July 12, 1949. J. R. COX 2,475,948

FRUIT JAR OPENER

Filed Jan. 13, 1945

Fig. 1.

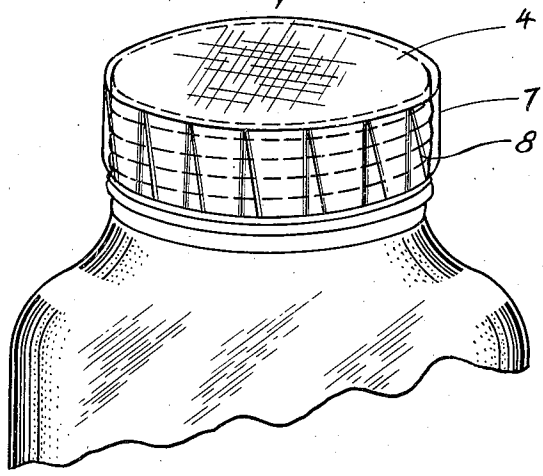


Fig. 2.

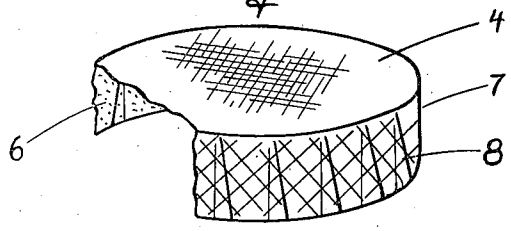
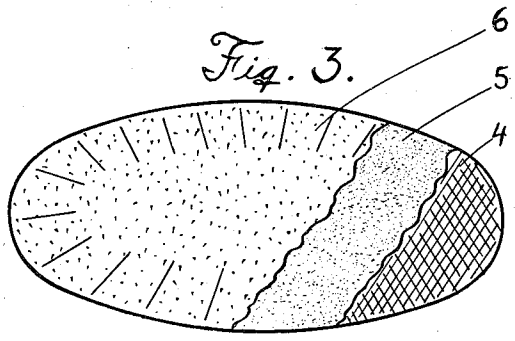


Fig. 3.



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Patented July 12, 1949

2,475,948

UNITED STATES PATENT OFFICE

2,475,948

FRUIT JAR OPENER

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Application January 13, 1945, Serial No. 572,636

3 Claims. (Cl. 81—3.40)

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My invention described in detail as follows, relates to a novel fruit jar opener.

The extensive use of preserving jars having screw tops or retaining rings for tops presents the problem of removing these tops. It frequently happens that by cooling or as a result of long continued standing, the screw tops stick tightly on the jars and resist the normal effort desirable for removable. I have found that a simple device can be formed for greatly facilitating the unscrewing of these tops.

One of the objects of my invention is to provide means convenient for handling and with the minimum bulk, by which these covers may be rapidly unscrewed. In other words I have provided means which do not increase the size of the device to be manipulated. As these devices are intended primarily for women's use, it is most important that no undue bulk or increase in diameter be imposed as this would make it difficult for use by women with their relatively smaller hands.

Another object of my invention is to provide a durable device economically and easily manufactured and which will require a minimum of space for its storage. In fact the device is of such nature that it may be supplied with the ordinary sealed package of preserving jars in the same manner in which rubber rings are customarily supplied.

Other objects of my invention will readily be understood from the following description of the preferred form as illustrated in the accompanying drawings.

In the drawings:

Fig. 1 is a perspective view of a fruit jar showing the application of my improved opener;

Fig. 2 is a similar view, partly in section, of the opener itself, and

Fig. 3 is a perspective view of the blank used.

In accordance with my invention, in a preferred form thereof, I form an improved opener for tops of fruit jars from a thin sheet of flexible material, preferably a textile fabric given a permanent set by molding, vulcanizing or the like. It thus conforms to the shape of the screw top of the jar and will fit closely upon that top. It thus is as convenient to hold or grip as the metal top or ring itself.

