

F. BRELLE.
FRUIT JAR.
APPLICATION FILED APR. 30, 1910.

983,423.

Patented Feb. 7, 1911.

Fig. 1.

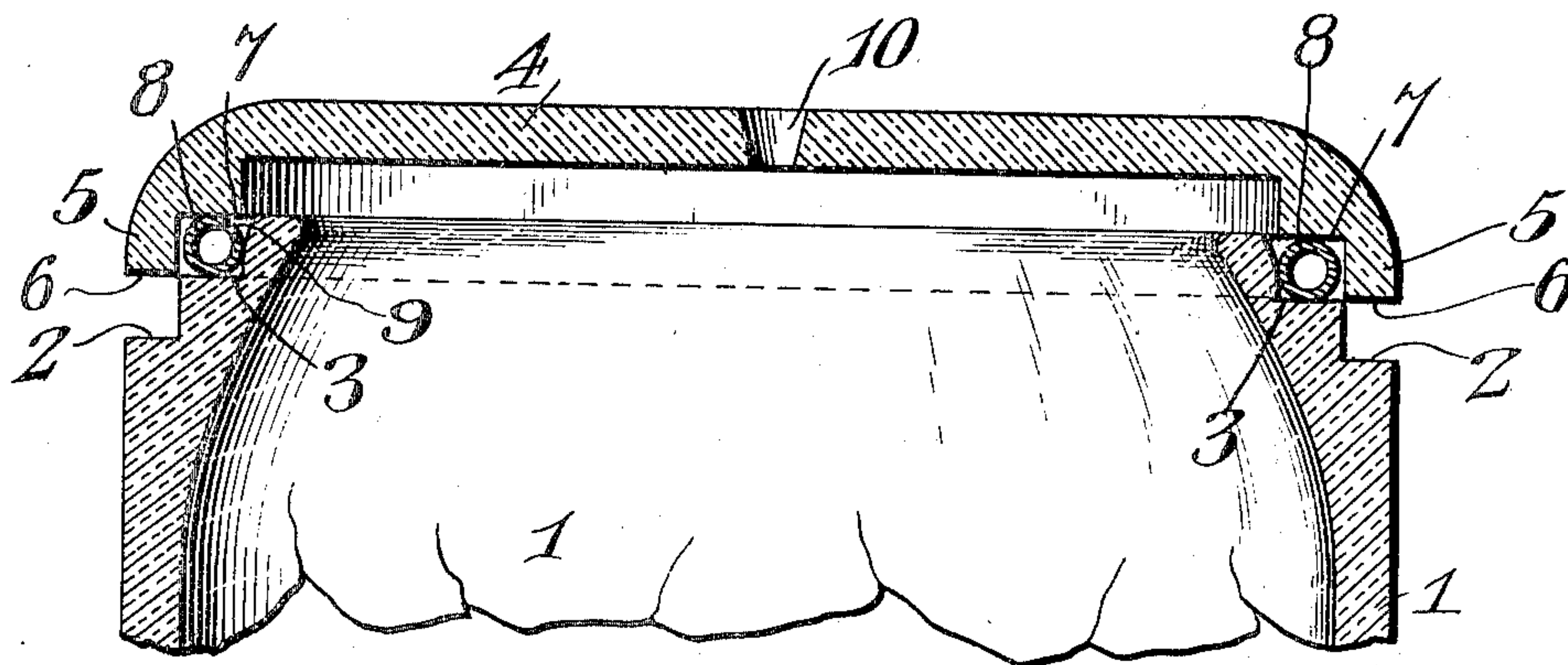


Fig. 2.

