No. 619,603. Patented Feb. 14, 1899.

W. H. NORTHALL.

BOTTLE SEALING DEVICE.

(Application filed Mar. 31, 1898.)

(No Model.)

Fig. 1.

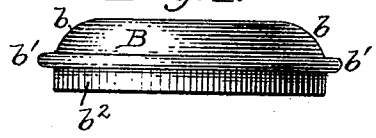


Fig. 2.

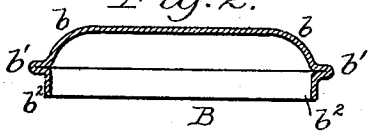


Fig. 3.

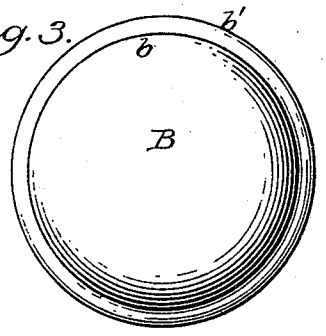


Fig. 4.

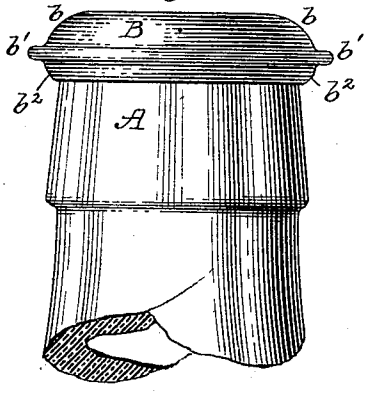
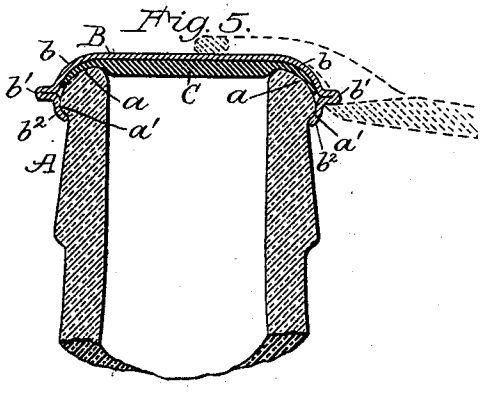


Fig. 5.



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UNITED STATES PATENT OFFICE.

WILLIAM HENRY NORTHALL, OF EVANSVILLE, INDIANA.

BOTTLE-SEALING DEVICE.

SPECIFICATION forming part of Letters Patent No. 619,603, dated February 14, 1899.

Application filed March 31, 1893. Serial No. 468,524. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY NORTHALL, of Evansville, in the county of Vanderburg and State of Indiana, have invented certain new and useful Improvements in Bottle-Sealing Devices; and I do hereby declare that the following specification, taken in connection with the drawings furnished and forming a part thereof, is a clear, true, and complete description of my invention.

The prime element in my improved bottle-sealing device consists of a sealing-cap composed of metal and having a flange which is capable of being securely applied to a bottle-head (having an appropriate locking-shoulder) by the application of suitable pressure, said cap being provided with an annular peripheral rib, with which a suitable bottle-opener may be engaged for detaching the cap from a bottle, and said cap, in combination with a suitable sealing-disk and a bottle having a suitable head and lip, constitutes a feature of my invention.

In the drawings, Figures 1, 2, and 3 illustrate one of my sealing-caps respectively in side view, section, and top view. Fig. 4 illustrates in side view a bottle-head with my sealing devices applied thereto. Fig. 5 is a lateral vertical central section of Fig. 4, and in dotted lines the application of an opener is illustrated.

The bottle-head A has at its mouth a rounded lip a and an exterior annular locking-shoulder a' below said lip. The sealing-cap B is composed of suitable metal, preferably tinned iron, and it is formed in suitable dies so as to develop at the top b an interior contour appropriately conforming to the contour of the bottle-lip a and also so as to develop the annular projecting rib b' and the flange b^2, which is adapted to snugly fit the top of the bottle-head and to be forcibly engaged in close contact with the locking-shoulder a'. The sealing-disk C is composed of suitable sealing material, preferably cork, and it is well fitted to and secured within the cap as against ready displacement. After a bottle has been filled the cap and seal is placed upon the bottle-head and pressure applied until the seal is heavily compressed between the bottle-lip and the coincident surface of the cap, and then the flange b^2 is forced into conformity with the rounded or beveled surface at the locking-shoulder a', thus firmly securing the cap to the bottle and maintaining the seal under proper and effective sealing compression.

The cap may be readily detached by means of any suitable opener—as, for instance, one which is adapted to operate as a lever, having its fulcrum on top of the cap and having at its working point such a configuration as will enable it to firmly engage with the under side of a portion or portions of the cap-rib b', as indicated by the bottle-opener shown in dotted lines in Fig. 5.

I do not restrict myself to any special kind of seal, nor to any particular kind of metal, nor to any precise location of the rib b', so long as it is between the top surface of the cap and the bottom of the flange b^2 and also provided that it cannot prevent the proper working of the flange into locking contact with the shoulder a' on the bottle-head.

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

1. The combination with a bottle having below its lip, an annular locking-shoulder, of a compressed suitable seal and a metallic sealing-cap, having an annular detaching-rib, and below said rib having a flange which is forced into locking contact with said shoulder for firmly confining the cap on the bottle and maintaining the seal in its compressed sealing condition.

2. A bottle-sealing cap composed of metal, and having a flange adapted to be compressed into close contact with a locking-shoulder, and having above said edge a peripheral projecting rib for engagement by a bottle-opener, substantially as described.

WILLIAM HENRY NORTHALL.

Witnesses:

PHILIP F. LARNER,

HOWELL BARTLE.