

No. 788,495.

PATENTED APR. 25, 1905.

L. C. SAWIN.
JAR CLOSURE.

APPLICATION FILED JUNE 16, 1902.

Fig. I

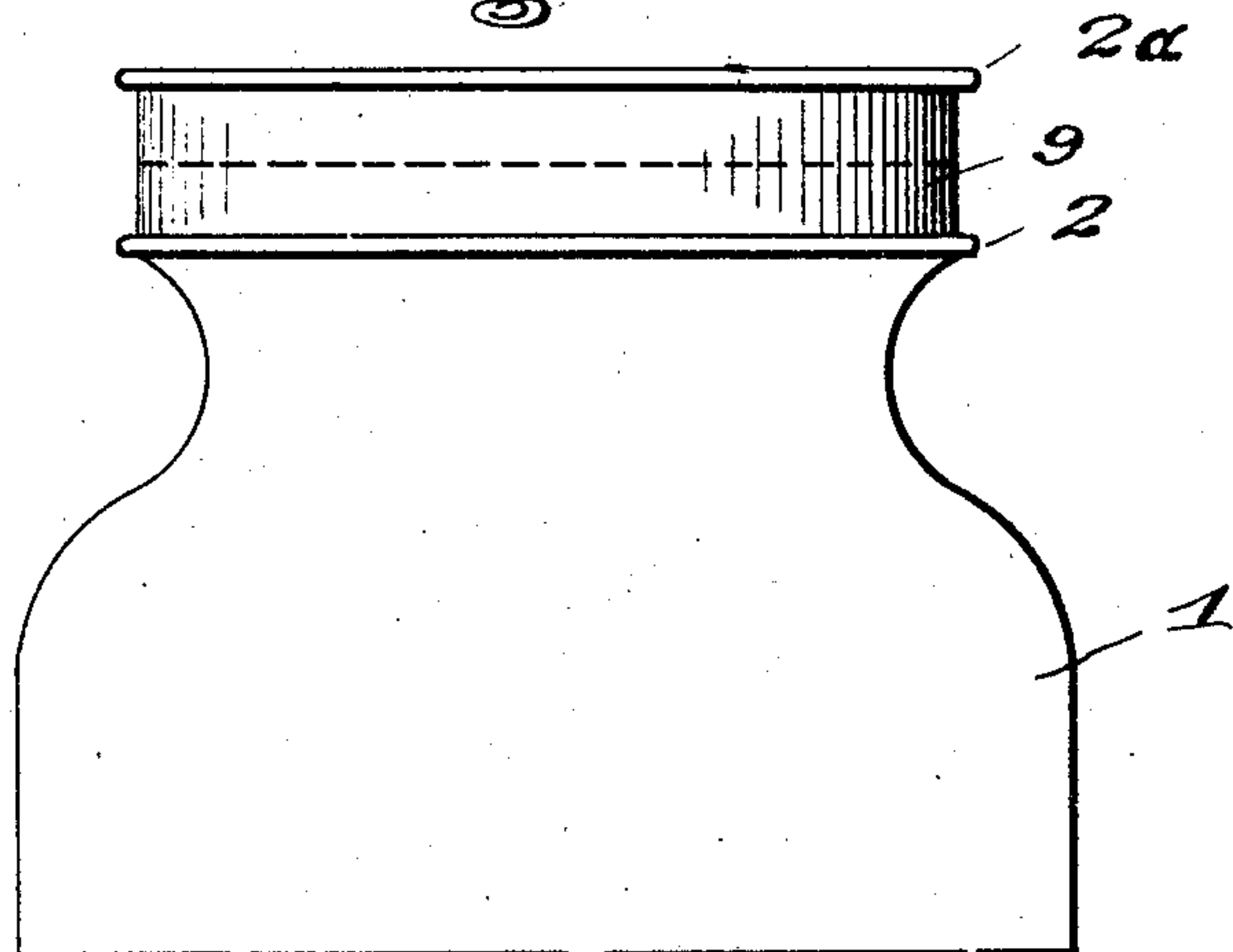


Fig. II

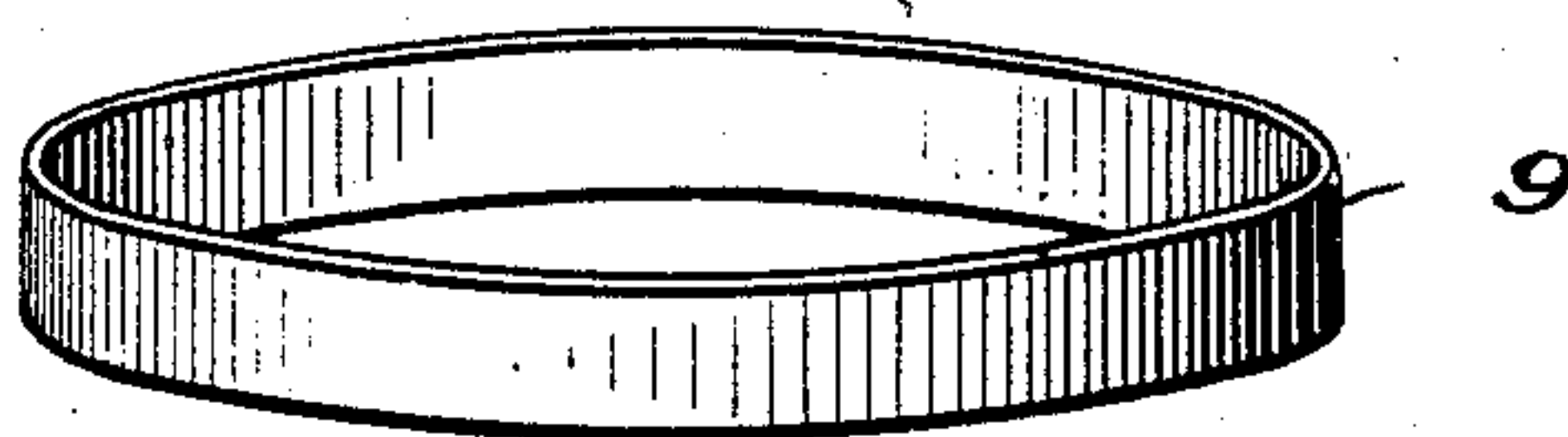
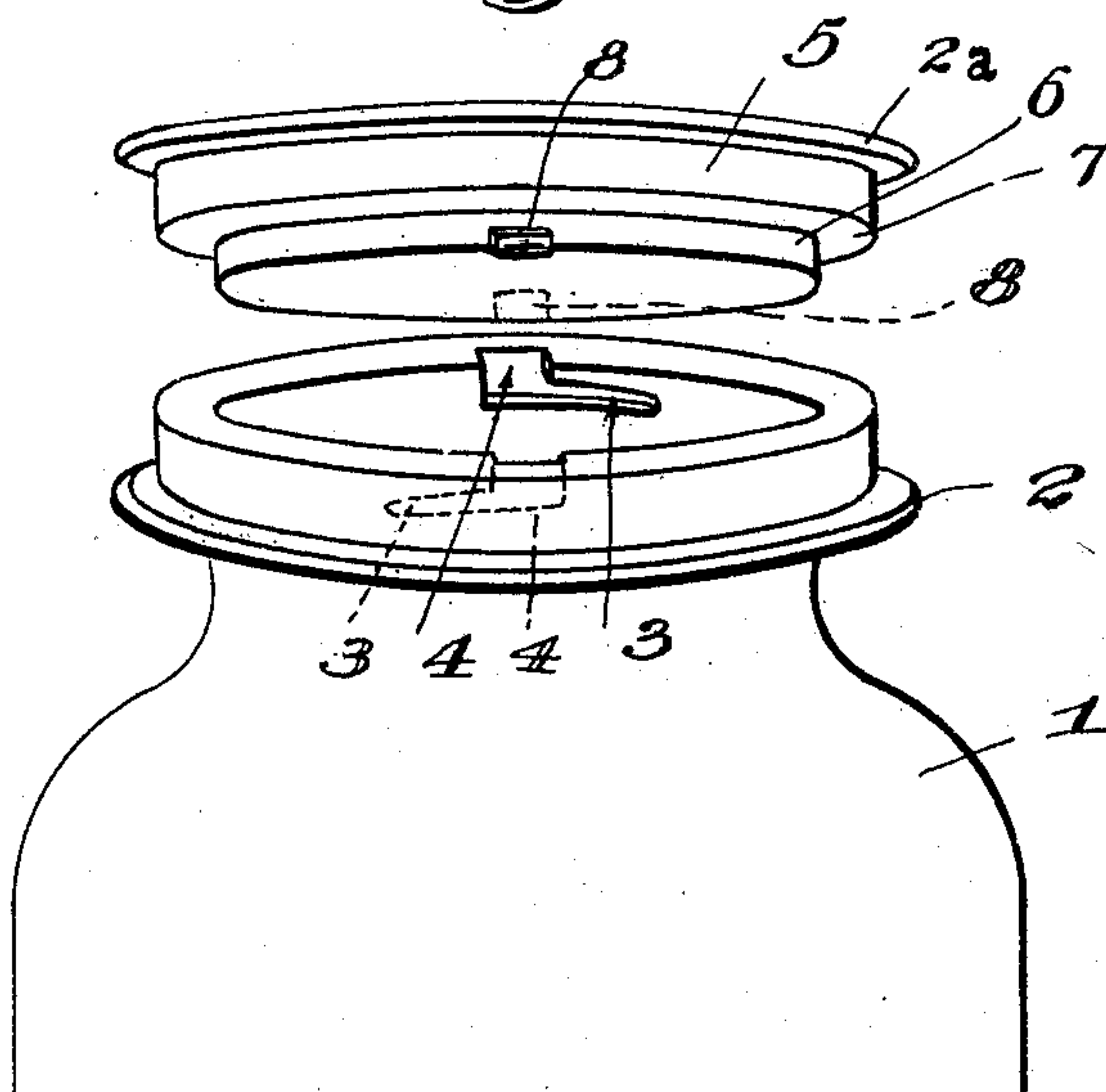


