

No. 768,115.

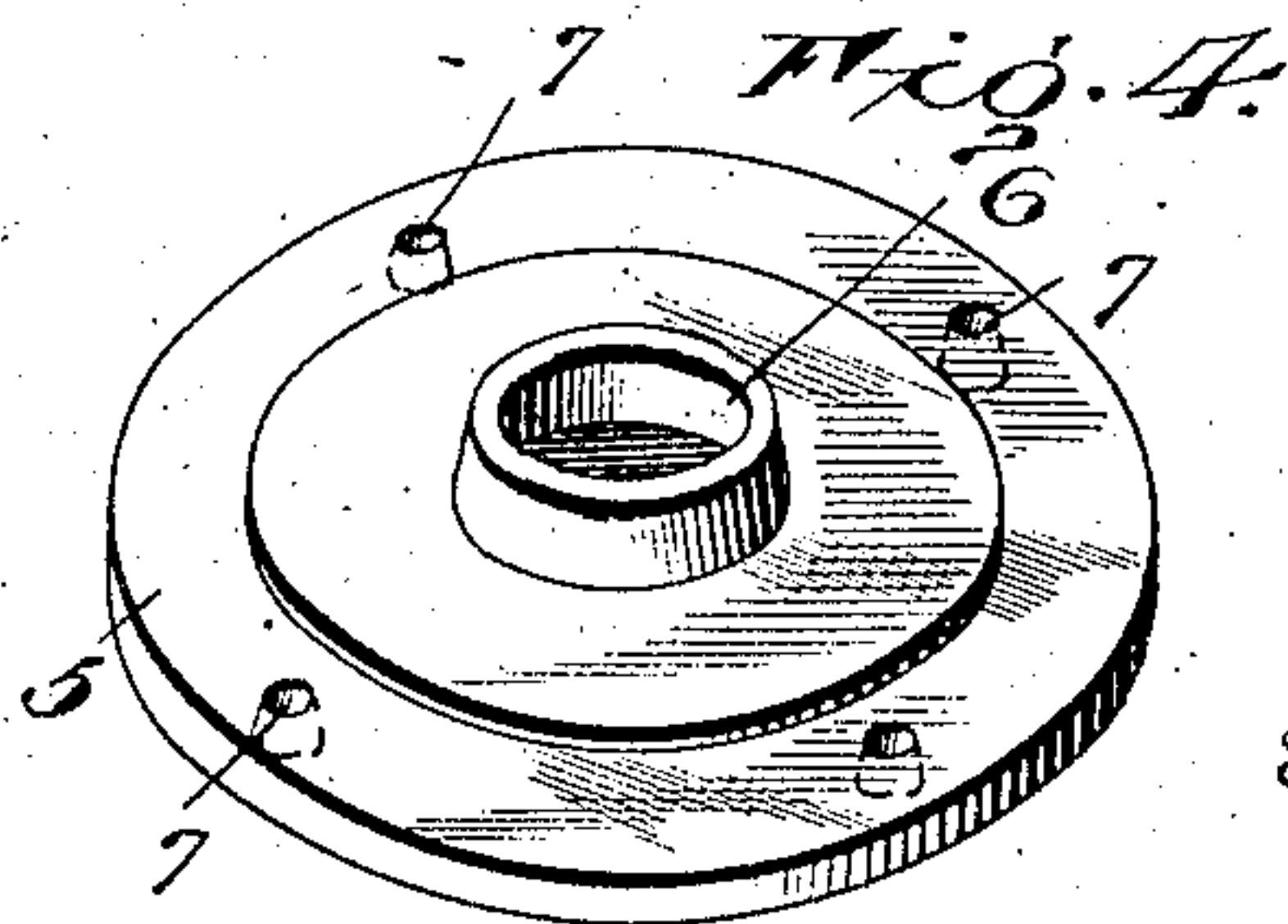
