Jan. 16, 1934. A. W. LANGDON 1,943,327

CONTAINER

Filed Aug. 14, 1930

Fig. 1

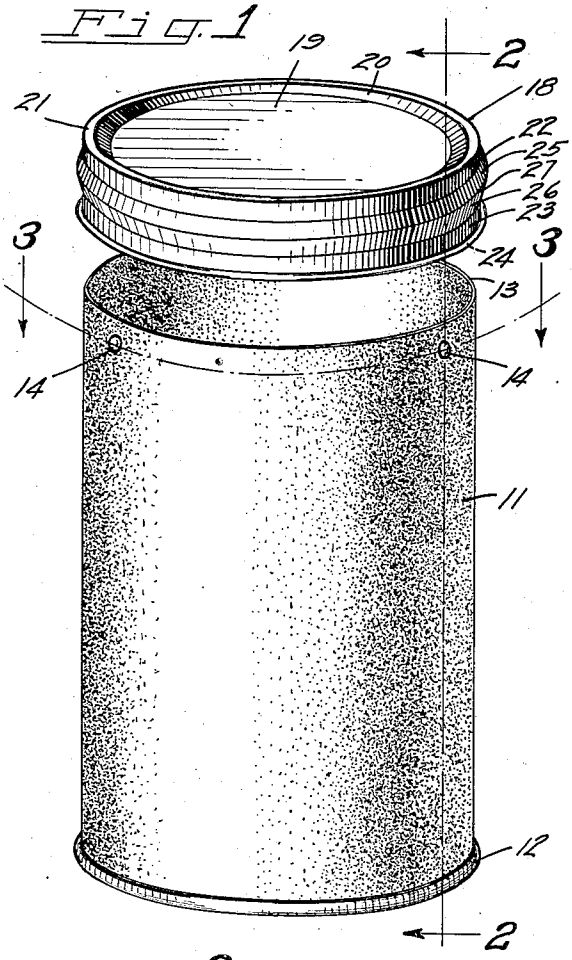


Fig. 2

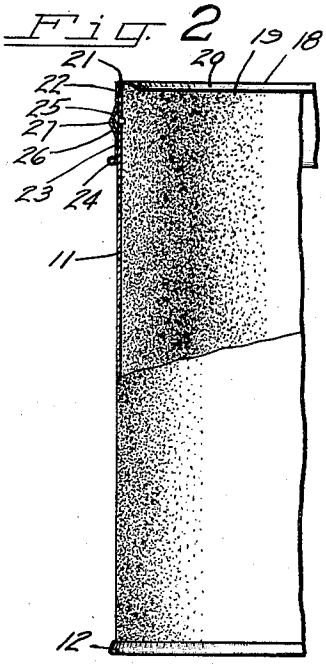


Fig. 3

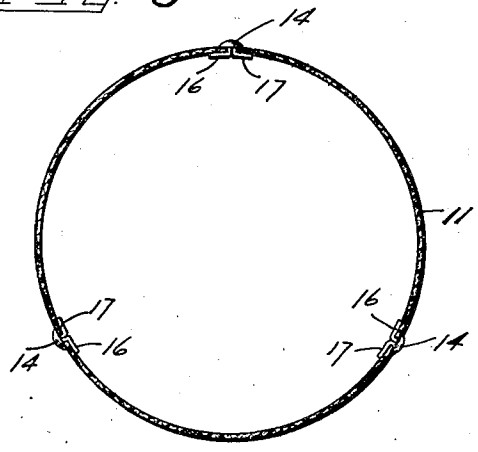
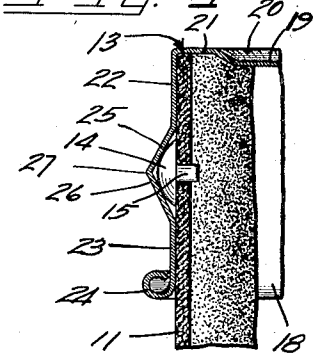


Fig. 4



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1,943,327

CONTAINER

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6 Claims. (Cl. 229—5.7)

This invention relates in general to fibre containers for the packaging, transporting and dispensing of a variety of products and more particularly to a fibre container having a permanent bottom and an improved easily removable metal cap.

The primary purpose of this invention is the provision of a novel, simple, inexpensive, tight fitting metal closure for a fibre container, which combines all the advantages of a simple slip cover with the additional merit of having a better locking engagement with cooperative parts of the container body than the ordinary type of slip cover.

An important object of this invention is the provision of such a modified slip cover having a locking channel or groove in its depending flange which cooperates with locking projections upon the fibre body which can be added to the conventional stock type of fibre body without any substantial structural changes in the latter.

Numerous other objects of the invention will be apparent as it is better understood from the following description, which, taken in connection with the accompanying drawing, discloses a preferred embodiment thereof.

Referring to the drawing:

Fig. 1 is a perspective view of a fibre container and closure embodying the invention, showing the metal cap removed and in superposed alignment with the container body;

Fig. 2 is a fragmentary elevational view of the container body and closure fully assembled;

Fig. 3 is a horizontal cross sectional view of the container body taken along the line 3—3 of Fig. 1; and

Fig. 4 is an enlarged, fragmentary, vertical cross sectional view of the upper part of the container body and closure showing the cooperating locking elements.