Frictional engagement between the opener and the screw top or ring is assured by supplying a thin layer of abrasive particles finely distributed over the inner surface of the opener and bonded thereto in any suitable manner. In my preferred form, the device as shown in the drawings consists of a blank 4. This blank may be square or circular in form. It is to be made of flexible material preferably woven or knitted textile fabric. The fabric may be sized or stiffened with glue or the like and molded to a flat cup-shape fitting a fruit jar cover before the sizing stiffens.

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Preferably at least one side of the blank 4 has a coating 5 of adhesive. By this term I mean a coating which is adhesive when applied but which later loses its adhesive nature and becomes relatively hard and non-tacky. There are many such materials some of which may be natural rubber and synthetic resins. These latter materials in their final fixed form are waterproof. This property is shared by many of the synthetic resins and plastics now on the market and adapted for coating purposes. In some instances these are thermo-setting or vulcanizable as is the case with natural rubber.

It will be obvious that such coating material in its final form retains a slight flexibility. However, it is also capable when applied as a coating to textiles to size the textile and to give the latter predetermined form by molding or the like.

Abrasive material 6 in the form of relatively fine sharp particles is finely distributed or spread over the coated surface of the fabric before the coating has been set, vulcanized or hardened. These abrasive particles may be in the form of small granules or crystals. Suitable materials for this abrasive are emery, carborundum, quartz and other natural or synthetic products.

The coated blank contains the particles 6 embedded in the coating 5 dried or hardened, thus embedding the particles 6 permanently in the coating 5. The surface holding the particles 6 is the one which is to become the inner surface of the completed opener. Either in the course of this operation or as a subsequent step the blank is molded into the final form illustrated in Fig. 1. This provides a peripheral flange 7 having overlapping plaits 8. The form is given a permanent set as the result of the operation. An incidental advantage is that this provides multiple plies of the fabric where the greatest wear and hardest handling occurs. At the same time if this molding is carried out while the adhesive is still tacky and plastic these folds or plaits may become stuck together to insure the final form and to increase the durability of the gripping flange. The flange 7 may be formed so that it is slightly conical to facilitate use of the device on various diameter jar tops, the exact shape of the flange 7, of course,

is a function of the shape of the mold used in the manufacture of the article.

It is thus apparent that the resulting article is a durable and simple implement of undue bulk and easily handled. It will conform closely to the outer surface of the screw cover or ring for the preserving jar. The normal gripping action upon the peripheral flange will maintain a tight engagement upon the screw top or ring and enable it to be unscrewed with the minimum application of force.

The device being relatively waterproof and durable may be easily and handily kept for repeated use.

While I have described the preferred form of my invention it is clearly apparent that it is susceptible of considerable modifications in materials, proportions and forms within the scope of the appended claims.

What I claim is:

1. A jar cap opener comprising a substantially flat circular central portion composed of a sheet of flexible material and an integral peripheral flange depending from and surrounding said central portion, said flange comprising a plurality of thickened portions composed of a plurality of layers of said flexible material folded and secured in overlapping plaits spaced circumferentially around the flange, the inner surface of said flange having a coating of bonding material and abrasive particles bonded to said flange by said material.

2. A jar cap opener comprising a substantially flat circular central portion composed of a sheet of flexible material and an integral peripheral flange depending from and surrounding said

central portion, said flange comprising a plurality of thickened portions composed of a plurality of layers of said flexible material folded and secured in overlapping plaits spaced circumferentially around the flange, the inner surface of said flange and the under-surface of said central portion having a coating of bonding material and abrasive particles bonded to said flange by said material.

3. A jar cap opener comprising a substantially flat circular central portion composed of a sheet of textile fabric and an integral peripheral flange depending from and surrounding said central portion, said flange comprising a plurality of thickened portions composed of a plurality of layers of said textile fabric folded and secured in overlapping plaits, the plaits being substantially perpendicular to the central portion, the inner surface of said flange having a coating of bonding material and abrasive particles bonded to said flange by said material.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,376,395	Baker	May 3, 1921
1,615,196	Lilja	Jan. 18, 1927
1,775,631	Carlton	Sept. 16, 1930
1,952,660	Dryden	Mar. 27, 1934
2,189,467	Jacobs	Feb. 6, 1940
2,235,313	Cleveland	Mar. 18, 1941
2,375,129	Norton	May 1, 1945