

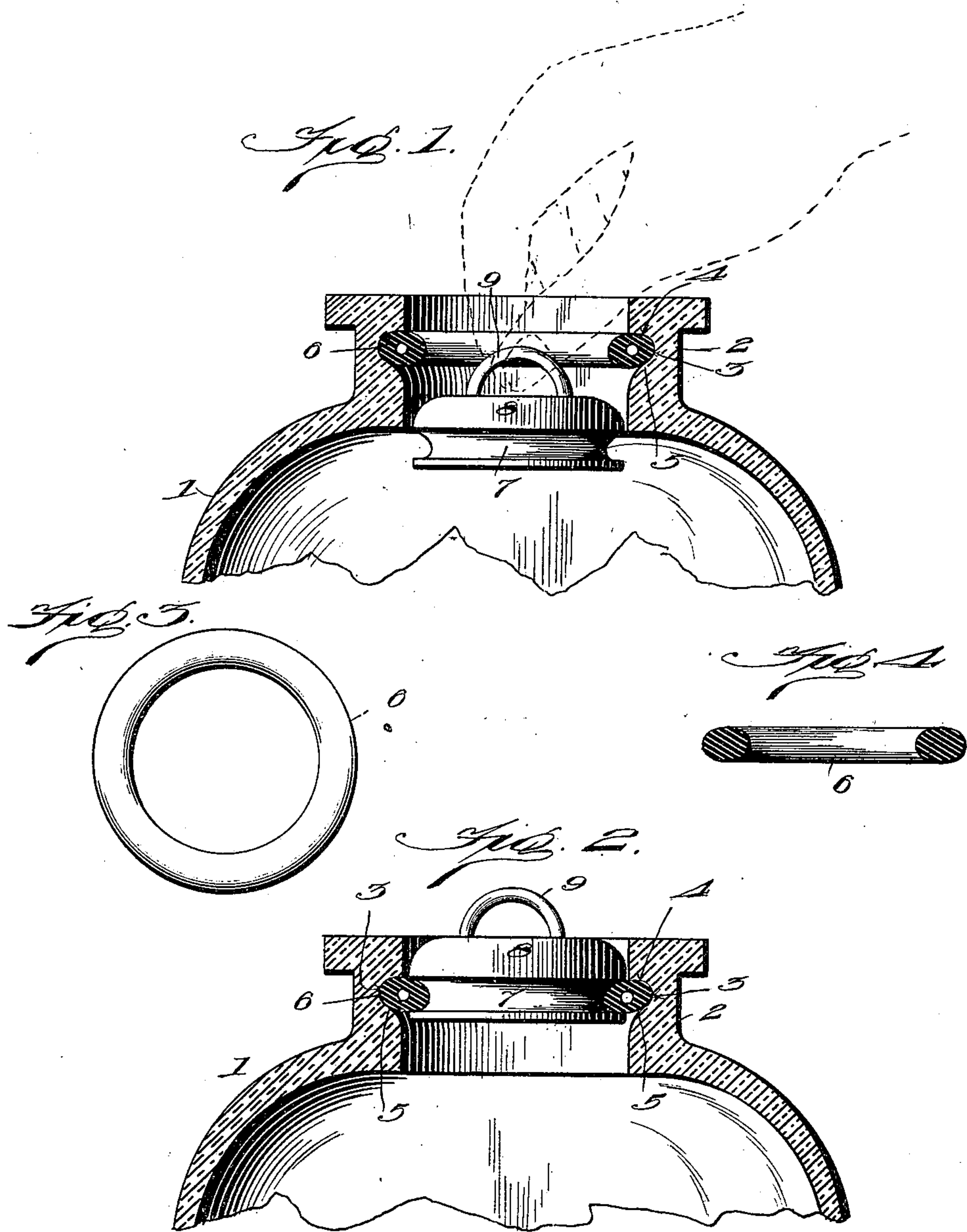
No. 668,501.

Patented Feb. 19, 1901.

J. W. DAVIS.
SELF SEALING FRUIT JAR.

(Application filed May 23, 1900.)

(No Model.)



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UNITED STATES PATENT OFFICE.

JOHN W. DAVIS, OF PALMYRA, ILLINOIS, ASSIGNOR OF ONE-HALF TO FRANK ERNEST DOPHEIDE, OF SAME PLACE.

