S. C. MILLER.

COLLAPSIBLE CONTAINER.

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1,269,483.

Patented June 11, 1918.

Fig. 1.

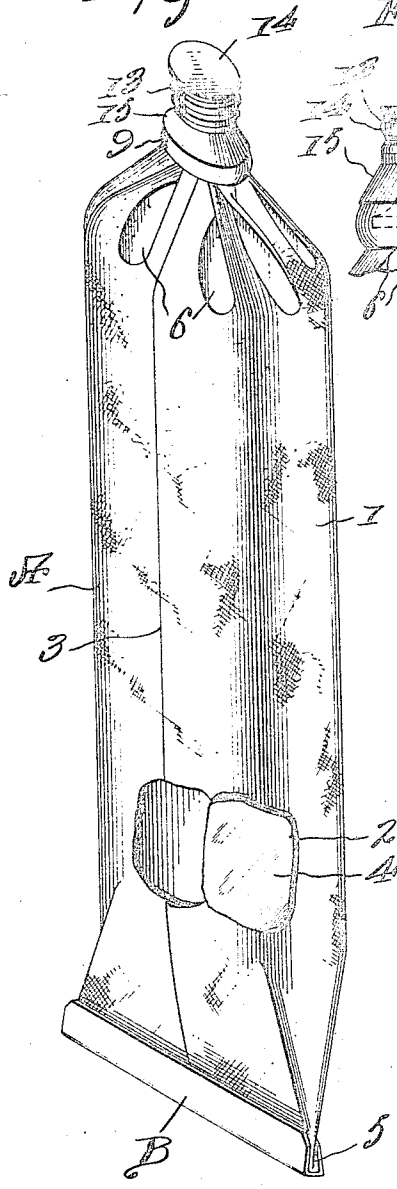


Fig. 4.

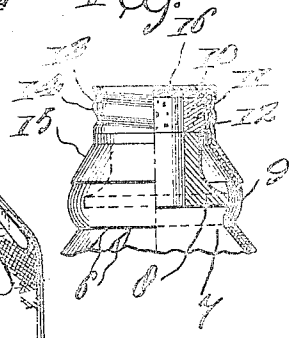


Fig. 2.

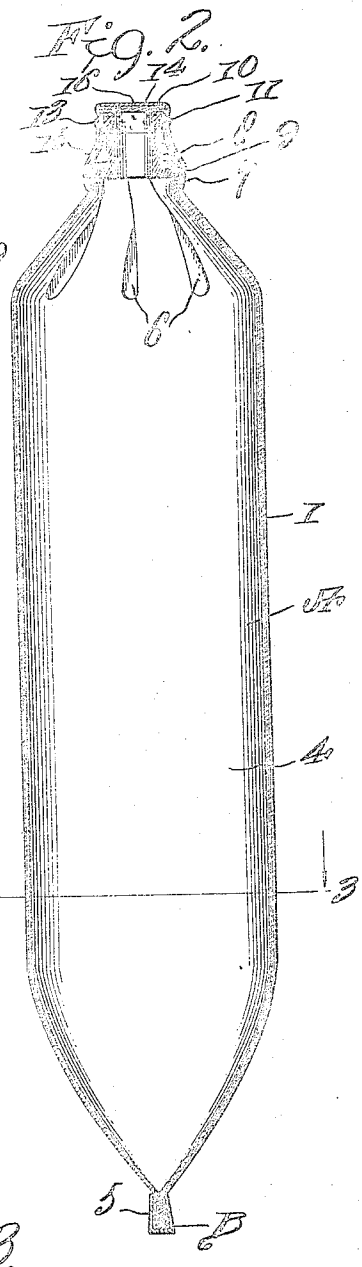
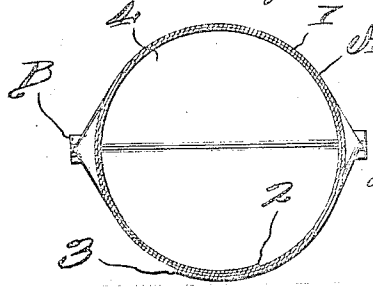


Fig. 3.



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UNITED STATES PATENT OFFICE.

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COLLAPSIBLE CONTAINER.

1,269,483. Specification of Letters Patent. Patented June 11, 1918.

Application filed May 18, 1917. Serial No. 169,563.

To all whom it may concern:

Be it known that I, SAMUEL C. MILLER, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Collapsible Containers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in collapsible containers adapted to contain fluid, semi-fluid or plastic material, such as lubricating oil, grease, vaseline, library paste, or other fluid, or plastic or semi-plastic material, which it is desired to use in small quantities, and at the same time to retain protected from the atmosphere.

The invention consists primarily of a hollow tubular roll made of one or more thicknesses of a single sheet of cotton duck, cotton canvas, or other suitable textile fabric, having overlapping ends, preferably cemented to form a tube, and having the bottom of this tube folded flat and held in place by a suitable clamping member, and the opposite end of the tube provided with a reduced nozzle whereby the contents of the tube may be expelled in the desired quantity.