To illustrate a preferred embodiment of the invention, I have shown on the drawing a container having a cylindrical body 11, of fibre or other suitable relatively soft material, and having a bottom end 12, preferably of metal, crimped or otherwise permanently secured to the body 11. The body 11 has a smooth exterior annular wall surface and terminates at the top into a straight annular edge 13.

Where the body is composed of a plurality of layers of material, as shown in Fig. 4, the locking projections, having shanks passing through said layers, aid also in securing said layers together to preserve the solidity of the body.

A short distance below the top edge 13 and in a parallel annular line therewith, I have provided a series of metallic locking projections or beads, spaced an equal distance from each other. In the preferred illustration on the drawing, three of these locking beads are shown. However, more than three may be employed.

Each of these locking projections comprises a well known type of split metal rivet, having a rounded rivet head or bead 14 and integral therewith a rivet pin 15 which is split into two pointed shanks 16 and 17, which are adapted to pierce or perforate the relatively soft material of the wall of the fibre body 11 at the desired point of location of the locking projection and which, after the perforation has been accomplished, may be radially separated or parted and bent back upon themselves in opposite directions to securely rivet the locking bead in position upon the body wall.

A metal cap or cover 18 is adapted to fit snugly over the upper outer surface of the container body 11. It is of the general configuration of a slip cover and comprises a substantially flat central panel 19, a slanting annular portion 20, a flat, horizontal annular shoulder portion 21 adapted to overlie and engage the annular top edge 13 of the body 11, and a vertically depending flange of substantial width.

This depending flange, instead of having a straight flat annular wall as in the simple type of slip cover, has an upper straight vertical portion 22, a lower straight vertical portion 23, and has its lowermost edge turned outwardly, upwardly and inwardly to form a hollow bead or curl 24. The straight annular portions 22 and 23 of the depending flange are on a plane which is at right angles to the plane of the shoulder 21, and the metal between these two straight portions is bent outwardly to form a V-shaped annular groove, comprising an upper V-shank or leg 25, a lower V-shank or leg 26 and an annular apex 27.

In applying the cover 18, the curled edge of the depending flange of the cover will easily slip over the top edge 13 of the body 11, until the cover meets the rivet heads 14. The latter will then slightly oppose a downward pressure upon the cover 18, and being rounded, they will yield inwardly to this downward pressure and owing to a slight resiliency inherent in the cylindrical fibre body 11, these rivet heads 14 will be pressed inwardly by the straight portion 23 of the depending flange until further downward pressure upon the cover 18 brings the rivet heads 14 into alignment with the annular groove of the depending

flange, when they will snap back into normal position and become locked with the groove or channel of the depending flange.

A substantially secure locking engagement is accordingly established between the body and cover which will positively resist accidental displacement of the cover and yet will permit easy manual removal of it.

It will be quite apparent that this invention is equally adaptable to containers of other than cylindrical shape and it is also conceivable that a fibre cover with locking groove might be substituted for the metal cover preferably illustrated in the drawing.

It is thought that the invention and many of its attendant advantages will be understood from the foregoing description, and it will be apparent that various changes may be made in the form, construction and arrangement of the parts without departing from the spirit and scope of the invention or sacrificing all of its material advantages, the form hereinbefore described being merely a preferred embodiment thereof.

I claim:—

1. In a fibre container, in combination, a fibre body having metal rivets arranged annularly adjacent its top edge and having shanks passing through said body, a cap arrangeable over said body and having a depending flange provided with a recess on its inner surface and adapted to snap over the heads of said rivets to provide a removable locking engagement between said body and said cap.

2. In a fibre container, in combination, a fibre body having metal beads arranged peripherally adjacent its top edge and having shanks passing through said body, a slip cover arrangeable over said body and having an internal recess adapted to snap over the heads of said beads to provide a removable locking engagement between said body and said cover.

3. A closure for a fibre container, comprising in combination, a fibre body, metal locking beads upon said body and having shanks passing through said body, a cap of the slip cover type, said cap having a groove cooperating with the heads of said beads to provide a locking engagement between said body and said cap.

4. A closure for a fibre container, comprising in combination, a fibre body, metal locking beads separate from and secured peripherally to said body adjacent its top edge and parallel therewith and having shanks passing through said body, a cap of the slip cover type, said cap having means cooperating with the heads of said beads to provide releasable interlocking engagement between said body and said cap.

5. A closure for a fibre container, comprising in combination, a fibre body, a series of spaced metal locking beads separate from and secured peripherally to said body adjacent its top edge and having shanks passing through said body, a cap of the slip cover type, said cap having a depending flange with a locking groove adapted to releasably interlock with the heads of said beads.

6. A closure for a fibre container, comprising in combination, a fibre body, a series of spaced metal locking beads separate from and riveted peripherally to said body in a line parallel with its top edge, a metal cap of the slip cover type, having a depending flange with an internal V-shaped channel, adapted to snap over the heads of said beads and form a releasable locking engagement therewith.

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