

No. 826,452.

PATENTED JULY 17, 1906.

T. C. THOMAS.

FRUIT JAR.

APPLICATION FILED OCT. 6, 1905.

Fig. 1.

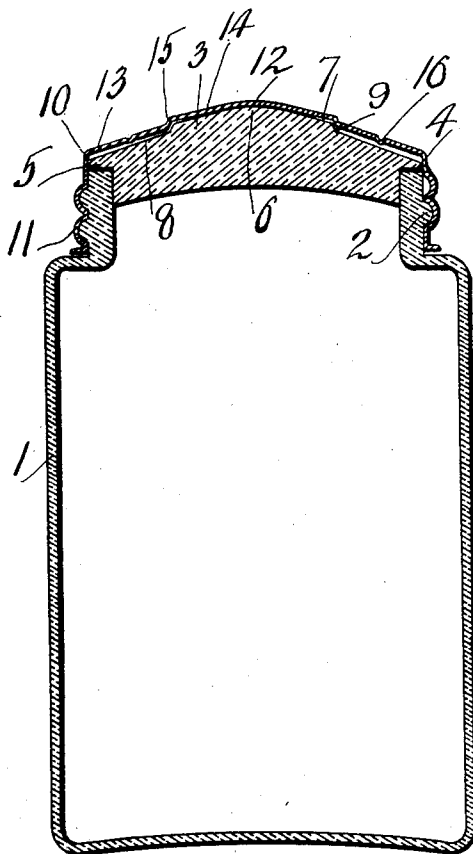
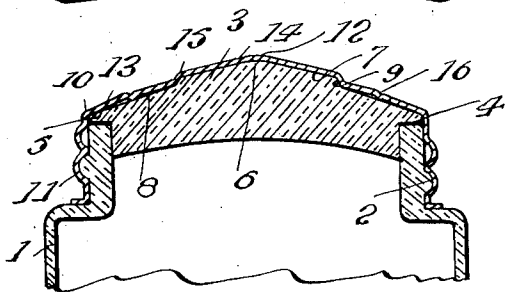


Fig. 2.



Witnesses:-

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FRUIT-JAR.

No. 826,452.

Specification of Letters Patent.

Patented July 17, 1906.

Application filed October 6, 1905. Serial No. 281,608.

To all whom it may concern:

Be it known that I, THOMAS C. THOMAS, a citizen of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Fruit-Jars; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention has reference to certain new and useful improvements in fruit-jars wherein a cover is provided which forms an absolutely tight seal for the jar and to a locking-cap for securing the said cover upon the fruit-jar.

The invention consists, essentially, of a cover or stopper for fruit-jars arranged with a tapered face and a central apex, a cap covering the stopper and provided with a centrally-disposed indented portion arranged to be engaged by the apex of the stopper, the said cap also provided with a tapered or arched body and a depressed ring removed from the indented portion of said cap.

The invention has for its further object a cover or stopper for fruit-jars arranged with a tapered face divided into two portions through an offset or annular shoulder, a cap adapted to cover the said stopper and provided with arched body portions which are dissimilar and distinguished by an annular shoulder conforming to that portion of the stopper, the said cap being also provided with a depressed ridge removed from the annular shoulder.

The invention consists in the construction and combination of parts and details, as will be fully described and set forth hereinafter and then pointed out in the claims.

Figure 1 is a vertical transverse sectional view of a fruit-jar containing my improvements, but showing the cap not fully down upon the stopper; and Fig. 2 is a sectional detail of the upper portion of the jar, showing the cap screwed down upon the stopper.

Like numerals of reference indicate corresponding parts throughout the figures.

The jar, which is indicated as 1, is preferably made of glass, but may be made of any other suitable material, and is provided with the exteriorly-screw-threaded neck 2.

3 denotes a cover or stopper of glass, porcelain, or other non-corrosive material adapted

to close the top of the jar and having a flange fitting within the neck or the mouth of the said jar, and a rubber gasket 4 is disposed on the top of the jar to fit between the same and an annular projected shoulder 5 from the said stopper. The stopper 3 is provided with a central apex 6, merging into an annular tapered face 7, which is separated from an outer annular tapered face 8 by means of an annular offset or shoulder 9. The faces 7 and 8 of the said stopper show different inclines, which I prefer, although they both may have the same taper.

