March 27, 1928. 1,664,147

B. WOOD

BOTTLE SEALING DEVICE

Filed Nov. 16, 1925

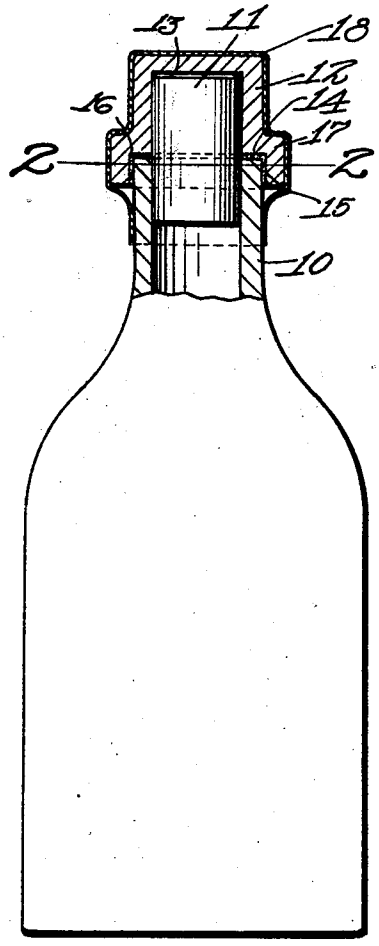


Fig. 1.

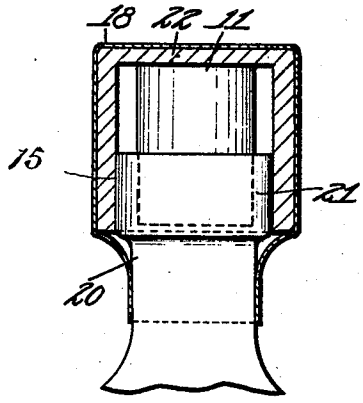


Fig. 3.

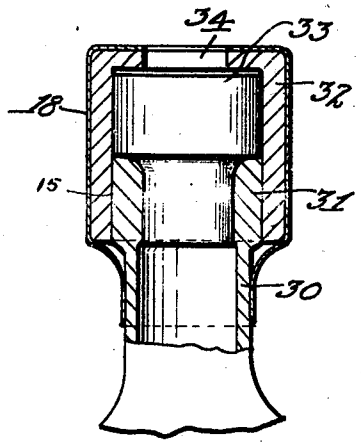


Fig. 4.

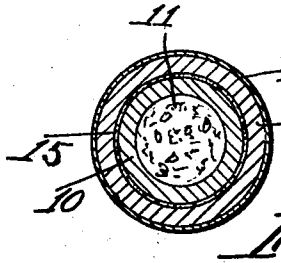


Fig. 2.

Inventors:
Benjamin Wood
By Attorneys
Southgate Fay & Harvey.

Patented Mar. 27, 1928. 1,664,147

UNITED STATES PATENT OFFICE.

BENJAMIN WOOD, OF NEW YORK, N. Y.

BOTTLE-SEALING DEVICE.

Application filed November 16, 1925. Serial No. 69,280.

This invention relates to a device for sealing bottles, jars, and the like. The principal objects thereof are to provide means co-operating with an ordinary cork of such a nature as to permit of the perfect sealing of the bottle or jar and yet enable the user to unseal the same and remove the cork without the use of a cork-screw or any other instrument, and at the same time leave the bottle or jar intact and without any rough surfaces on its neck so that it can be used over again in the same way as it was when originally put up at the factory; also to provide a simple and practical means for protecting a cork extending beyond the neck of the bottle.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings, in which

Fig. 1 is a side view of the bottle having a seal constructed in accordance with this invention, the upper part being shown in central vertical section;

Fig. 2 is a sectional view of the same on the line 2—2 of Fig. 1; and

Figs. 3 and 4 are sectional views showing two modifications of the invention.

