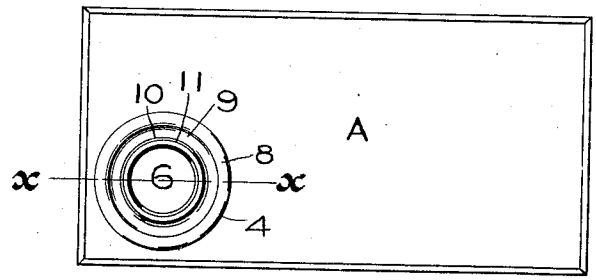
No. 848,785. PATENTED APR. 2, 1907.

E. A. TOWLE.

CLOSING CAP.

APPLICATION FILED AUG. 16, 1904.

Fig. 1.



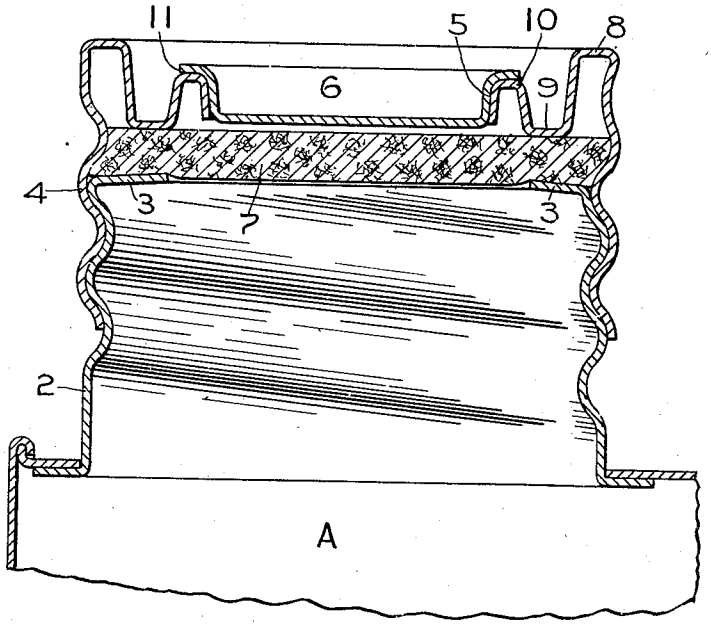


Fig. 2.

Witnesses,
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UNITED STATES PATENT OFFICE.

EUGENE A. TOWLE, OF ST. PAUL, MINNESOTA.

CLOSING-CAP.

No. 848,785. Specification of Letters Patent. Patented April 2, 1907.

Application filed August 16, 1904. Serial No. 220,976.

To all whom it may concern:

Be it known that I, EUGENE A. TOWLE, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Closing-Caps, of which the following is a specification.

My invention relates to improvements in closures for vessels such as syrup-cans, its object being to provide improvements in the cap whereby an outlet may be secured for the contents of the vessel without removing the cap.

To this end my invention consists in the features of construction and combination hereinafter particularly described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view of a can fitted with my cap, and Fig. 2 is a section on line x x of Fig. 1.

In the drawings, A represents a can such as a syrup-can. Secured in the outlet-opening of the can is an ordinary threaded neck 2, having its upper end inturned to form a flange 3. Threaded to screw over the neck 2 is a cap 4. The cap 4 is formed with a central opening 5, within which is fitted a friction-top 6. Inside the top of the cap is arranged a disk 7, of cork or other suitable material. In order to hold the cork tightly clamped within the cap and also to hold the friction-top out of contact with the cork and in position where it cannot be accidentally displaced, I construct the top of the cap as follows: The top of the cap is bent to form an outer rim 8, a concentric inner rim 10 surrounding the friction-top opening 5 and intermediate of said rims a rib 9 extending downwardly toward the flange 3 of the neck. The inner rim 10 is lower than the outer rim 8, so that the friction-top will be protected by the outer rim against accidental displacement. The friction-top is of such height that its lower face will stand higher than the rib 9, and consequently out of contact with the cork. The screwing down of the cap will thus cause the cork to be squeezed between the flange 3 and rib 9 of the cap to form an air-tight closure.

In use where the cap is held too tightly to be easily unscrewed it is only necessary to lift the friction-top by inserting any suitable instrument under its edge 11. The cork may then be punched or cut out below the opening 5 to allow the contents of the vessel to be poured out. When not in use, the friction-top may be pressed back into its opening. The ordinary closed-top screw-cap is generally so firmly screwed into closing position in order to form an air-tight seal that it cannot easily be removed without a special instrument. The user often cuts an opening in the can in order to gain access to its contents, and the can thereafter must remain unsealed, thus subjecting the contents to fermentation. With my invention this is avoided, as the friction-top is easily removed and placed back in closing position.

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

1. A closure of the class described comprising in combination a neck, a cap fitted to said neck and provided with an opening in its top, said cap being formed with a contact opposed to the top of the neck, a secondary closure fitted to said opening, and a flat unbent resilient imperforate disk arranged between the cap and neck, said disk being held in position by the pressure of the neck and the opposed contact-wall of the cap against the free edge of said disk.

2. A closure of the class described comprising in combination a neck, a cap fitted thereto provided with an opening in its top, a secondary closure for said opening, and a downwardly-extending rib carried by the top of said cap in position to form a contact opposed to the top of the neck.

3. A closure of the class described, comprising in combination a neck formed with an inwardly-flanged outer end, a cap fitted to said neck and provided with an opening in its top, a friction-cap fitted in said opening, a rim carried by said cap and extending above the top of said friction-top, and a circumferential rib carried by the top of said cap and extending below the bottom of said friction-top.

4. A closure of the class described, consisting of a threaded neck having an inwardly-flanged outer end, a threaded cap fitted to said neck, said cap being formed in its top with a central opening, and the top of said cap being bent to form an outer rim and then bent to form a downwardly-extending rib standing above said neck-flange, and then bent to form an inner rim standing lower than said outer rim, a friction-top fitted to said inner rim, and a resilient disk arranged between said rib and neck-flange.

5. A closure of the class described, com-

prising a threaded neck having an inwardly-flanged outer end, a threaded top fitted to said neck and provided with a central opening in its top, the top of said cap being bent to form an outer rim, an inner concentric rim around said opening, and a downwardly-extending rib intermediate of said rims, a friction-top fitted in said opening with its upper edge lower than said outer rim, and its lower edge higher than said rib, and a resilient disk arranged within said cap above said flanged neck.

6. A closure of the class described comprising in combination a neck, a cap fitted thereto provided with an opening in its top, a secondary closure for said opening, a rib extending downwardly from the top of the cap toward the top of the neck whereby said rib and the top of the neck form opposed clamping contacts, and an imperforate resilient disk interposed between said rib and neck.

7. A closure of the class described comprising in combination a neck formed with an inwardly-flanged outer end, a cap fitted to said neck and provided with an opening in its top, a secondary closure for said opening, and a resilient disk interposed between said top and the flanged end of said neck.

8. A closure of the class described comprising in combination a neck formed with an inwardly-flanged outer end, a cap fitted to said neck and provided with an opening in its top, a secondary closure for said opening, a circumferential rib carried by the top of said cap and extending toward the flanged end of said neck, and a resilient disk arranged between said cap and neck.

In testimony whereof I affix my signature in presence of two witnesses.

EUGENE A. TOWLE.

Witnesses:
H. S. JOHNSON,
EMILY F. OTIS.