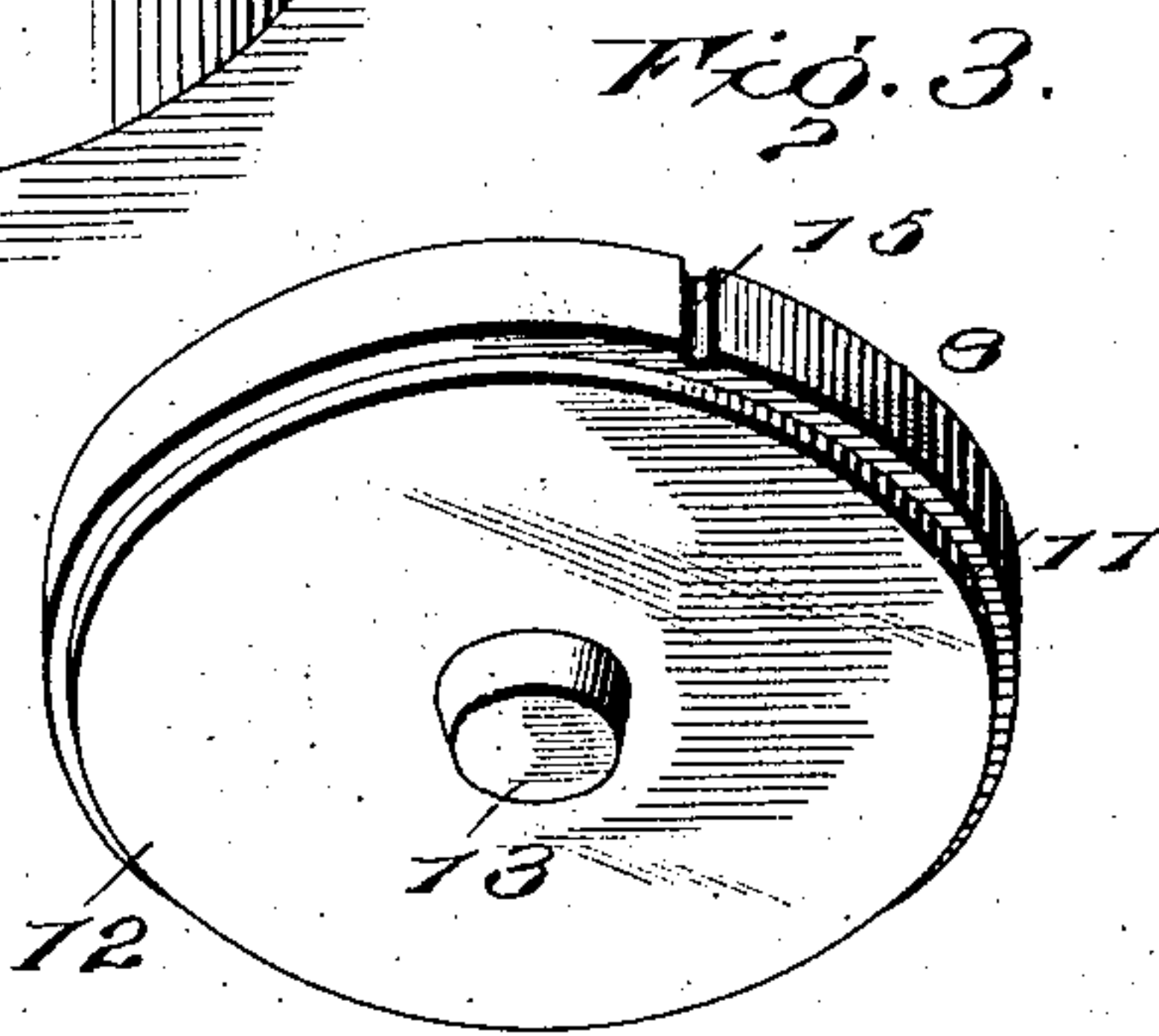
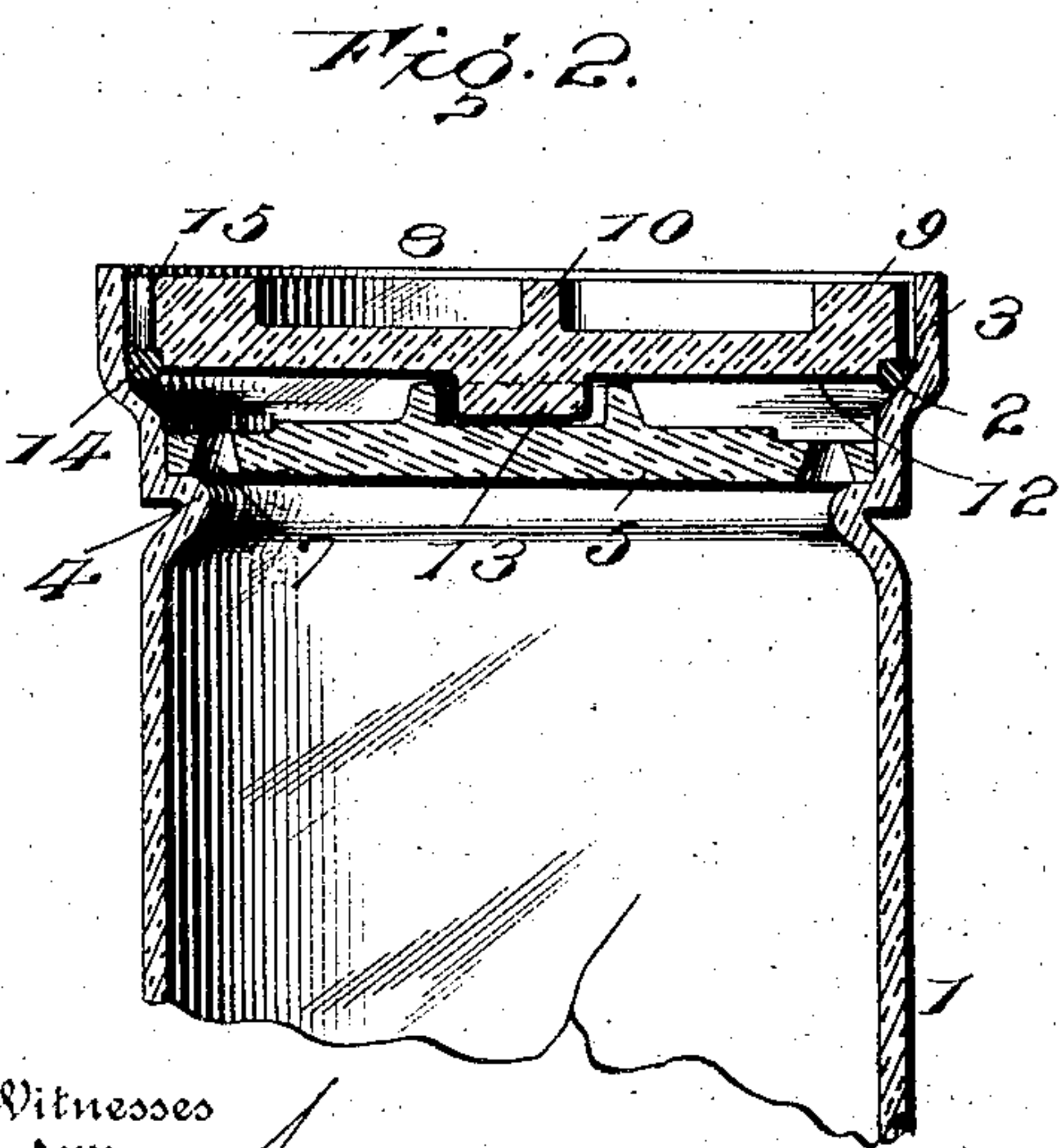
