues when the lock is bent into ring form without bending said tongues at their juncture with said strip, substantially as set forth.

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