In the first two figures the bottle has a plain neck 10 shown cylindrical in form outside and in to receive an ordinary stopper 11. In the use of the device this stopper is put in far enough to seal the neck but still projecting far enough so that if these two parts were the only ones present the stopper would furnish enough of a gripping surface to enable the user to twist it with his fingers and loosen it enough to enable him to draw it out without the use of a cork screw or other metallic instrument. In this way the cork is preserved for re-use and there is no danger of injuring the bottle neck and the nuisance of having to look for a cork screw is avoided.

To protect the projecting end of the cork I use a cap 12 of metal or glass for that purpose. This cap has a cavity or passage 13 for receiving the part of the cork that projects out of the bottle. It is provided with surfaces 14 and 15, in the form shown here, for engaging the exterior surfaces of the neck 10 or at least coming close enough to them so that the space between can be sealed by a sealing composition 16 in the nature of a cement or glue. The present case provides for an enlarged projection 17 around the bottom of the cap 12 to fit over the end of the bottle neck. After the cork is inserted and the cap applied and sealed by the compound 16 an ordinary metal foil layer 18 is placed over the whole thing as prepared for market.

In the use of the device the metal foil can be removed or not, but the cap 12 can be twisted hard enough to release it from the neck by breaking the glue or cement 16. The cap 12 is then removed, leaving the cork 11 projecting up as indicated. Now the cork can be removed by an ordinary twisting process. Therefore only two twists of the hand are needed for the entire operation of opening the bottle.

The cork is left in its original condition and can be used over again and in fact the cap can also. The cap 12 may be corrugated around the top if desired and it may be either closed or open at the top. The cork has to be long enough to tightly fit in the bottle and yet protrude above the top of the bottle neck to give room for grasping it by the fingers. The cap merely protects the cork and does not perform any other function. The cement layer 16 therefore should be easily frangible and does not need to be tight.

In the form shown in Fig. 3 I have shown the neck 20 of the bottle as having an enlargement 21 at its end in which the bottom of the cork 11 is received, this enlargement having a passage of just the right size to receive it. In this case the cap 22 is, or can be, made cylindrical so as to just fit the outside of the neck. Although this leaves an air space between the bottle and the cap, that is immaterial. The tin foil 18 is used as in the other case.

In the form shown in Fig. 4 the bottle neck 30 is provided with an enlargement 31 and the cork 33 is formed in such shape as to just fill this enlargement and also fill the entire space in the bottle cap 32 which is like the cap 22 except that it is shown with an opening 34 through the top. The tin foil is used as in the other case.

This constitutes a simple expedient for accomplishing the purposes desired. It will be noticed that it is not in any sense a non-refillable bottle as it is desired that the bottle shall be refillable and reusable with the same cork and cap.

Although I have illustrated and described only a few forms of the invention, I am

aware of the fact that other modifications can be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims. Therefore I do not wish to be limited to the exact shapes shown, but what I do claim is:—

1. The combination with a bottle having a neck, of a separate cap of hard material having a space therein and secured to the neck at the top thereof by a frangible connection, a cork extending down into the neck and up into the cap, the cap being removable from the cork when detached from the neck by breaking said frangible connection, and a layer of tin foil covering the entire cap and engaging the neck below the cap, whereby the cap can be removed by twisting it about its longitudinal axis, and then the cork can be grasped by the part projecting above the neck and withdrawn by a twisting motion.

2. The combination with a bottle having a cylindrical neck, of a separate cap of hard material having a space therein of the same cross section as the inside of the neck and secured to the flat top surface of the neck by a frangible connection, a cork of uniform diameter extending down into the neck and up into the cap and fitting both, the cap being removable from the cork when detached from the neck whereby the cap can be removed by twisting it about its longitudinal axis, and then the cork can be grasped by the part projecting above the neck and withdrawn by a twisting motion.

In testimony whereof I have hereunto affixed my signature.

BENJAMIN WOOD.