No. 639,562. Patented Dec. 19, 1899.

W. I. F. HARDEN.

NON-REFILLABLE BOTTLE.

(Application filed Jan. 28, 1896. Renewed May 16, 1898.)

(No Model.)

Fig. 1.

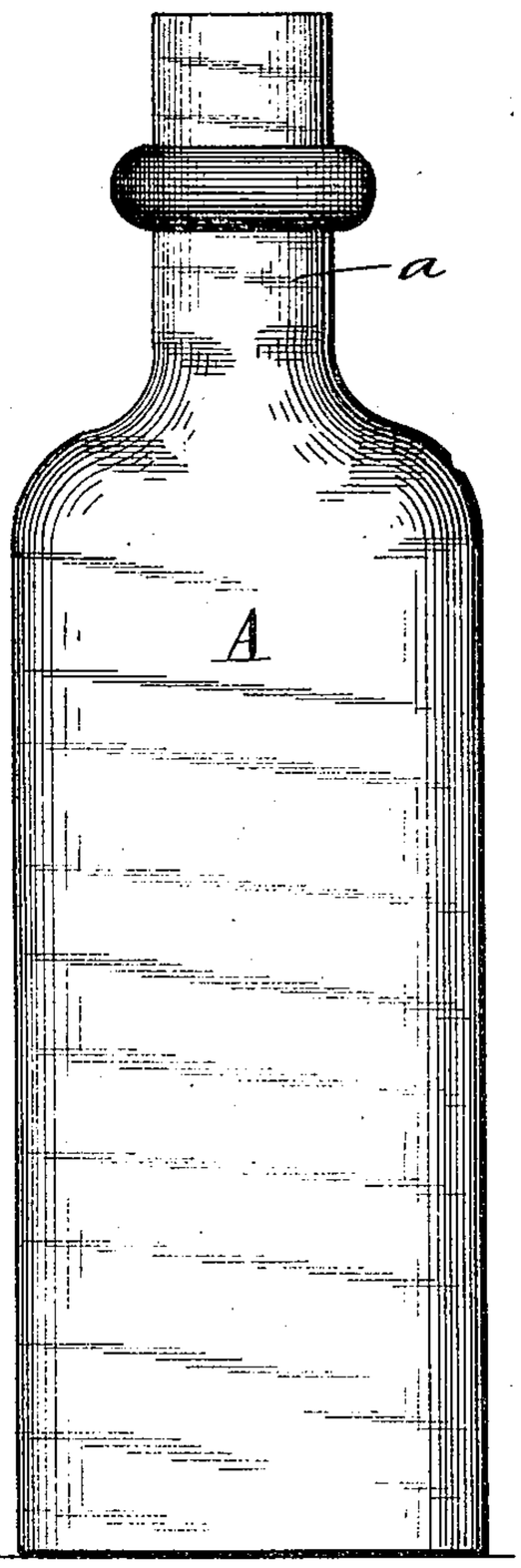


Fig. 2.

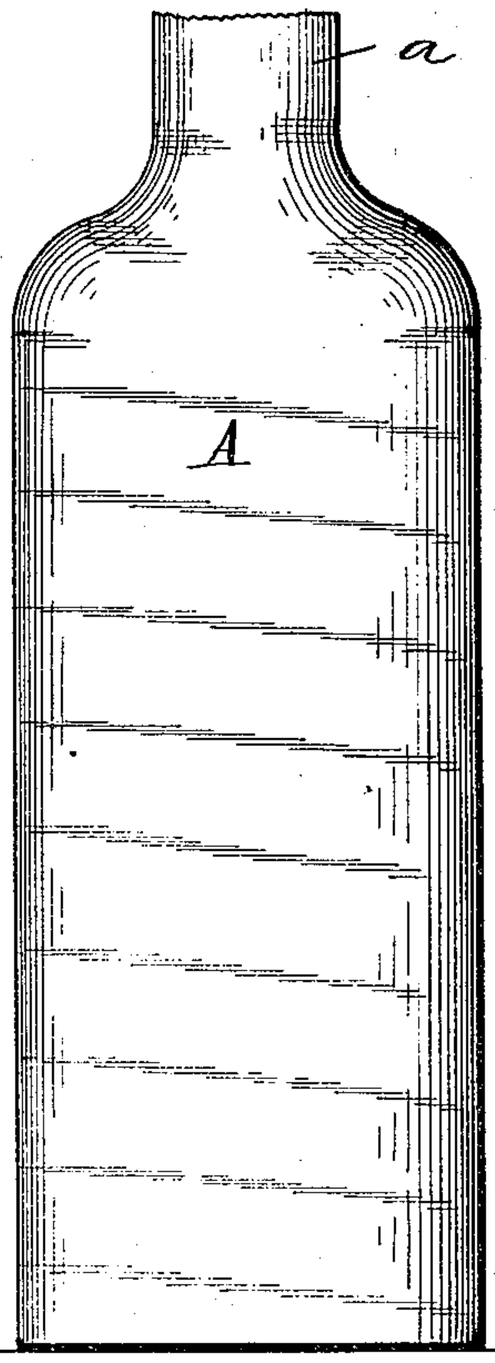
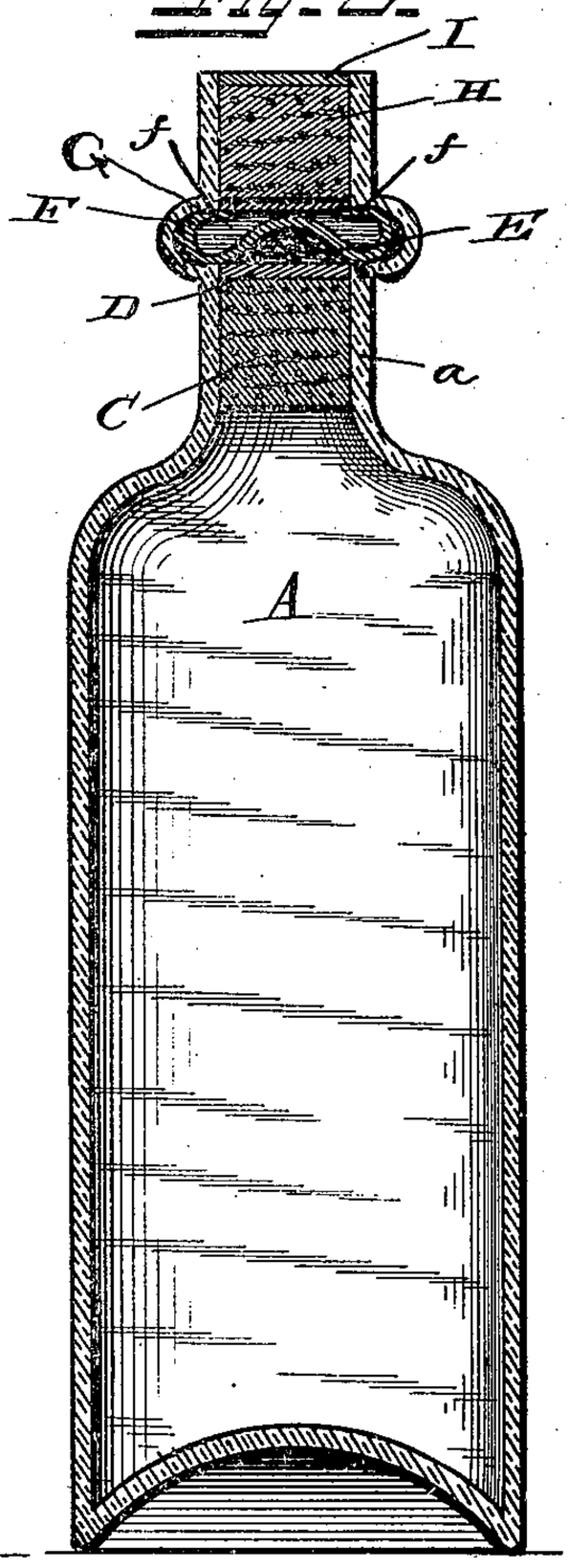