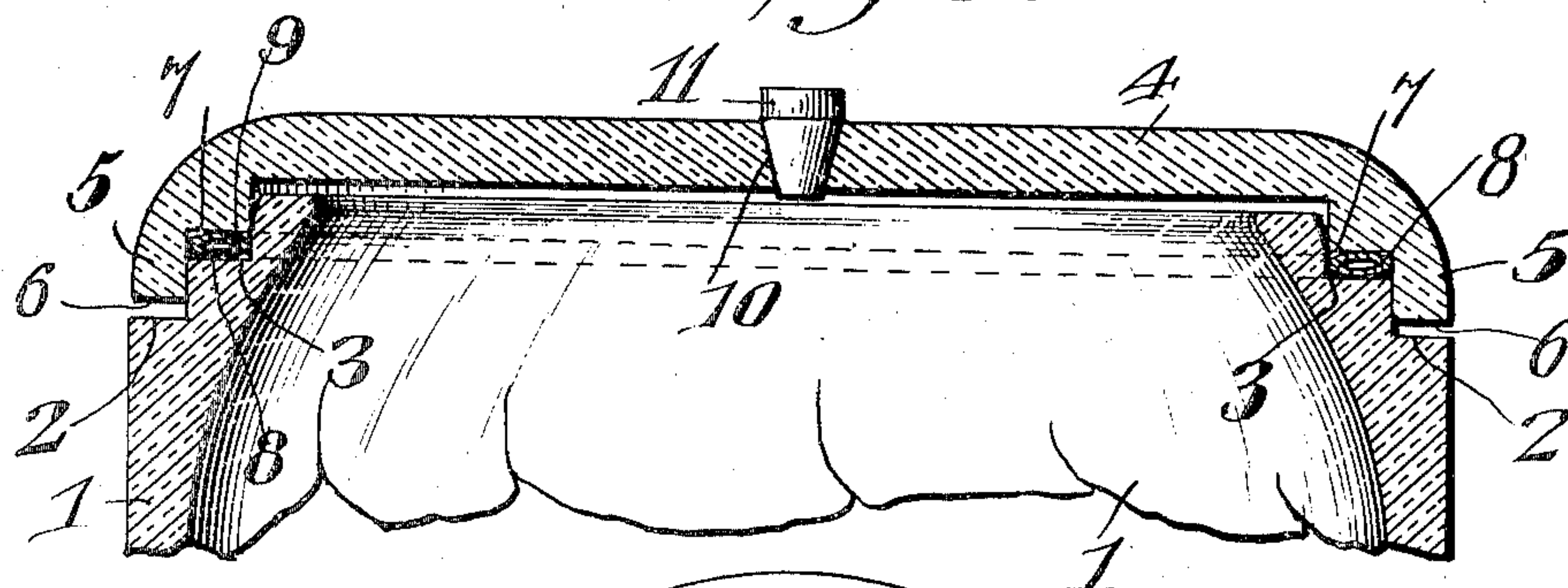
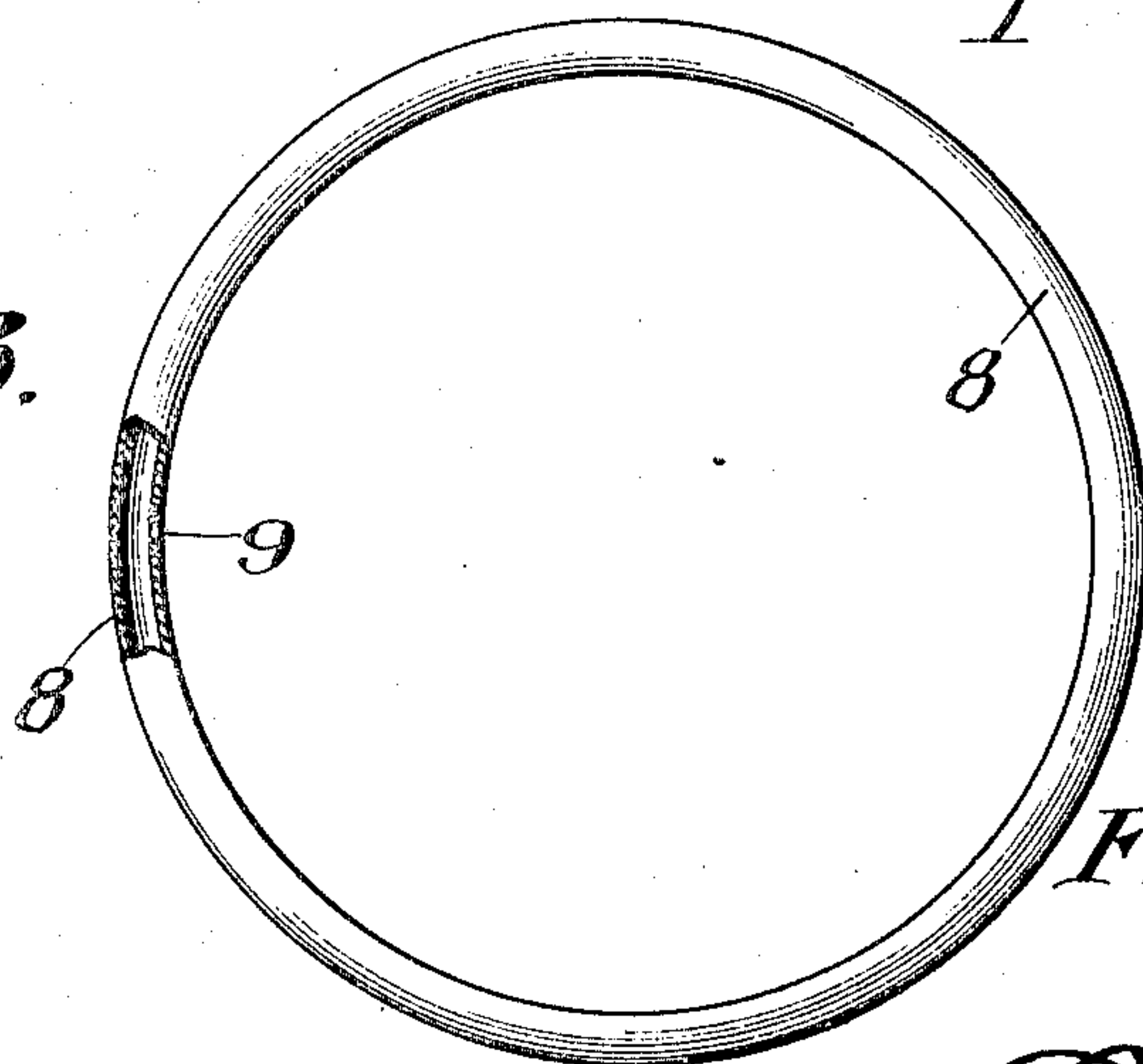


