(No Model.)

S. C. ROWELL.

BOTTLE.

No. 544,324. Patented Aug. 13, 1895.

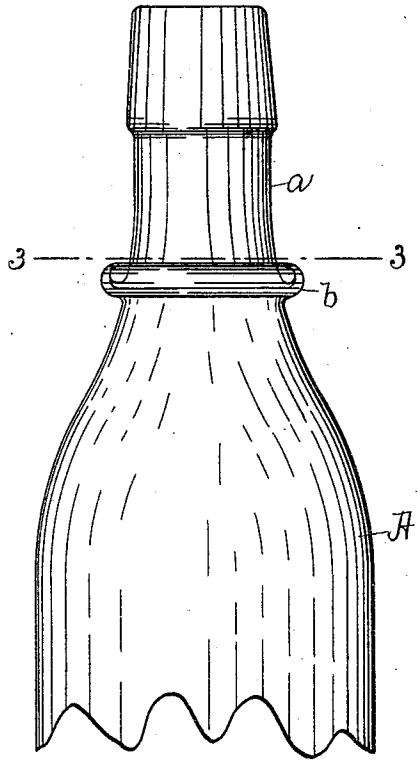

Fig. 1.

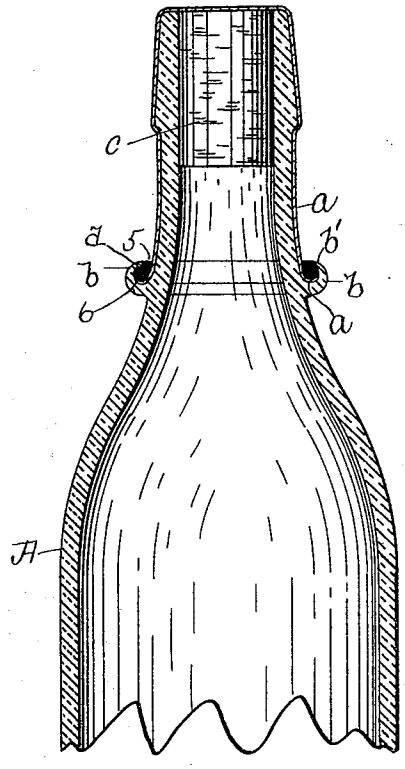

Fig. 2.

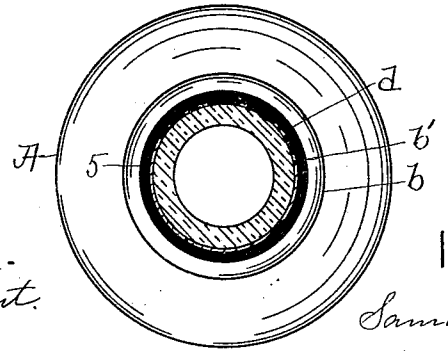

Fig. 3.

WITNESSES.
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ATT'Y.

UNITED STATES PATENT OFFICE.

SAMUEL C. ROWELL, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-FOURTH TO HENRY D. DUPEE AND EDWARD ELLIS, OF SAME PLACE.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 544,324, dated August 13, 1895.

Application filed February 7, 1895. Serial No. 537,577. (No model.)

To all whom it may concern.

Be it known that I, SAMUEL C. ROWELL, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Bottles, of which the following description, in connection with the accompanying drawings, is a specification, like letters and numerals on the drawings representing like parts.

This invention is an improvement in bottles of that class employing a cap, covering, or cork-retaining device fitted over the mouth and the upper part of the neck of the bottle, and usually secured thereon by means of a wire, the said cap being made of tin-foil or suitable material. Bottles of the class referred to are employed among other uses for the more expensive wines and ales—that is, that class of bottled goods which are designed to be consumed at the time the bottle is opened.

This invention has for its object to provide a bottle of the class referred to on which the cap is sealed in such manner as make it practically a part of the bottle, so that when the said cap is destroyed the bottle is rendered practically worthless, thereby preventing the said bottle being used by a bottler for an inferior grade of goods, as will be described.