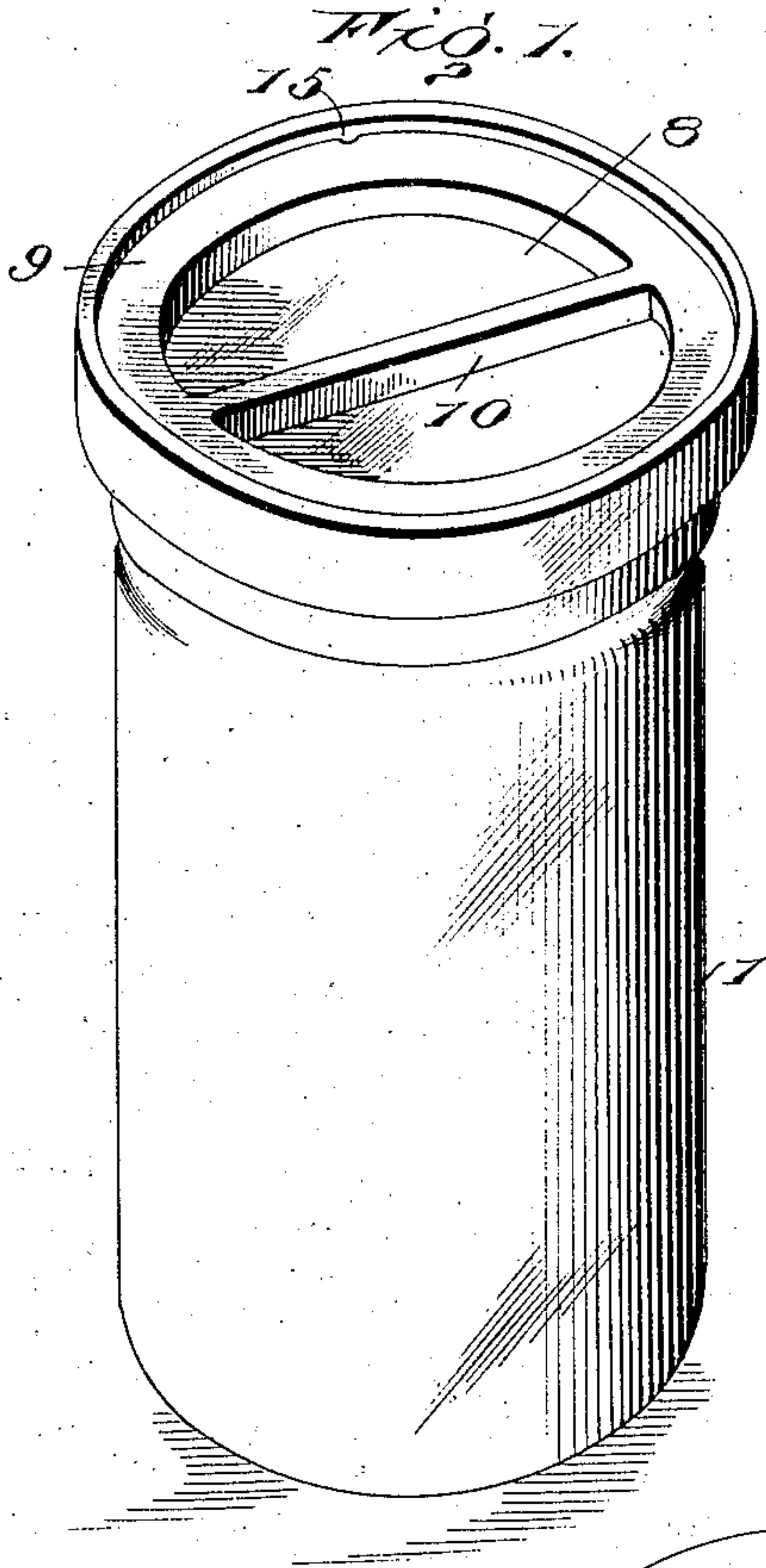
PATENTED AUG. 23, 1904.