10 indicates a cap or sheet-metal outer covering provided with a screw-threaded flange 11 to adapt the same to be screwed on the threaded neck 2 of the jar. The said cap has somewhat the same general appearance as the stopper, being provided with a centrally-disposed indented portion 12, arranged to be engaged by the apex 6 of the stopper. The cap is further provided with the outer and inner annular tapered portions 13 and 14, which are adapted to coincide, respectively, with the tapered faces 8 and 7 of the stopper, and the portions 13 and 14 of the cap are divided by the depressed annular offset or shoulder 15, corresponding and adapted to coincide with the offset or shoulder 9 of the stopper, and in the portion 13 of the cap I provide a depressed ridge 16, which is removed from the offset 15 therein or approximately midway of the threaded flange and the annular shoulder of the cap.

In operation after the jar has been filled the packing-ring 4 is placed upon the top of the jar and the stopper 3 in the neck thereof with the shoulder portion 5 engaging and resting upon the said ring 4. The cap 10 is then screwed upon the neck of the jar, and the indented portion thereof pressing on the apex of the stopper presses the shoulder of the stopper against the gasket or packing-ring and in turn the gasket against the top of the jar, thereby forming an absolutely tight joint and seal. In the operation of closing the jar by the stopper and the cap the first engagement of the cap is centrally of the stopper through the apex thereof and the indented portion of the cap. In screwing the cap onto the neck of the jar after the engagement of the indented portion thereof with the apex of the stopper the shoulder portion of the cap is caused to subsequently

engage the corresponding shoulder or offset of the stopper, the resiliency of the cap or the arched portion thereof permitting it to be drawn down to conform to the surface of the said stopper. In addition to this engagement of the cap with the stopper the office of the depressed ring is to engage the outer annular tapered surface or face of the stopper and firmly press the shoulder of the said stopper down onto the top of the jar. Thus, it will be seen, to securely seal the jar I provide a contact between three different points of the cap and the stopper, which gives a uniform pressure between the cap and the stopper for sealing the neck of the jar—the first being the engaging of the apex of the stopper with the indented portion of the cap for positioning the stopper within the neck of the jar; second, the engagement of the corresponding annular shoulders or offsets of the stopper and the cap, and, third, the pressure applied by the depressed annular ridge of the cap on the outer annular tapered face of the said stopper.

Providing a cover or closure for fruit-jars substantially as herein shown under no circumstances can the contents of the jar come into contact with metal either when filling or emptying the jar, and thus all danger of contaminating the contents of the jar is avoided.

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

1. In combination with a jar, a stopper arranged with a tapered face and a central apex 6, a cap covering the stopper and provided with a centrally-disposed indented portion arranged to be engaged by the apex 6, and also provided with a tapered or arched body and a depressed ridge removed from the indented portion of the cap, all arranged sub-

stantially in the manner and for the purpose described.

2. In combination with a jar, a stopper arranged with a tapered face having inner and outer tapered portions separated by an annular shoulder, a cap covering the said stopper provided with inner and outer tapered portions separated by an annular shoulder adapted to conform to and coincide with the tapered portions and shoulder of the stopper, all arranged substantially in the manner and for the purpose described.

3. In combination with a jar, a stopper arranged with a tapered face having inner and outer dissimilar tapered portions divided by an annular shoulder, a cap covering the said stopper provided with inner and outer dissimilar tapered portions divided by an annular shoulder adapted to conform to and coincide with the tapered portions and shoulder of the stopper, all arranged substantially in the manner and for the purpose described.

4. In combination with a jar, a stopper arranged with a tapered face having inner and outer dissimilar tapered portions divided by an annular shoulder, a cap covering the said stopper provided with inner and outer dissimilar tapered portions divided by an annular shoulder adapted to conform to and coincide with the tapered portions and shoulder of the stopper, and an annular depressed ridge in the said cap removed outwardly from the annular shoulder thereof, all arranged substantially in the manner and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS C. THOMAS.

Witnesses:

CHAS. W. LA PORTE,
R. B. LA PORTE.