G. KIRKEGAARD.

BOTTLE STOPPER.

APPLICATION FILED JULY 24, 1907.

931,625. Patented Aug. 17, 1909.

Fig. 1.

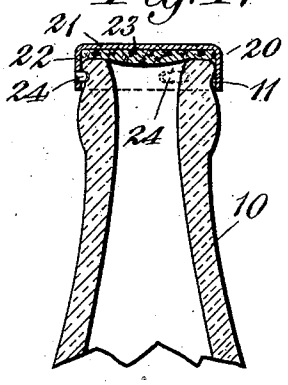


Fig. 2.

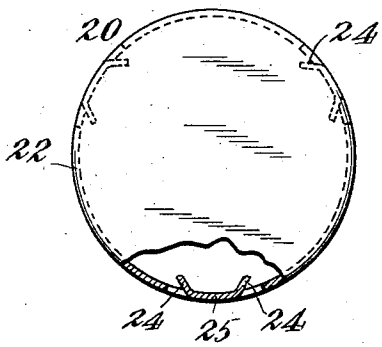
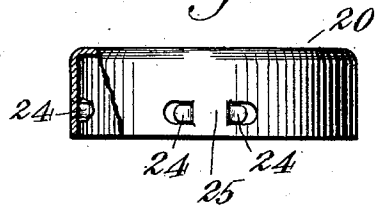


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORG KIRKEGAARD, OF NEW YORK, N. Y., ASSIGNOR TO IMPERIAL STOPPER COMPANY, A CORPORATION OF MAINE.

BOTTLE-STOPPER.

No. 931,625. Specification of Letters Patent. Patented Aug. 17, 1909.

Application filed July 24, 1907. Serial No. 385,235.

To all whom it may concern:

Be it known that I, GEORG KIRKEGAARD, a citizen of the United States, and a resident of the city of New York, in the county of New York and State of New York, United States of America, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

My invention relates to a bottle stopper or cap which may be attached to and locked upon a bottle or similar structure to seal such a structure, and its object is to provide a simple and efficient construction for such a device.

I will describe my invention in the following specification and point out the novel features thereof in the claim.

Referring to the drawings, Figure 1 represents, in sectional side elevation, the upper portion of a bottle with one of my improved stoppers attached thereto. Fig. 2 is a plan view, partly in section, on an enlarged scale, of one of my bottle stoppers, and Fig. 3 is a side elevation, partly in section, of the same stopper.

Like characters of reference designate corresponding parts in all of the figures.

10 designates a bottle, the upper portion of which is provided with an annular rounded bead which forms a shoulder 11 about or directly below the opening or mouth of a bottle to which the stopper is to be attached.

20 designates a cap, preferably of metal such as commercial tin-plate, and comprises a circular disk 21 having an annular depending straight flange 22. The inner diameter of this flange is approximately equal to the outside diameter of the bead about the mouth of the bottle. A packing 23 of cork or other resilient material is placed within the flange and against the inner surface of the disk 21.

At several points in the flange 22 lugs 24 are punched through its side. The lugs are preferably arranged in pairs and project inwardly from the inner surface of the flange but at opposite angles as shown, and a portion 25 of the flange is left intact between them. These lugs have rounded tips or extremities as shown. The lugs 24 extend inward horizontally from the flange 22, that is to say, their general direction or length is in a plane transverse to the axis of the cap. In applying one of these caps to a bottle or other structure it is first pressed down firmly over the neck of the bottle which may be previously filled with desired material. Thus the resilient packing 23 is compressed between the top of the mouth of the bottle and the inner surface of the cap, and thereby effects a tight seal. While the cap is thus held under pressure over the mouth of the bottle, the lugs 24 are pressed in under the inclined rounded shoulder 11 about the neck of the bottle. The pressure of the rounded tips of these lugs upon the shoulder 11 has a tendency to draw the disk of the cap down tighter over the bottle, and the lugs lock the cap upon the bottle so that the cap will remain in its sealing position as long as desired.

Since the bead on the bottle and the tips of the lugs are both rounded, the extent to which the cap is pressed down upon the bottle may vary without affecting the seal.

To remove the cap from a bottle it is only necessary to pry it off at the flange. This will cause the lugs 24 to be bent outward until they allow the flange to slip over the bead of the bottle.

What I claim is.—

The combination with a bottle provided with a rounded external bead at its mouth, of a stopper comprising a metallic disk and a depending flange containing a packing material, said flange provided with inwardly directed horizontal lugs the tips or extremities of which are adapted to engage the under side of the bead on the bottle to hold the stopper in place, substantially as described.

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

GEORG KIRKEGAARD.

Witnesses:

ELLA TUCH,

GUSTAVE HARTMAN.