(No Model.)

H. A. HOPPE.

FRUIT JAR COVER.

No. 275,047. Patented Apr. 3, 1883.

Fig. 1.

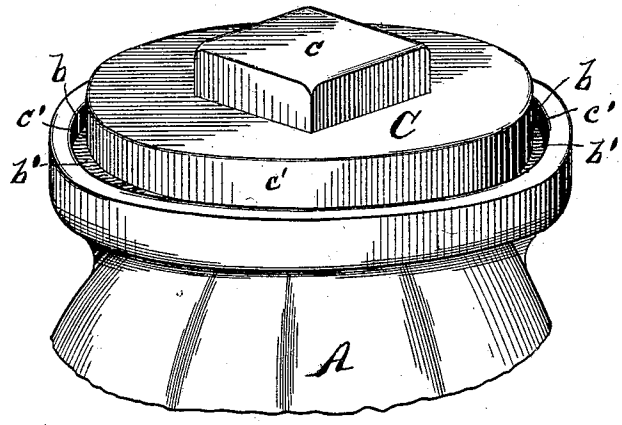


Fig. 2.

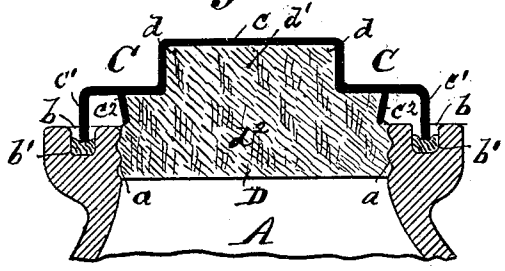


Fig. 3.

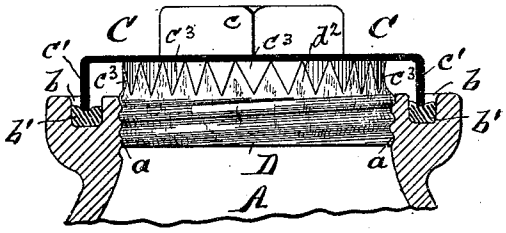
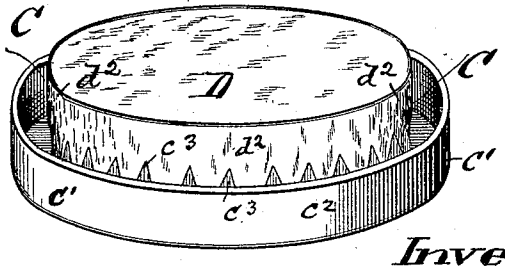


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY A. HOPPE, OF ST. LOUIS, MISSOURI.

FRUIT-JAR COVER.

SPECIFICATION forming part of Letters Patent No. 275,047, dated April 3, 1883.

Application filed February 23, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. HOPPE, a citizen of the United States, residing at St. Louis, and State of Missouri, have invented a new and useful Cover for Fruit-Jars, &c., of which the following is a specification.

My invention is intended to apply to jars, bottles, cans, and similar vessels for preserving fruit and various other contents that require to be sealed.

According to my invention I provide a cover having a disk of cork, wherewith the air-tight joint or closure can be made with the threaded portion of the neck of the jar. At same time a further air-tight joint is provided between the flange of the cover, drawn tight against an interposed packing in an annular groove of the jar when the cork disk or cover is screwed down to completely close the jar.

My invention, as regards its specific novel parts, can be stated to consist, first, in the novel manner and means whereby the cork material can be firmly embedded and made to form an immovable part of the cover; secondly, in combining with the cover carrying the cork, as hereinafter described, the further outer annular flange fitted to engage an annular groove of the jar having a gasket or packing; thirdly, in the combination of my improved cover parts, consisting of the metal cover, its annular outer flange, also cork disk, with the jar, &c., having a neck with internal threads to receive the cork, and also groove and packing for the joint with the flange of the cover. I attain the said objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view, chiefly to show my improved cover as it appears when applied to close a jar. Fig. 2 is a central vertical section through a fruit-jar with my improved cover in place. Fig. 3 also shows the cover in place, with a side view of the cork disk as it appears united to the serrated flange and hollow cap or head portions of the cover. Fig. 4 is a perspective view of the cover when same is inverted.