Fig. 3.



Frank Brelle
Inventor

Witnesses
Jas. E. McLaughlin
R. H. Bishop

By

E. G. Siggers
Attorney

UNITED STATES PATENT OFFICE.

FRANK BRELLE, OF SAN JOSE, CALIFORNIA.

FRUIT-JAR.

983,423.

Specification of Letters Patent.

Patented Feb. 7, 1911.

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To all whom it may concern:

Be it known that I, FRANK BRELLE, a citizen of the United States, residing at San Jose, in the county of Santa Clara and State of California, have invented a new and useful Fruit-Jar, of which the following is a specification.

My invention relates to improvements in fruit jars, and the object of the invention is to provide an efficient means for sealing the jar whereby the contents of the same may be preserved for an indefinite period.

A further object of the invention is to provide a cover and seal for a preserve jar which may be readily fitted to the jar or removed therefrom when so desired, but which, while on the jar, will effectually protect the contents thereof against the influence of the atmosphere.

These stated objects, and such other objects as will hereinafter incidentally appear, are attained in the use of the device illustrated in the accompanying drawings, and the invention consists in certain peculiar features of the same which will be hereinafter first fully described and then set forth more in detail in the appended claims.

In the drawings, Figure 1 is a vertical diametrical section of a portion of a fruit jar with the cover in position to seal the same. Fig. 2 is a similar view showing the cover fitted tightly upon the jar and sealed. Fig. 3 is a detail plan view, partly broken away, of an elastic ring or packing employed in the practice of my invention.

The jar 1 may be of any preferred form and size and is illustrated as constructed at its upper end with a pair of annular shoulders 2 and 3, whereby a step-like form will be given the upper end of the jar. The cover 4 is provided with a depending annular rim 5, and on the inner side of the said rim, I provide a pair of annular shoulders 6 and 7 adapted to fit against the shoulders 2 and 3 of the jar, as will be readily understood. When the cover is placed in position upon the jar, as shown in Fig. 1, an annular space will be provided between the shoulder 3 and the shoulder 7, as will be readily understood, and within this space I fit an elastic tube or gasket 8 of rubber or similar material, preferably dipped in rosin so as to increase the adhesiveness of the same to the glass of the jar and the cover, and provided with a small vent 9 at any point. The cover is also provided with a vent 10 at its

center, and this vent, after the cover has been forced home upon the jar, is closed by a cork stopper or other form of plug 11 to complete the sealing operation.

The vent 9 is so positioned as to be directed toward the inner circumference of the ring or gasket, so that when the ring is lodged on the shoulder 3 and the cover 4 is applied, the vent 9 is in communication with the interior of the jar and that portion of the jar between the shoulder 3 and the mouth of the jar is so shaped that there is provided communication between the interior of the gasket and the interior of the jar even while the cover is moving to the fully seated position. On the production of sub-atmospheric pressure within the jar, after the cover has been applied with the gasket in place, the air within the gasket will flow out through the vent 9 until a like sub-atmospheric pressure is produced within the gasket and the superior atmospheric pressure will cause the seating of the cover 4 and the collapsing of the gasket, which position will be maintained so long as the sub-atmospheric pressure is maintained within the closed jar. If at any time the stopper 11 be removed, the in-rush of air will establish atmospheric pressure within the jar and such atmospheric pressure together with the natural tendency of the gasket 8 to assume its normally expanded shape will cause the lifting of the cover from the seated position, thus loosening the cover, so that it may be readily removed without the necessity of applying tools or any great force. Because of the production of sub-atmospheric pressure within the gasket as well as within the jar, no other fastening means are needed than the natural atmospheric pressure exterior to the jar, no air at atmospheric pressure reaching the interior of the gasket through the vent 9, since this vent is as effectively sealed against the atmosphere as is the interior of the jar.