J. S. DU BOIS.

JAR.

APPLICATION FILED JULY 23, 1903.

NO MODEL.



Inventor

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By

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Witnesses

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UNITED STATES PATENT OFFICE.

JOSIAH S. DU BOIS, OF CAMDEN, NEW JERSEY.

JAR.

SPECIFICATION forming part of Letters Patent No. 768,115, dated August 23, 1904.

Application filed July 23, 1903. Serial No. 166,706. (No model.)

To all whom it may concern:

Be it known that I, JOSIAH S. DU BOIS, a citizen of the United States, residing at Camden, in the county of Camden and State of New Jersey, have invented certain new and useful Improvements in Jars, of which the following is a specification.

One object of the invention is to provide a simple, inexpensive, and efficient closure for jars mainly intended for the reception and sealing of preserved fruits and the like substances, said closure acting solely by the pressure of the atmosphere.

Another object is to provide means whereby the vacuum which causes the sealing may be readily broken to permit the removal of the cap or cover when desired.

A further object is to provide an immerser for the preserved fruits or substances to act in conjunction with the cap or cover and means to prevent the accidental displacement of said immerser when the jar is tilted or turned upside down.

With these and other objects hereinafter referred to the invention consists in the improvements hereinafter described and claimed.

The nature, characteristic features, and scope of the invention will be more readily understood from the following description, taken in connection with the accompanying drawings, forming a part hereof, wherein—

Figure 1 is a perspective view of a jar provided with a closure embodying my improvements. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a bottom perspective view of the cap or cover, and Fig. 4 is a top perspective view of the immerser.

1 indicates the jar, which may be of any suitable shape desired. The jar is provided near its open end with an internal circumferential ledge or ring-seat 2, which supports the packing-ring and the cap or cover, said ledge or seat merging into the vertically-extending rim or flange 3 of the jar. The rim or flange 3 is of a height substantially equal to the thickness of the edge of the cap or cover.

Beneath the ledge or seat 2 is an annular shoulder or offset 4, which supports the immerser. The latter is indicated at 5, and, as clearly shown in Figs. 2 and 4, it is provided

on its upper side with a centrally-disposed cup or socket 6 and near its periphery with apertures 7, which latter are for the purpose of giving free passage to the preserving syrup or fluid.