SELF-SEALING FRUIT-JAR.

SPECIFICATION forming part of Letters Patent No. 668,501, dated February 19, 1901.

Application filed May 23, 1900. Serial No. 17,709. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. DAVIS, a citizen of the United States, residing at Palmyra, in the county of Macoupin and State of Illinois, have invented a new and useful Fruit-Jar, of which the following is a specification.

This invention relates to new and useful improvements in preserving-jars; and its primary object is to provide a device of this character having a cover of peculiar construction which is adapted to fit tightly within the neck or mouth of the jar and prevent the escape or admission of gas and air, respectively.

A further object is to provide a device which is simple, durable, inexpensive, and effective in operation.

To these ends the invention consists in providing the inner wall of the neck of the jar with an annular groove having a lower inclined surface and a square upper surface. This groove is adapted to receive a ring formed of suitable elastic material which is of greater diameter than the internal diameter of the neck and which will fit snugly within the groove at all times. This ring extends out of the groove within which it is seated and is adapted to fit within an annular groove formed within the top or cap of the jar. This cap is slightly smaller in diameter than the passage within the neck of the bottle, but is adapted when inserted therein to receive that portion of the ring which projects from the groove within which it is seated, thereby forming an air-tight seal. The groove within the cap is so constructed as to prevent said cap from being drawn upward after being placed in position unless drawn edgewise from the neck of the bottle.

The invention also consists in the further novel construction and combination of parts hereinafter more fully described, and illustrated in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a longitudinal section through the jar, showing the cap therein before the same is removed therefrom or placed in sealed position. Fig. 2 is a longitudinal section through the device, showing the cap in elevation. Fig. 3 is a detail view of the packing-ring. Fig. 4 is a section through a modified form of ring.

Referring to the figures by numerals of reference, 1 is a jar having a neck 2, which is provided in its inner surface with an annular groove 3. The upper wall 4 of this groove extends inward at right angles to the inner wall of the neck 2, while the lower wall 5 of said groove is arranged at an incline, as shown. This groove is adapted to receive and hold a ring 6, formed of suitable elastic material, as rubber, and which projects outward from the groove 3 and is adapted to engage an annular groove 7, formed within the side of a cap 8. This cap is of such diameter as to be readily inserted into the neck of the jar, and the groove thereof is similar in form to the groove within the neck, with the exception that the lower instead of the upper wall is at right angles to the inner wall of the neck. The rubber ring 6 is preferably tubular; but I do not limit myself to this form, as, if desired, the ring may be solid, as shown in Fig. 4.

When it is desired to seal the jar, a rubber ring is placed within the groove 3 and the cap 8 is inserted edgewise into the neck of the jar. The cap is then swung into a horizontal position and drawn upward by means of the bail or loop 9, formed thereon. The upper inclined edge of the cap which first comes into contact with the rubber will force the same inward, compressing it within the groove 3. As the cap continues upward in its movement the lower square wall of the groove 7 will contact with the ring and prevent the same from spreading downward. The ring will therefore become seated within the groove of the cap as well as the groove of the neck. Further upward movement of the cap will be prevented, in view of the fact that the ring will be clamped between the upper square wall of the groove 3 and the lower similar wall of groove 7. When it is desired to move the cap, the same is pressed downward into the bottle and turned edgewise and removed while in this position.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes and altera-

tions as fairly fall within the scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by

5 Letters Patent, is—

1. The combination with a jar having a groove formed within the neck thereof, of a flexible ring seated within and projecting from the groove, an upper wall to the groove
10 at right angles to the interior wall of the neck, an inclined lower wall to the groove, a cap within the neck having an annular groove therein adapted to engage the ring, a lower
15 wall to said groove at right angles to the inner wall of the neck, an upper inclined wall to said groove, and a loop or bail upon the cap.

2. The combination with a jar having a groove formed within the neck thereof, of a flexible tubular ring seated within and projecting from the groove, an upper wall to the groove at right angles to the interior wall of the neck, an inclined lower wall to the groove, a cap within the neck having an annular groove therein adapted to engage the ring, a
25 lower wall to said groove at right angles to the inner wall of the neck, an upper inclined wall to said groove, and a loop or bail upon the cap.

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