Similar letters refer to similar parts throughout the several views.

A represents my jar, formed like ordinary fruit-jars of the bottle form, but provided with internal threads at *a*, (see Figs. 2, 3,) and having the annular groove at *b*. (See Figs. 1, 2, 3.) The cork of my cover is screwed down into the threads *a* of the jar, forming the first air-tight joint or closure; and it is to the annular groove *b* and its packing *b'* that the vertical or outer flange of my cover is united, forming the second air-tight closure.

C represents the cover; *c*, its square-shaped head; *c'*, its outer annular flange; c^2, its inner flange. The cover, with its said parts, may be of sheet metal, pressed or otherwise wrought into the shape shown in the figures. The head *c* of the cover, projecting above the plane of the cover, forms a square-shaped cavity, *d*, into which the corresponding shaped portion of the cork is firmly embedded. (See Fig. 2.) By its outer flange, *c'*, the cover presses or binds top of the packing in the annular groove of the jar, and performs the function of surrounding the joint of the cork with the jar with an outer air-tight joint. By its inner flange, c^2, the cork disk is further secured firmly from moving, since the serrations or V cuts c^3 can be embedded in the side of the cork disk, as indicated in Figs. 2, 3, 4.

D represents a single piece of cork cut or made to have the shape indicated—that is to say, to have the projecting square-shaped head *d'* and the thick disk portion d^2. (See Figs. 2, 3, 4.

It has always been a desideratum to close jars or vessels of this class with cork—a material known not to have any injurious effect upon the fruit or contents; but it has been found very difficult to unite or make cork material a part of the cover, so as to render same practical for uses to hermetically seal or close a jar. I embed the cork firmly by its head *d'* into the hollow or mortise formed by the metal head *c* of the cover, (see Fig. 2,) preventing the cork entirely from turning; and this joint is further made certain, strong, and durable by embedding the V-cut edges of the flange c^2 of the cover into the side of the cork. (See Figs. 2, 3, 4.) Preferably the flange c^2 tapers to wedge the cork at that point. If otherwise made, the swelling of the cork, when dipped in hot water, insures at the time of sealing the jar a most strong, tight, and immovable fastening of the cork to the cover.

To close or seal the jar, or to put my improved cover in place, I simply dip the cover in hot water, then screw the cover down, forcing the cork disk to enter the threads of the jar, as indicated in Figs. 2, 3. In so screwing the cover down to its place its outer flange presses upon the packing in the groove and closes the joint at that point. The contents are thus protected by two different air-tight joints, the threads enabling the operator to bind the outer flange tightly against the packing. Specially is the cork material firmly united to the cover and adapted to close the jar. In fact, a wrench can be applied to the square-shaped head *c* of the cover to force the cork properly into the neck of the jar, or to loosen the cover from the jar, as the case may be.

I am aware that fruit-jars and the like have been made with an annular groove and provided with a gasket to form an air-tight joint with the flange of the cover; nor do I claim said parts, broadly; but

What I do claim is—

1. In combination with the cover C, having the head *c* and inner flange, c^2, with V-shaped cut edges, the cork D, having head d' and disk-shaped portion d^2, by means whereof the said cork material can be firmly secured to the cover and made to form part of same, substantially as described.

2. The combination of the cover C, having the head *c*, inner flange, c^2, with V-shaped cut edges, and the cork D, having head d' and disk-shaped portion d^2, with a fruit or similar jar having threads *a*, by means whereof the said cover parts can be sealed to the jar, substantially as and for the purposes set forth.

3. The combination of the cover C, having the head *c*, inner flange, c^2, with serrations c^3, and the outer flange, c', the cork D, shaped to have the head and disk portions d' d^2, and a fruit or similar jar having threads *a*, annular groove *b*, and packing b', by means whereof the said jar, &c., can be made air-tight, in the manner and for the purposes set forth.

In testimony of said invention I have hereunto set my hand.

HENRY A. HOPPE.

Witnesses:

TIMOTHY DINAN,

PETER MCDANIEL.