In practicing my invention, the jar is filled in the usual manner and the ring 8 is placed upon the shoulder 3, as shown in Fig. 1. The elastic quality of the ring will serve to keep the same distended, as shown in said Fig. 1, so that when the cover 4 has been fitted over the ring and the end of the jar and pressed downward on the jar, the air within the ring will be expelled through the vent 9 and the ring, consequently, collapsed as shown in Fig. 2. The air contained be-

tween the upper edge or mouth of the jar and the under side of the cover will escape through the vent 10 in the cover, and this escape may be made complete by heating the contents of the jar, as will be readily understood. After the air within the jar has been expelled through the vent 10 the closure 11 is inserted and then when the jar and its contents have cooled and any vapor formed has condensed, the pressure of the atmosphere upon the cover will maintain the latter tightly upon the jar with the ring 8 compressed, thus effectually sealing the junction of the cover and jar. In order to remove the cover, it is necessary merely to take out the closure 11, whereupon the air will rush through the vent in the cover and, consequently, equalize the pressure thereon so that very slight force will suffice to remove the cover from the jar. This uncovering of the jar will be facilitated by the elasticity of the packing ring 8, which will tend to expand and thereby aid the force applied to the cover to remove the same.

My device is exceedingly simple in its construction and operation and has been found highly efficient in use.

I desire to have it understood that the device shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

Having thus described the invention, what I claim as new, and desire to secure by Letters Patent, is:—

1. A preserving jar provided with a cover fitted thereto, a hollow gasket vented toward the interior of the jar when lodged thereon, and a cover adapted to the jar and gasket and provided with a vent adapted to be closed after the production of sub-atmospheric pressure within the jar.

2. A preserving jar having an exterior shoulder at the mouth end, a cap provided with a shoulder matching a shoulder on the jar and having an internal diameter providing communication between the shouldered portion of the jar and the interior thereof when the cap is in place, and a hollow gasket adapted to be lodged between the shoulders of the jar and the cap and vented toward the interior of the jar, the cap of the jar having means for the escape of air from the interior of the jar after the cap is applied, said means being adapted to be closed against the passage of air toward the interior of the jar after the production of sub-atmospheric pressure within the jar.

3. The combination of a jar, a cover fitted thereto and provided with an opening, an elastic tubular ring fitted between the jar and the cover and provided with a vent

opening toward the interior of the jar, and means for closing the opening in the cover.

4. A fruit jar provided with a hollow gasket having means of communication between the interior of the gasket and the interior of the jar to cause the production of sub-atmospheric pressure within the gasket on the production of sub-atmospheric pressure within the jar and for restoring atmospheric pressure within the gasket on the restoration of atmospheric pressure within the jar.

5. The jar having inner and outer annular shoulders arranged in different vertical and horizontal planes providing a step-like formation for the upper end of the jar, combined with a cover having a vent, and a depending rim formed with a pair of annular shoulders of a size and location to cooperate with the shoulders of the jar, and an elastic tube encircling the upper end of the jar and resting upon the inner shoulder thereof, said tube having a vent opening toward the interior of the jar.

6. A means for closing and sealing the mouths of jars comprising a cover adapted to the jar mouth and provided with a passage through it, and a tubular gasket for the cover provided with a vent opening toward the inner circumference of the gasket.

7. A closure for jars comprising a cover member adapted to the mouth of the jar and provided with a passage through it adapted for the application of a suitable closure, and a collapsible gasket adapted to the cover to seal the latter when applied to the jar said gasket collapsing in response to the production of sub-atmospheric pressure therein by the production of sub-atmospheric pressure within the jar.

8. A closure for jars comprising a cover member adapted to the mouth of the jar and provided with a passage through it adapted for the application of a suitable closure, and a collapsible gasket for the cover, said gasket having a surface coating of an adhesive and provided with a vent opening toward the inner circumference of the gasket.

9. A closure for jars comprising a cover member adapted to the mouth of the jar and provided with a passage through it adapted for the application of a suitable closure, and a collapsible gasket having a surface coating of rosin and provided with a vent opening toward its inner circumference.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

FRANK BRELLE.

Witnesses:

WM. D. CHURCH,
H. R. LANTZ.