

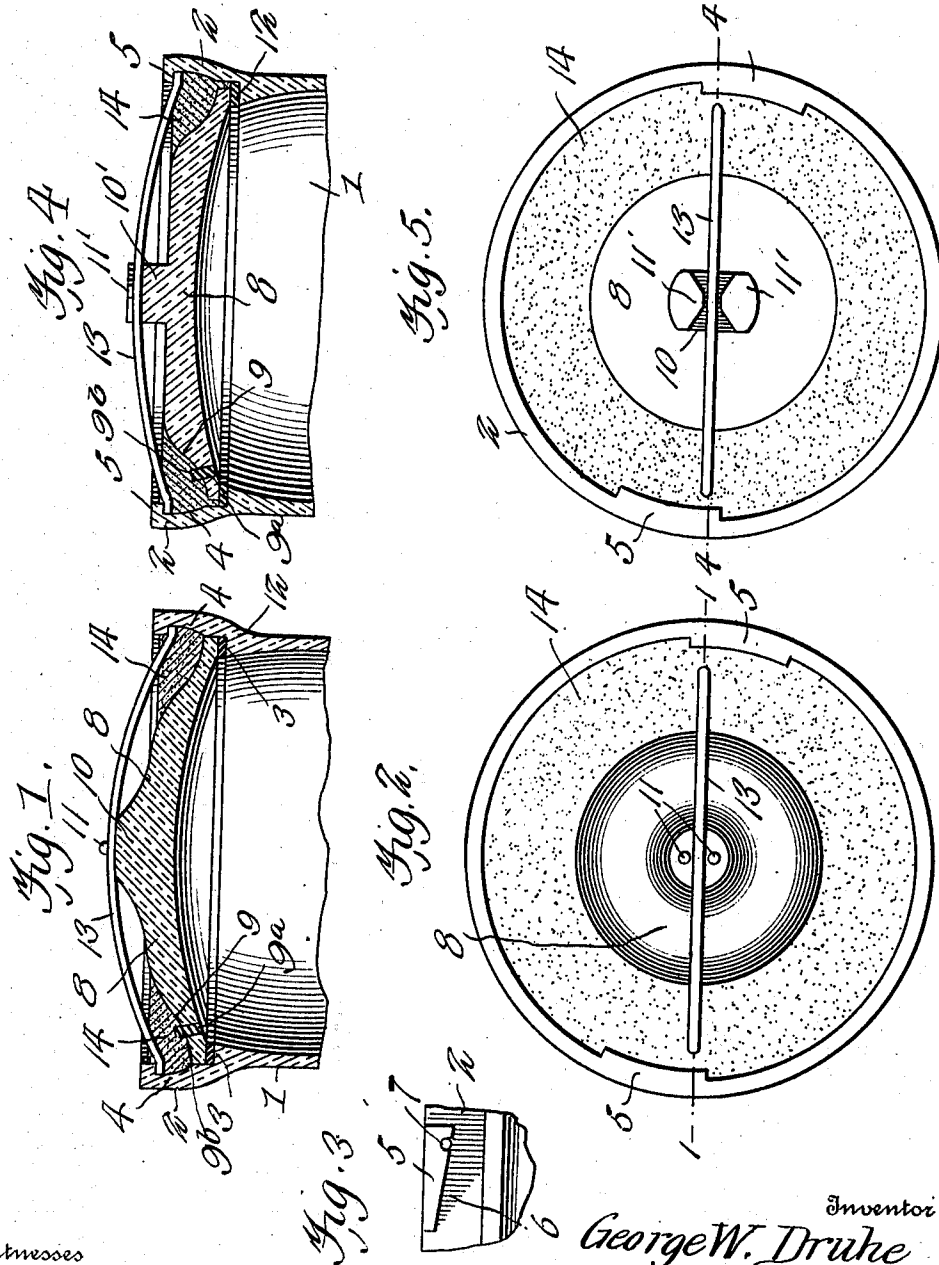
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FRUIT JAR.

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970,896.

Patented Sept. 20, 1910.



Witnesses

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UNITED STATES PATENT OFFICE.

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FRUIT-JAR.

970,896.

Specification of Letters Patent. Patented Sept. 20, 1910.

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To all whom it may concern:

Be it known that I, GEORGE W. DRUHE, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented new and useful Improvements in Fruit-Jars, of which the following is a specification.

This invention relates to improvements in seals for fruit and other like jars, the object of the invention being to provide a simple, inexpensive and efficient construction of seal whereby the jar may be hermetically closed against the entrance of air and deterioration of its contents.

The invention consists of the features of construction, combination and arrangement of parts hereinafter fully described and claimed, reference being had to the accompanying drawings, in which:—

Figure 1 is a central vertical section through the mouth of a jar closed by my improved seal; Fig. 2 is a top plan view of the same; Fig. 3 is a fragmentary detail view looking toward the inner side of the rim of the jar; Fig. 4 is a view similar to Fig. 1 showing a modified form of construction; Fig. 5 is a top plan view of the same.