In accordance with this invention the bottle is provided with a cork-retaining device, preferably a cap of tin-foil or other suitable material, and the bottom of the said cap is incased or sealed up in a ring or layer of a suitable cement capable of becoming substantially very hard when dried or set, and the said bottle is provided on its outer side with a groove for the reception of the said cap and cement. The groove referred to may and preferably will be made by means of an annular flange or rim attached to or forming part of the bottle and bent toward the bottle, so as to leave a substantially narrow passage between the edge of the flange and the bottle, and a substantially large chamber or groove below the inwardly-turned edge of the flange for the reception of the lower part of the cap and the cement.

These and other features of this invention will be pointed out in the claims at the end of this specification.

Figure 1 is an elevation of a sufficient portion of a bottle embodying this invention to enable it to be understood; Fig. 2, a vertical longitudinal section of the bottle shown in Fig. 1, and Fig. 3 a transverse section on the line 3 3, Fig. 1.

The bottle A, which may be of any desired shape, size, or configuration, such as now commonly employed for containing light and heavy wines, ales, &c., is provided, in accordance with this invention, with a groove on its exterior surface for the reception of a lower part of a cap or covering *a*, which may be such as now commonly employed on bottles containing the class of goods specified.

The groove referred to may and preferably will be formed by means of an annular flange *b*, preferably of glass, and for the best results formed integral with the bottle, the said flange being bent or curved inwardly, so that its edge *b'* is separated from the outside of the bottle a substantially small distance, and is for the best results substantially thin, the said inwardly-bent edge forming between it and the bottle a substantially narrow passage 5, (see Fig. 3,) which communicates with a substantially large chamber or groove 6 below the said edge. The cap or covering is fitted over the mouth and neck of the bottle A after the said mouth is closed by the cork *c*, and its lower part is inserted through the passage 5 into the groove or chamber 6 preferably by a suitable tool or instrument, (not shown,) or it may be by hand, and the chamber or groove 6 and passage 5 are then filled with a suitable plastic or cementing substance *d*, preferably of a composition which will set or harden quickly—such, for instance, as the self-hardening cements now found on the market—or the said groove and passage may be filled with a transparent substance such as soluble glass, in order to securely seal or lock the lower edge or portion of the cap or cork-retaining device against removal from the groove or chamber 6.

When it is desired to open the bottle the cap or cork-retaining device may be cut or severed above the groove—as, for instance, on the section-line 3 3, Fig. 1—and the upper portion can then be removed to obtain access to the cork *c*, leaving the lower portion of the cap sealed up in the groove or chamber 6.

When the cap or cork-retaining device is

severed or destroyed, as described, the bottle cannot be sealed up again with a new cap without first digging out the sealing material, which operation would destroy the flange *b*, and thereby render the bottle worthless for refilling with an inferior grade of goods, as attention of the customer would be called at once to the mutilated condition of the bottle.

Furthermore, my invention is also applicable to bottles containing other classes of goods, such as patent medicines, catchups, &c., and is especially aimed to prevent the counterfeiting of superior goods—that is, the refilling and sealing of bottles which have once been opened.

I have herein described the cork-retaining device as a cap of tin-foil or other suitable material; but I do not desire to limit my invention in this respect, as the cork-retaining device might be made in other forms—as, for instance, in the form of a wire passed over the mouth of the bottle and whose ends are sealed, as described.

I claim—

1. The combination with a bottle provided on its exterior with a groove, the walls of which are firmly attached to the bottle against removal bodily, a cork or stopper fitted into the neck of the bottle to close its mouth, a cork retaining device having its lower end inserted into said groove, and means to lock the said retaining device in said groove against removal without rupturing the said cork retaining device, for the purpose specified.

2. The combination with a bottle provided on its exterior with a flange of frangible material firmly attached to the bottle against removal bodily and forming a groove, a cork or stopper fitted into the neck of the bottle to close its mouth, a cork retaining device having its lower portion inserted into said groove, and means to lock said cork retaining device in said groove against removal without first destroying the said retaining device, for the purpose specified.

3. The combination with a bottle of frangible material provided on its exterior with a flange integral with the bottle and forming therewith a groove, a cork or stopper inserted into the neck of the bottle to close its mouth, a cap of tin foil fitted over the neck and mouth of the bottle and having its lower part or edge inserted into said groove, and a cementing substance filling the groove and locking the lower edge or portion of the cap in the groove against removal bodily, substantially as described.

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

SAMUEL C. ROWELL.

Witnesses:
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