Fig. III



Witnesses

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Inventor

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UNITED STATES PATENT OFFICE.

LEE C. SAWIN, OF FULLERTON, CALIFORNIA.

JAR-CLOSURE.

SPECIFICATION forming part of Letters Patent No 788,495, dated April 25, 1905.

Application filed June 16, 1902. Serial No. 111,997.

To all whom it may concern:

Be it known that I, LEE C. SAWIN, a citizen of the United States, residing at Fullerton, in the county of Orange and State of California, have invented a new and useful Jar-Closure, of which the following is a specification.

My invention relates to means for covering jars, bottles, and other receptacles, and has for its object to provide a simple and efficient means whereby the cover may be secured to the receptacle in such a manner that leakage is prevented.

Another object is to provide a cover which may readily be detached from the receptacle. Referring to the drawings, Figure I is a side elevation of a portion of a jar, showing the cover in place. Fig. II is a detail of the band. Fig. III is a view showing the cover slightly raised from the jar.

1 represents the body portion of the jar. 2 is an external annular ridge near the upper edge of the jar. An inclined recess 3 is formed in the inner wall of the jar near the upper edge. Two recesses diametrically opposite are preferably employed, although more may be used, if desired. At one end of each recess a passage 4 is provided, which extends to the upper edge of the jar.

5 is the cover, which is provided with an extension 6, which fits in the mouth of the jar and holds the cover centrally in position and also serves to partially prevent leakage of the contents of the jar.

7 is a shoulder formed on the lower edge of the cover and which is adapted to lie flat against the upper edge of the jar when the cover is in position.

2^a is an external annular ridge formed near the top of the cover.

The extension 6 is provided with lugs 8, which are arranged diametrically opposite and are adapted to enter the recess 3 when the cover is put on. When placing the cover on the jar, the lugs enter the passages 4. The cover is then turned slightly, which causes the lugs to move along the inclined recesses, which draws the cover into close contact with the jar, the shoulder 7 being tightly pressed against the upper edge of the jar.

9 is a contractile impervious band, prefer-

ably of rubber, which is slipped over the joint after the cover is in position and which effectually closes the crack and prevents air from entering the jar.