Referring to the drawing 1 designates the body of a fruit or other jar, provided at its upper end with a mouth or rim portion 2 having at its base an internal annular shoulder 3. The said mouth or rim portion 2 is of somewhat greater diameter than the body of the jar for the free inlet and discharge of the contents thereof, and is provided above the shoulder 3 with an annular undercut groove or recess 4, above which are arranged at diametrically opposite points cam lugs or projections 5 having inclined lower surfaces 6, each lug being formed with a receiving notch 7 adjacent the lower end of its inclined surface.

The lid or cover 8 of the jar may be made of glass or other suitable material, and is preferably of concavo-convex form. The upper surface of the lid slopes or tapers from its central portion downwardly and outwardly to its marginal edge, such surface of the lid being provided adjacent said edge with a recess or concaved portion 9. The central portion of the lid is provided with an upstanding lug or projection 10 having spaced pins or fingers 11 extending therefrom.

After the jar is filled with the fruit or substance to be preserved, a washer or gasket

12 of rubber or other suitable material is seated upon the shoulder 3, after which the lid or cover 8 is applied in position to rest upon the washer, so as to form a close joint around said shoulder. The lid or cover is adapted to be held in position by a bowed retaining spring 13 adapted to rest centrally upon the lug 10 and to extend between the pins 11 and to be held from lateral displacement thereby. The ends of the spring extend transversely across the rim or mouth 2 and are bent to form fingers to engage the inclined surfaces 6 of the lugs 5 and to seat within the notches 7, by which said spring may be locked in position at the time when it is adjusted to exert the greatest amount of pressure upon the lid. It will be understood of course that the spring may be applied to and released from engagement with the lugs by a partial rotary movement in one direction or the other.

After the lid has been locked in position in the manner described, a body of sealing wax 14 in a molten condition is poured into the channel or space formed by the recess 4 and the concaved surface 9 of the lid, such wax when cooling forming a hardened seal in which the ends of the retaining spring are embedded and which securely and hermetically seals the joint between the rim and lid to prevent the entrance of air. When it is desired to open the jar, the retaining spring may be turned to withdraw it from engagement with the locking lugs, and the seal 14 broken and removed in any suitable manner, whereupon the lid may be detached. If, during the operation of filling the jar, any portion of the fruit or juices should come in contact with the inner surfaces of the rim, they may be cleanly removed by the use of a cloth or other wiper so that the sealing wax will adhere firmly to the surfaces of the rim and lid.

If desired, the portion 19 of the cover may be provided with an air inlet opening 9^a adapted to be closed by a plug 9^b of rubber or other suitable material. If the jar is sealed when the contents are hot, the air between the cover and contents will, upon the cooling of the jar, become rarefied and form a partial vacuum, by which the external air pressure is caused to aid in holding the cover in place. The air inlet and plug are covered when the jar is sealed by the wax, thus preventing possibility of leakage. After the removal of the wax in opening the jar, the

plug is extracted, thus allowing the cover to be readily removed when the locking spring is released from the lugs.

In the modified form of my invention shown in Figs. 4 and 5, the lug or projection 10' is of somewhat different form from that shown in Fig. 1 and is provided with a transverse groove forming projections or retaining members 11' serving the same function as the pins 11 illustrated in Figs. 1 and 2 to hold the retaining spring against lateral displacement. In this form of the invention also the lid is of somewhat smaller diameter than the interior of the rim above the shoulder 3, so as to form a space or crevice in which the wax may lodge to make a secure seal at that point.

Having thus described the invention what is claimed is:

20 1. The combination with a jar having a mouth portion provided with an internal shoulder, an annular recess above said shoulder, and cam locking members above said recess, of a lid adapted to be inserted within
25 the mouth and to be supported by said shoulder, said lid having its upper surface provided with an upstanding central portion formed with spaced guides and provided adjacent its peripheral edge with an annular
30 concavity, a bowed spring extending between said retaining members and having its inner ends engaged with said cam locking members, and a body of sealing material filling the mouth within the annular recess and con-

cavity of the lid and having the ends of the 35 spring embedded therein.

2. The combination with a jar having a mouth provided with an internal shoulder, an annular recess above said shoulder, and cam locking members above said recess, of 40 a lid inserted within the mouth and supported by the shoulder, said lid being formed with a bottom concavity and having its upper surface provided with an upstanding central portion formed with spaced return- 45 ing members and provided adjacent its peripheral edge with an annular concavity, the body of said lid being formed with an opening extending therethrough adjacent said peripheral edge and intersecting the top and 50 bottom concavities, a removable plug closing said opening, a bowed spring extending across the top of the lid between said retaining members of the upstanding portion and having its ends interlocking with said cam 55 locking members, and a body of fusible sealing material filling the mouth within said annular grooves and upper concavity of the lid, the projecting end of the plug and the ends of the spring being embedded in said 60 material.

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

GEORGE W. DRUHE.

Witnesses:

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