

F. A. BUNNELL.
Fruit Jar Cover.

No. 52,525.

Patented Feb. 13, 1866.

FIG. 2.

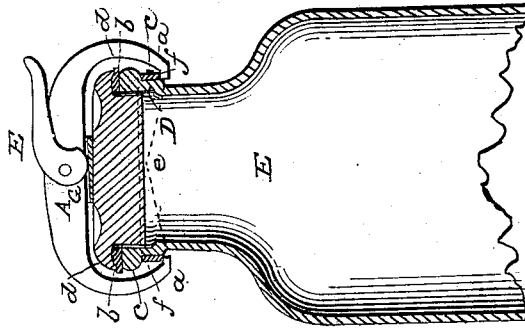
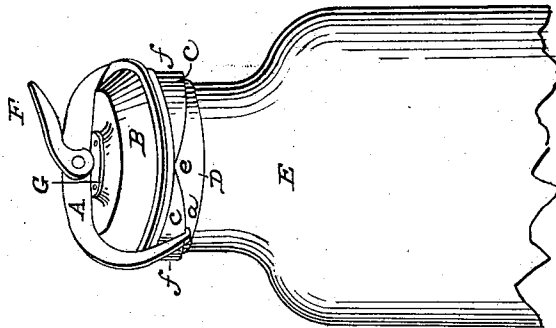


FIG. 1.



WITNESSES:

*Wm. Brown
Thos. Busch*

INVENTOR.

*F. A. Bunnell
per *Wm. Brown*
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UNITED STATES PATENT OFFICE.

F. A. BUNNELL, OF SYRACUSE, NEW YORK.

IMPROVEMENT IN COVERS FOR FRUIT-JARS.

Specification forming part of Letters Patent No. 52,525, dated February 13, 1866.

To all whom it may concern:

Be it known that I, F. A. BUNNELL, of Syracuse, in the county of Onondaga and State of New York, have invented a new and useful Improvement in Covers for Fruit-Jars; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents the top of a fruit-jar with my improvement applied thereto. Fig. 2 is a sectional view.

Similar letters of reference indicate like parts.

This invention relates to covers for fruit-jars and other vessels which are to be closed air tight. The cork or stopper fits inside the mouth of the jar, and it has a flange which rests upon its rim. This flange is concave in cross-section, and is intended to rest upon the gasket or packing-ring. Inclined planes, whose inclinations are directed toward the bottom of the jar, are formed upon the outside of the neck of the jar, and when these are seized by the fingers of a clamp, and the latter is turned about over the stopper, the clamp is drawn down toward the mouth of the jar, and the stopper is forced into the mouth of the jar and its flange made to compress the gasket.

E designates the upper part of an ordinary glass fruit-jar. D is its mouth or neck, having on its top the usual outer rim or bead, *c*. Below this bead I place a ring of metal of unequal breadth, as seen in the drawings, its wide and narrow parts being opposite to each other. The shape of the ring is such that the valves on opposite sides of the neck are duplicates of each other, their width being diminished at the points *e*, only one of which is seen in Fig. 1, and being increased at the points *f*, thereby making a double inclination along the lower edge of each division of the ring. Instead of a ring of metal placed on the neck of the jar I can have the outer part of said neck itself made in this way when the jar is formed.

B is a stopper, which is also a cover, its central part being formed of such a diameter as enables it to enter the mouth of the jar, and a flange, *d*, being formed on its upper part

of a diameter to cover the rim of the jar. The under surface of the flange is made concave in cross-section, so that when it is brought down on the packing-ring *b* the latter will be held by the sides or edges of the flange, and so will not be allowed to spread, there being room in the concavity of the flange to receive the body of the gasket or ring. The center part of the upper surface of the stopper has a metallic plate, G, fixed on it to form a bearing-surface for the action of the tightening-cam, hereinafter mentioned.

A is a clamp with curved ends which approach each other, but which yet are far enough apart to permit them to be put over the neck and mouth of the jar or other vessel to be closed. Its curved ends terminate in horizontal fingers *a a*, which extend inwardly, and whose position is such as to fit beneath the ring C. The fingers *a*, when the clamp is applied to the jar, are placed beneath the narrowest parts, *e*, of the ring, and on turning the clamp around the mouth of the jar the fingers are made to travel along toward the widest parts, *f f*, of the ring, thereby forcing the clamp downward against the top of the cork or stopper.

F is a cam pivoted to the clamp at the center of its length, so as to bring it directly above the bearing-plate G. When the cam is operated the side of its greatest diameter is brought down on the said plate, and the cork is thereby forced as far into the jar as is desirable, at the same time the packing-gasket being compressed between the flange of the cork and the top of the rim of the jar. There is an advantage in having the cork or stopper extend downward into the mouth of the jar, since it displaces any air which may be found above the surface of the fruit therein.

I claim as new and desire to secure by Letters Patent—

1. In apparatus for closing fruit-jars and other vessels, the combination of the clamp A and cam-lever F with a metallic bearing-surface placed on the cork or stopper, when the cam acts directly on such surface or on the stopper without the use of an intermediary slide, substantially as described.

2. Making the flange of the stopper, which rests on the mouth of the jar, concave in cross-section on its under surface, so as to retain

the packing-ring in a mass and prevent it from flattening out, substantially as described.

3. The extension of the stopper within the mouth of the jar, in combination with the flange *d*, substantially as described.

4. Forming inclined planes below the rim of the mouth of the jar, for the purpose of

drawing the clamp down on the stopper, substantially as described.

F. A. BUNNELL.

Witnesses:

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W. C. GHEE.