8 indicates the cap or cover having its edge extended vertically, as at 9, and connected by the transverse rib 10. The lower annular edge of the cover is reduced, as at 11, leaving the downwardly-extending portion 12 of the cover slightly smaller than the mouth of the jar and presenting sharp edges to engage and bind the packing-ring.

13 indicates a downwardly-directed projection of the cover, which enters the cup or socket 6 of the immerser and coöperates with said cup to maintain a suitable space between the cover and immerser and also to prevent the accidental displacement of the immerser when the jar is tilted or turned upside down. It will be apparent that this arrangement might be reversed—that is to say, the projection might be provided on the immerser and the cup or socket on the cover.

14 indicates a rubber packing-ring or gasket which rests upon the ledge or seat 2, and when the cap or cover is applied engages the sharp edges of the reduced or cut-away portion 11 thereof.

The sealing of the jar may be accomplished by the aid of heat and then effecting a reduction in pressure in the jar by permitting the contents thereof to cool. I prefer, however, to employ the sealing apparatus described in United States Letters Patent No. 553,976, granted to me February 4, 1896. In said apparatus a main receptacle is employed provided with an air-tight cover and otherwise made impervious to the atmosphere, so that a vacuum or partial vacuum may be maintained within the said receptacle for any given period of time. The jars are introduced into said receptacle with their covers resting upon the packing-ring or gasket 14. When the exhaustion of the jar is complete, the pressure of the atmosphere crowds the gasket 14 down tightly upon the ledge 2 and around the reduced portion of the cover, thus preserving the vacuum.

When it is desired to break the vacuum in

order to remove the cap or cover, the jar may either be heated or an awl or other pointed instrument may be inserted through a recess 15, provided in the periphery of the cap or 5 cover, and said instrument caused to penetrate the packing-ring or gasket 14, so as to permit the entrance of air.

It will be obvious to those skilled in the art to which the invention relates that modifica- 10 tions may be made in details without departing from the spirit and scope of the same. Hence I do not limit myself to the precise construction and arrangement of parts hereinbefore described and illustrated in the accom- 15 panying drawings; but,

Having described the nature and objects of the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a jar having an up- 20 wardly-directed external flange and an internal ledge or seat, a packing-ring resting on said ledge, and a cover having its bottom slightly reduced to provide sharp edges which engage said packing-ring and constitute there- 25 with a hermetic seal, said cover having a peripheral recess to permit the insertion of an instrument for breaking the seal, substantially as specified.

2. The combination of a jar having its throat 30 provided with a ring-seat and with an annular shoulder or offset below the same, an immerser resting on the offset, a packing-ring disposed on the ring-seat, a sealing-cap having its bottom reduced to provide sharp edges which en- 35 gage said packing-ring under atmospheric pressure and constitute therewith a hermetic seal, said cap having a peripheral recess whereby the packing-ring is accessible to means capable of destroying the seal, and means to 40 prevent the accidental displacement of the immerser, substantially as described.

3. The combination with a jar having an upwardly-extending external flange, an internal

ledge or seat, and an offset or shoulder below said ledge, a packing-ring resting upon the 45 ledge, an immerser resting upon the offset and having its top provided with a cup or socket, and a cap or cover having its bottom reduced to provide sharp edges which engage the pack- 50 ing-ring under atmospheric pressure, said cap having a downwardly-directed projection which enters said cup or socket and prevents the accidental displacement of the immerser, substantially as specified.

4. The combination of a jar having an up- 55 wardly-directed external flange and an internal ledge or seat, a packing-ring resting upon said ledge, and a cover having its bottom slightly reduced to provide sharp edges which engage said packing-ring under atmospheric 60 pressure and constitute therewith a hermetic seal, said cover having its outer edge vertically extended and connected by a transverse rib, substantially as specified.

5. The combination of a cap and an im- 65 merser, whereof one is provided with a cup or socket and whereof the other is provided with a projection adapted to enter said cup or socket and prevent the accidental displacement of the immerser, a jar having an encir- 70 cling rim and offsets to accommodate the cap and immerser, and a packing-ring against which the cap is held by atmospheric pressure, said cap having its bottom reduced to provide sharp edges which engage the pack- 75 ing-ring and also having a peripheral recess whereby the packing-ring is accessible to means capable of destroying the seal, substantially as described.

In testimony whereof I have hereunto signed 80 my name in the presence of two subscribing witnesses.

JOSIAH S. DU BOIS.

Witnesses:

W. J. JACKSON,
K. M. RICHMOND.