My invention will be more fully understood by reference to the accompanying drawings, in which:

Figure 1 is a perspective view showing the collapsible container in the completed condition, parts being broken away to show the impervious coating applied to the interior fabric.

Fig. 2 shows a central vertical section through the container;

Fig. 3 shows a cross section along the line 3—3 of Fig. 2, and looking down; and

Fig. 4 is a sectional elevation on a larger scale showing the preferred construction of the nozzle.

A represents the substantially cylindrical body portion of the container, which is formed of a single strip of textile material 1, wrapped upon itself and having ends 2 and 3, as shown most clearly in Fig. 3. These ends may be cemented, glued, or otherwise attached to the body of the container.

The body of the container may be saturated with any suitable material, such as linseed oil, to cause it to be impervious to liquid or the air; or one or both faces of the textile fabric may be coated with a suitable material 4, as shown in Fig. 1, which is substantially liquid proof and air proof; or no coating or saturation may be used with certain materials where the container is intended to contain such material as will itself make the textile fabric impervious to air or liquid.

The bottom of the fabric is folded flat and bent back on itself as at 5, and then held in place by a metal clip B. The fabric may be cemented or glued at the fold 5, and then more securely held in place by the metal clip B. On certain occasions this clip B may be omitted.

The container, at its delivery end, is bent into folds 6, as shown in Figs. 1 and 2, and the ends of these folds are gathered up as at 7 between the ferrule 8 and the fastening member 9, which member is preferably flanged inward as at 10, to hold in place the cork ring 11, mounted above the ferrule 8, as shown most clearly in Fig. 4. The fastening member 9 is provided with a coarse screw thread 12 engaging the screw thread 13 on the outer cap 14.

This outer cap is preferably provided with a hood 15 in the form of a hollow truncated cone, whereby the outer cap may be more conveniently centered in the position for causing the screw threads to engage. This outer cap 14 is preferably provided with an inner disk of cork or other suitable material 16 to form a tight joint when the outer cap is screwed down in place.

The material to be contained in the collapsible tube is preferably forced in through the nozzle, which may be done in any convenient way, and then the cap is applied and the package is ready for transportation.

When in use the cap is removed, and the container is pressed on preferably from the bottom, upward, expelling the desired quantity of the material contained therein. This may be effected by simply pressing on the sides of the container, or an ordinary key may be applied to the base of the container and wound up in the usual way.

After the container is emptied, it may be refilled through the nozzle with a similar material and used over and over again.

By having the container made of cotton duck, or other suitable textile fabric, it is not apt to break when in use, as happens with the metal tubes when used.

Having thus described my invention, what I claim and desire to secure by Letters Patent of the United States is:

1. A collapsible container having its body portion in the form of a cylindrical tube made of a plurality of thicknesses of textile material having the ends thereof cemented or glued to said body portion, with one end of said tube bent to form a straight fold, with a metal clip engaging said fold and thus securely closing said end of said tube, and the other end of said tube folded to form a neck, a ferrule mounted in said neck, a fastening member mounted exterior to said ferrule and having its walls tapering outward and downward, with its lower end securing the neck of said fabric to said ferrule, and the said fastening member being provided with coarse screw threads above said ferrule, and a screw cap mounted over said fastening member, and provided with a hood in the form of a frustum of a hollow cone adapted to be centered by said fastening member, substantially as described.

2. A collapsible container having its body portion in the form of a cylindrical tube made of a plurality of thicknesses of textile material having the ends thereof cemented or glued to said body portion, with one end of said tube bent to form a straight fold, with a metal clip engaging said fold and thus securely closing said end of said tube, and the other end of said tube folded to form a neck, a ferrule mounted in said neck, a fastening member mounted exterior to said ferrule and having its walls tapering outward and downward, with its lower end securing the neck of said fabric to said ferrule, and the said fastening member being provided with the coarse screw threads above said ferrule, a screw cap mounted over said fastening member, and provided with a hood in the form of a frustum of a hollow cone adapted to be centered by said fastening member, with a cork ring mounted above said ferrule and inside of said fastening member, the said fastening member being provided with an inwardly projecting flange adapted to hold said cork ring in place, and a cork disk mounted inside of said screw cap, substantially as described.

3. A collapsible container having its body portion in the form of a cylindrical tube made of a plurality of thicknesses of textile material having a coating impervious to the contents of the tube on one side of said material, and having the ends thereof cemented or glued to said body portion, with one end of said tube bent to form a straight fold, with a metal clip engaging said fold and thus securely closing said end of said tube, and the other end of said tube folded to form a neck, a ferrule mounted in said neck, a fastening member mounted exterior to said ferrule and having its walls tapering outward and downward, with its lower end securing the neck of said fabric to said ferrule, and the said fastening member being provided with coarse screw threads above said ferrule, and a screw cap mounted over said fastening member, and provided with a hood in the form of a frustum of a hollow cone adapted to be centered by said fastening member, substantially as described.

In testimony whereof I affix my signature.

SAMUEL C. MILLER.