The air is expelled from the jar usually by heating the contents. The subsequent partial vacuum formed causes the band to be tightly forced against the parts it encircles by atmospheric pressure, thus effectually preventing any leakage. The annular ridges serve as guides whereby the band may readily be placed in position to lap over the joint equally on both sides and to hold the band from displacement. The periphery or portion of the cover between the shoulder 7 and the ridge 2^a is smooth and cylindrical and of substantially the same diameter as the top of the jar above the ridge or shoulder 2, the portion of the jar above the ridge also being smooth and cylindrical, so that when the cover is in position the exterior of the cover and the jar between the two ridges or shoulders will form a smooth cylindrical surface of substantially even and uniform diameter at all points. This forms a seat for the band which will prevent the passage of the air much more effectually than if either the jar or the cover had a groove for the reception of a projection, and by making the band of substantially the same width as the distance between the two ridges its edges will engage with the ridges, and thereby further assist in preventing the passage of air into the jar.

The cylindrical surfaces of the jar and the cover are caused to register or lie in the same plane by the extension 6, which projects from its lower face and fits within the mouth of the jar, and by providing the cover with the extension 6 the amount of material adjacent to the portions of the jar and cover between the two ridges is such that they never get hot enough to cause injury to the band, thereby permitting the band to be placed in position as soon as the jar is filled and while the vacuum is greatest, which will secure a better result than if the band could not be placed in position until the jar had cooled.

By forming the recesses 3 within the inner face of the top of the jar instead of in its exterior there will be less liability of the por-

tion of the jar between the top of the recess and the top of the jar being accidentally broken off than would be the case if the groove were formed in its outer face, and if
 5 either one or both of the lugs 8 should be broken off the extension 6 will still cause the cylindrical exterior surfaces of the jar and the cover to register, and by means of a weight or otherwise the cover can be held down until
 10 the jar and its contents become cold, when the pressure of the air in its efforts to enter the jar will hold the parts firmly in the desired position, and by utilizing the ridge 2^a as a shoulder for the band and also as a grip it
 15 need be but little wider than the thickness of the band, thereby permitting of the use of an almost inelastic band, as it need not be stretched so much to be put on.

In removing the cover the band may easily
 20 be taken off, as it is exposed and readily accessible. After the band is removed air creeps in through the joint, which soon restores an equilibrium of pressure on the inside and outside of the cover and permits the
 25 cover to be raised without difficulty.

The provision of the fastening means 4 and 8, located interiorly of the receptacle and cover and adapted to be engaged by partial rotation of the cover to hold the cover onto
 30 the receptacle, is an essential feature of the invention, inasmuch as without such fastening means the attachment of the cover to the receptacle would not be sufficiently secure. Moreover, when the jar has been filled with
 35 hot material it is necessary that some means should be provided for holding the cover firmly in place while the rubber is being applied. In filling the jar it will often occur that some of the material—for example, fruit
 40 juice and pulp—will be spilled on the edges of the jar and cover. When this occurs, it is necessary to apply the cover with such force as to squeeze out from the joint any such ma-

terial; otherwise the rubber ring will not give a tight joint. The inclined space engaging
 45 means 4 and 8 enables the parts to be brought together more closely and with such pressure as to insure the formation of a perfect closure by the rubber ring, as well as the secure retention of the cover on the receptacle. 50

It is evident that various modifications may be made in the herein-described embodiment without departing from the spirit of the invention.

What I claim, and desire to secure by Letters Patent of the United States, is— 55

In combination, a receptacle having an external shoulder formed near its top, the portion of the receptacle above the shoulder being smooth and cylindrical upon its exterior
 60 and provided upon its interior with inclined recesses and a passage leading into each recess from the top, a cover for the receptacle having an annular ridge projecting from the upper edge and a cylindrical extension projecting from its lower face, said extension being of substantially the same diameter as the interior diameter of the mouth of the receptacle, the periphery of the cover being smooth, and cylindrical and of substantially the same
 65 diameter as the exterior diameter of the top of the receptacle, and registering therewith when in position, and a flexible band around the cylindrical portions of the receptacle and the cover and of a width substantially equal
 70 to the distance between said shoulder and ridge. 75

In witness whereof I have signed my name to this specification, in the presence of the subscribing witnesses, at Los Angeles, California, this 9th day of June, 1902. 80

LEE C. SAWIN.

Witnesses:

GEORGE T. HACKLEY,
 JAMES R. TOWNSEND,
 F. M. TOWNSEND.