April 21, 1931. D. G. MAGILL 1,801,514

FIBER CAN

Filed June 23, 1928

Fig. 1

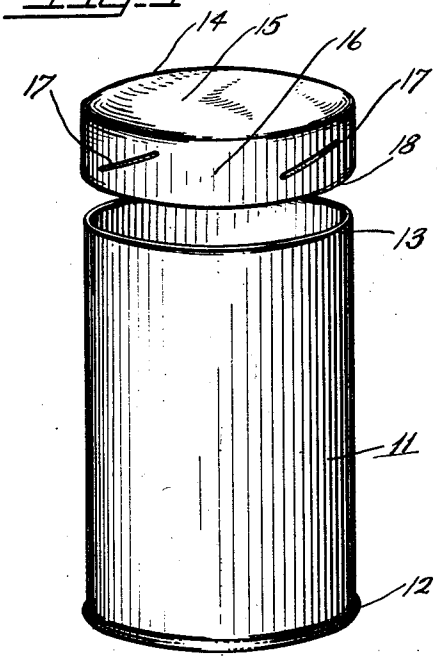


Fig. 3

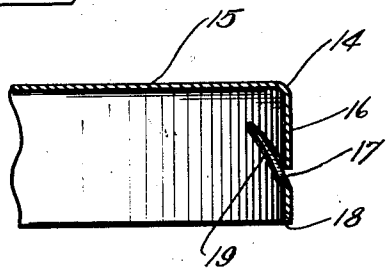


Fig. 4

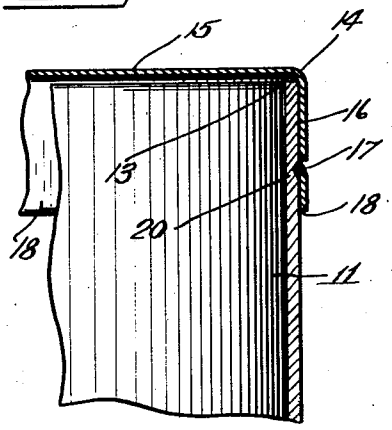
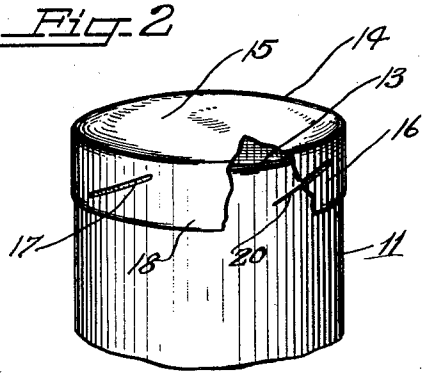


Fig. 2



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Patented Apr. 21, 1931 1,801,514

UNITED STATES PATENT OFFICE

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FIBER CAN

Application filed June 23, 1928. Serial No. 287,858.

This invention relates in general to fiber 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 removable metal cap.

The object of my invention is the provision for a fiber container of an improved metal cap having screw threads or interrupted threads and which cap when applied to the container produces in the container cooperating cover engaging threads or indentations.

Another object of my invention is the provision of an improved screw cap having inwardly projecting threads which because of their improved form enter or embed themselves into the softer material of the can body and produce a secure locking engagement between the can body and the cap until the latter is positively disengaged by a certain reverse movement.

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

Referring to the drawings:

Figure 1 is a perspective view of a fiber container and closure embodying my invention, with the closure removed;

Fig. 2 is a fragmentary perspective view, with parts broken away, showing the cover in place, and also showing the threads formed on the container body;

Fig. 3 is a cross-sectional detail view of the cover, showing one of the interrupted threads or cutting projections, and

Fig. 4 is an enlarged cross-sectional view showing the cover and the container body tightly engaged.

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

A cap or cover 14 of sheet metal is adapted to fit snugly over the upper part of the container body 11. It is of the general configuration of a slip cover and comprises a substantially flat top 15 and a depending annular skirt portion of flange 16. The metal of the skirt or flange 16 is severed and pressed inwardly at regular intervals to form inward projections or interrupted cutting threads 17 arranged obliquely to the lower edge 18 of the flange 16 so as to be of screw-thread form. The inside diameter of the cap 14 is substantially the same or slightly larger than the outside diameter of the container top so that the cap 14 will snugly fit over the container top.

Referring now to Figs. 2 and 4, it will be readily seen that when the lower edge 18 of the cap 14 is slipped over the edge 13 of the container body 11 the inwardly projecting cutting threads 17 will come in contact with the smooth wall of the container 11 and will stop further downward movement of the flange 16 until pressure is applied. When pressure is applied and the cap 14 is given a partial rotation, the inwardly projecting sharp edges of the threads 17 will gradually embed themselves in the soft material of the container body 11 and will cut grooves or threads therein corresponding in incline and position to the grooves or threads 17, and the container body 11 and the cap 14 will thus be tightly engaged.

Any straight outward pull of the cap 14, as is usually employed to remove the ordinary slip cover, will not remove my improved screw cap. On the contrary, such straight outward pull has a tendency to cause the inward projections 17 to anchor or embed themselves more firmly in the soft material of the container body. Rotation of the cap in the reverse direction however will disengage the cover threads 17 from the body threads 20 and permit the removal of the cap from the container. The cover may then be reapplied and removed as often as the ordinary handling of the container may require.

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. A closure for a fiber container, comprising a cap of the slip cover type, said cap having depending annular flange and inwardly struck interrupted threads in said flange adapted to form corresponding threads upon said container body when the cap is applied to said body.

2. A closure for fiber container, comprising a metal cap arrangeable over said container to close the same, said cap having a depending annular flange slit at intervals to provide inclined interrupted threads, the material beneath the slits being pressed inwardly to provide upwardly extending sharp projections adapted to cut into the material of the body when the cap is screwed in place.

DONALD G. MAGILL.