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM I. F. HARDEN, OF HARTFORD, KANSAS.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 639,562, dated December 19, 1899.

Application filed January 28, 1896. Renewed May 16, 1898. Serial No. 680,885. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM I. F. HARDEN, a citizen of the United States, residing at Hartford, in the county of Lyon and State of Kansas, have invented certain new and useful Improvements in Non-Refillable Bottles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in bottles; and it has for its objects, among others, to provide a simple and cheap bottle that cannot be disguised after having been once used and so constructed as to protect alike the producer, the importer or vender, and the customer or consumer, the first against adulterations by changing, mixing, or substituting other liquids or substances than originally intended or labeled, also preventing fraud in reusing old bottles, stamps, &c., or doing business over other signatures. The customer cannot be so easily imposed upon, as the original packages can be produced on demand and the neck of the bottle decapitated in his presence, proving beyond a reasonable doubt the originality and identity of its contents.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a side elevation of the bottle complete. Fig. 2 is a like view of the same after the top has been broken, and Fig. 3 is a central longitudinal section through Fig. 1.

Like letters of reference indicate like parts in the several views.

Referring now to the details of the drawings by letter, A designates the bottle, and *a* the neck, having a cavity, flange, or opening in the inside and shown also by a bulge on the outside.

C represents a cork inserted from the top of the bottle and passing down into the neck below the cavity therein and pressed firmly into place immediately below and on a line with the base of the cavity.

D is a small round plate, preferably of metal, filling the space of aperture, yet lying level or flat on the smooth surface of the cork beneath.

E represents a space of the cavity filled with cotton, wool, or other suitable material to form an air-chamber to aid in the preservation of wine.

F designates an inverted conical or bell-shaped metal plate, with flanges *f* extending outward and upward, which when inserted in the neck fills the same and which on reaching the cavity by pressing on the same from above spring outward or expand and extending its flanges or arms so as to fill the space and being pressed upon from above tends to tighten the metal plate, and if pressure is persisted in it will destroy the neck of the bottle.

G designates a layer of wax or cement or other suitable material placed upon the flanged metal plate.

H is a cork of suitable size to fill the aperture to the top. The top may be closed, as at I, with wax or other attractive form to so remain until it reaches the consumer.

The bottle is opened by removing the top or cap by means of a glass-cutter or by breaking off the same.

Modifications in details may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

Having thus described the invention, what is claimed as new is—

1. A bottle of the character described having a neck provided with a cavity in its inner surface; a cork below said cavity; a recurved spring-metal plug inserted in said neck and having a radial flange normally engaging with said cavity; and a cork above said plug, substantially as described.

2. A bottle of the character described having a neck provided with a cavity in its inner surface; a cork below said cavity; a recurved spring-metal plug inserted in the neck and having a radial flange normally engaging with said cavity, said plug adapted to additionally expand under pressure; and a cork above, and resting upon, the plug, substantially as described.

3. A bottle of the character described, comprising the neck, a cavity in the inner surface thereof; a cork below said cavity; a recurved spring-metal plug having a concave bottom and inserted in the neck; a radial flange on the plug normally engaging with said cavity; a suitable sealing medium intermediate said flange and neck; a chamber, formed by the cork and the concaved bottom of the plug, for the reception of a suitable fabric; and a cork in the neck above, and bearing upon, said spring-plug, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM. I. F. HARDEN.

Witnesses:
C. S. PERKINS,
J. W. RICHHART.