

(No Model.)

C. KORTHAUS.

BOTTLE STOPPER.

No. 342,519.

Patented May 25, 1886.

Fig. 1.

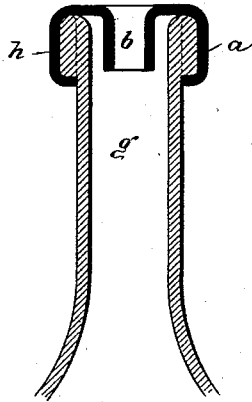


Fig. 2.

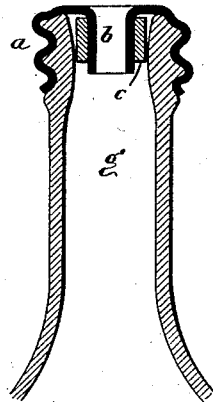


Fig. 3.

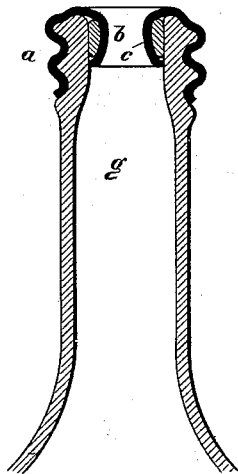
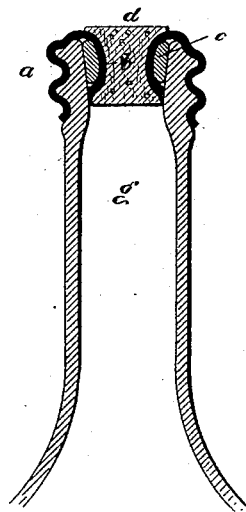


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES KORTHAUS, OF COLOGNE, PRUSSIA, GERMANY.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 342,519, dated May 25, 1886.

Application filed February 20, 1886. Serial No. 192,624. (No model.) Patented in England January 29, 1886, No. 1,328.

To all whom it may concern:

Be it known that I, CHARLES KORTHAUS, a subject of the King of Prussia, Empire of Germany, residing at the city of Cologne, in the King of Prussia, Empire of Germany, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

Heretofore comparatively large corks and stoppers were required for closing the necks of bottles, jars, flasks, &c., and said stoppers were merely held in place by frictional contact with the sides of the bottle-neck.

The object of my invention is to provide an attachment for the necks of bottles, jars, &c., whereby a smaller stopper can be used, and which stopper is held firmly and securely.

The invention consists in the combination, with a bottle, of a cap held on the same, which cap is provided with a downwardly-projecting neck within the bore of the bottle-head, which neck is surrounded by a packing-ring and expanded.

In the accompanying drawings, Figure 1 is a cross-sectional view of the bottle-neck, provided with a ring. Fig. 2 is a cross sectional view of the necked ring and packing. Fig. 3 shows the neck on the cap expanded to hold the packing-ring. Fig. 4 shows a stopper held in the cap.

The neck *g* of the bottle is provided at its upper end or head with the usual external band or projection, *h*; or the upper end of the bottle-neck may be provided with an extended screw-thread. The cap *a* is placed on the bottle-head, and is held on the same by having its edges turned in under the bottom edges of the projection *h*; or the cap may be provided with a screw-thread, which is engaged with the thread on the bottle-head; or, the cap may be fastened on the bottle head in any other

suitable manner, either permanently or detachably. The cap *a* is provided with a downwardly-projecting neck, *b*, which projects into the bottle-neck *g*, and is surrounded by a packing-ring, *C*, of rubber, or any other suitable material. By means of a suitable extending instrument inserted in the neck *b* the lower part of said neck *b* is expanded and pressed toward the inner sides of the bottle-neck, whereby the packing-ring *c* is pressed tightly against the side of the neck to form a close and tight joint, as shown in Figs. 3 and 4. A stopper, *d*, of rubber, cork, or other suitable material, is then forced into the neck *b*, and expands as it passes below the end of said neck and completely closes the bottle-neck below the neck *b*, thus preventing the liquid in the bottle from coming in contact with the packing-ring or the metal parts of the cap or neck. The said stopper *d* closes the bottle effectually, and is held in place securely, and cannot be withdrawn accidentally.

A comparatively small stopper is sufficient to close the bottle.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with a bottle, of a cap held on the same, which cap is provided with a downwardly-projecting neck within the bore of the bottle-head, and of a packing-ring surrounding the neck of the cap, the inner or lower end of said neck being expanded to press the packing-ring firmly against the sides of the bore of the head, substantially as set forth.

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

CHARLES KORTHAUS.

Witnesses:

HEINR. JOS. MAYER,
HEINR. REIFS.