

UNITED STATES PATENT OFFICE.

WILLIAM H. NORTHALL, OF EVANSVILLE, INDIANA, ASSIGNOR OF TWO-THIRDS TO J. H. POLSDORFER & SONS, OF SAME PLACE.

BOTTLE-CAP.

SPECIFICATION forming part of Letters Patent No. 534,001, dated February 12, 1895.

Application filed January 2, 1895. Serial No. 533,555. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. NORTHALL, a citizen of the United States, residing in the city of Evansville, county of Vanderburg, and State of Indiana, have invented a certain new and useful Improvement in Bottle-Caps, of which the following is such a full, clear, and exact description as will enable one skilled in the art to which it appertains to make and use the same.

My invention consists of a cap designed to fit over the top of a bottle and hold the cork in place, and is particularly adapted for use in connection with bottles containing aerated liquids, or liquids charged with gas, where there is a pressure tending to force the cork from the bottle neck.

The object of my invention is to provide a bottle cap which, while being cheap in construction, will be of such strength as to securely hold the cork in place against internal pressure of the liquid as well as against accidental external shocks, and which may be easily applied and removed and will present a pleasing appearance to the eye.

The best embodiment of my invention at present known to me is that shown in the drawings, in which—

Figure 1 represents my improved cap in position on the neck of a bottle. Fig. 2 represents the cap with the tying-band removed. Fig. 3 represents the blank from which the capping portion of the cap is made. Figs. 4 and 5 represent the tying-band, used for the purpose of drawing the legs of the cap against the bottle and holding them in place. Fig. 6 is an enlarged horizontal section of the complete cap taken on the line 6—6 at Fig. 1; and Fig. 7 is a vertical central section of the capping portion of the cap, taken on a line corresponding to 7—7 of Fig. 3.

Similar letters of reference designate similar parts in each figure.

The cap is made in two parts, a capping portion which fits over the cork and extends down along the neck of the bottle somewhat farther than the head A of said neck, and a tying-band which serves to hold the lower extremities of the capping portion tightly against the neck beneath the shoulder B of said head.

The capping portion, which may be stamped

out of a single piece of metal, consists of the plate *a* having a plurality of legs *b*, projecting therefrom, which are bent down so that the capping portion will snugly embrace the head of the bottle neck. Each leg flares considerably at its foot *c* so as to afford a good support under the shoulder of the bottle head and so as to prevent the leg from getting twisted or misplaced. At one end of one of these feet are the projections *d* which are bent over toward each other in front of the foot and form a flat sleeve. At the bottom of the other feet are the lips *e* which are turned back parallel to the foot and thus form hooks.

The tying-band is a single strip of metal *f* of a length somewhat greater than the circumference of the bottle neck at the point where the band acts, and has one of its ends bent back upon it so as to form the hook *g*. In position, it is hooked under the foot, back of the sleeve and passes through the sleeve and around the legs, lying between the feet and the upturned lips *e*. Its forward end projects some distance through the sleeve and, when bent back toward itself, ties the cap. This sleeve is formed on the foot of the cap instead of on one end of the band, for the reason that thereby much stock is saved—the legs forming the sleeve being stamped out of material which would otherwise be lost and the band being a parallel strip which is cut with no waste; and for the additional reason that thus the band is more securely held to the rest of the cap before it is applied to the bottle. This construction also enhances the neatness of the cap.

The cap is delivered to the bottler in the assembled condition above described—the band passing twice through the sleeve and its projecting end being slightly bent back near its extremity to prevent it from being pulled out, and the legs battering sufficiently to allow the cap to be easily placed in position. The bottler simply drops or otherwise places the cap over the head of the bottle and draws the band in the direction of its length, forcing the legs tight against the neck under the shoulder, and then bends the projecting end of the band back upon itself, thereby holding the cap in place, the stiffness of the ma-

terial composing the band preventing it from becoming loose.

The drawings show the cap applied in connection with a full sized cork C, and such is its preferable use, but it is obvious that it may be used with the thin cork known in this art as a seal.

To distinguish this application from others which I have made on the same subject matter, I designate this one as "Case D."

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

1. In a bottle cap, a capping portion formed of a plate having a plurality of legs projecting therefrom, at the foot of one of said legs there being formed a sleeve and at the feet of others upturned lips, in combination with a tying band adapted to lie between the upturned lips and the legs and to pass through the sleeve, substantially as described.

2. The combination with a bottle neck having a shoulder thereon, of a bottle cap con-

sisting of a plate, having a plurality of legs projecting therefrom, and a tying-band which lies under the said shoulder of the bottle and passes twice through a sleeve formed at the base of one of said legs and is held at others of said legs by upturned lips thereon, substantially as described.

3. In a bottle cap, a capping portion consisting of a plate *a* having a plurality of legs *b* formed integral therewith, each leg having its lower end flaring into feet *c*, there being formed on one of said feet the projections *d*, which are bent over to form a sleeve, and on other of said feet the upturned lips *e*, in combination with a separate tying-band formed of a single strip of metal *f*, all constructed and arranged substantially as described for the purpose specified.

WILLIAM H. NORTHALL.

Witnesses:

WM. H. GUDGEL,
CHRIST HOEPPNER.