No. 741,969. PATENTED OCT. 20, 1903.

W. D. KEEFER.

JAR CLOSURE.

APPLICATION FILED JUNE 18, 1903.

NO MODEL.

Fig. 1.

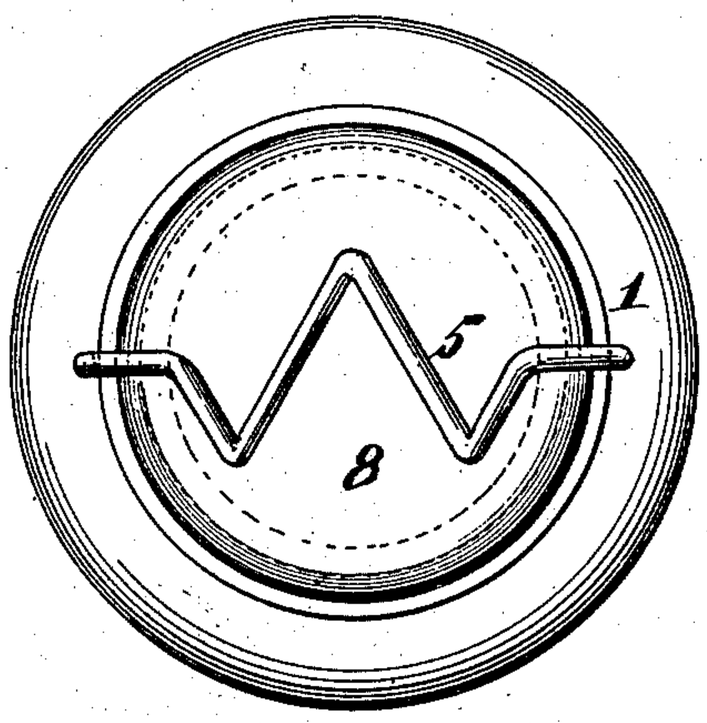


Fig. 2.

Fig. 3.

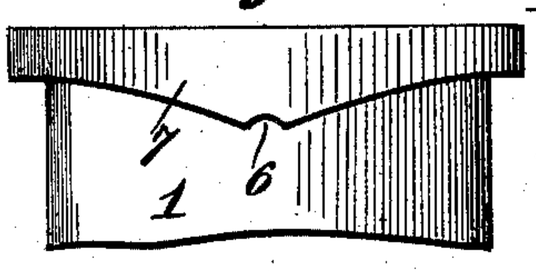
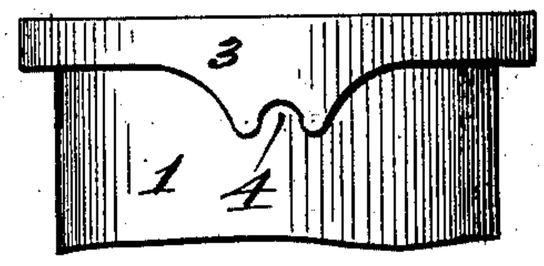


Fig. 4.



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No. 741,969. Patented October 20, 1903.

UNITED STATES PATENT OFFICE.

WILLIAM D. KEEFER, OF GAS CITY, INDIANA, ASSIGNOR TO OBEAR-NESTER GLASS COMPANY, A CORPORATION OF MISSOURI.

JAR-CLOSURE.

SPECIFICATION forming part of Letters Patent No. 741,969, dated October 20, 1903.

Application filed June 18, 1903. Serial No. 162,071. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM D. KEEFER, a citizen of the United States, and a resident of Gas City, county of Grant, and State of Indiana, have invented a new and useful Improvement in Jar-Closures, of which the following is a specification.

My invention relates to jars and similar vessels, and has for its principal object to secure a tight closure therefor that will be simple of application and removal; and it consists in the construction and in the arrangements and combinations of parts hereinafter described and claimed.

In the accompanying drawings, which form part of this specification, and wherein like symbols refer to like parts wherever they occur, Figure 1 is a plan view of a jar embodying my invention. Fig. 2 is a vertical sectional view thereof. Fig. 3 is a detail view of one side of the neck, and Fig. 4 is a detail view of the opposite side of said neck.

The body 1 of the jar or bottle is made of glass or other suitable material and preferably has a wide mouth. This mouth is countersunk and flaring—that is, an annular shoulder 2 is formed inside of the neck near the end thereof, and above said shoulder the width of the opening increases upwardly. On the outside of the neck is a shoulder 3, having a notch or depression 4 therein of sufficient depth to accommodate the end of a bent-wire clamping-spring 5. This spring is preferably a strip of resilient wire whose middle portion is crimped or fluted in a single plane and whose end portions are bent at right angles to this plane to constitute distance-sections and are then bent back parallel with said plane to constitute engaging hooks.

On the outer side of the neck, diametrically opposite the notch 4, is a second notch 6, which is preferably shallow, but of sufficient depth to properly hold the clamping-spring. This second notch 6 is formed in the lowermost portion of a projecting shoulder 7, preferably a continuation of the shoulder 3, which inclines upwardly therefrom, preferably on each side, so that the shallow notch terminates the downward inclination in each direction.

The closure consists of a glass cap 8, having an annular rib or shoulder 9 on its under side. Around this annular rib fits a ring or washer 10, of soft rubber or other suitable material. The outer diameter of this washer is of proper size to fit into the top of the mouth or opening in the neck of the bottle, and its thickness is slightly more than the depth of the countersink—that is, the distance from the shoulder in the neck of the jar or bottle to the end thereof.

In use the rubber ring is mounted over the rib of the cap, and then said cap is inserted into the mouth of the bottle or jar. Then the clamping-spring is applied by placing its body portion flatwise against the cap with one end of the bent spring inserted into the deeper notch in the external shoulder of the neck and the opposite end of said bent-wire spring inserted below the inclined portion of the external shoulder. This last-mentioned end portion of the spring is then pressed sidewise, whereby its end is forced lower and lower along said inclined shoulder until said end snaps or springs upwardly into the shoulder groove or notch, where it is locked and held by the resiliency of the spring. In this position the force of the spring exerts a continuous downward pressure upon the cap, and in the downward movement of the cap the rubber ring or washer thereof is compressed laterally as well as vertically, so as to fit snugly on all sides and form a perfect seal.

What I claim is—

1. A jar, a closure-cap therefor, and a clamping-spring, said jar having an external depression for engaging one end of a clamping-spring, and a shoulder inclining downwardly and terminating in a depression in its under surface diametrically opposite said first depression.

2. A jar having its mouth flaring and countersunk and a cap having a compressible washer arranged to be squeezed into said mouth and a clamping-spring for clamping said cap to said jar, said jar having a notch adapted to receive one end of said clamping-spring and having a second notch diametrically opposite thereto, and an inclined shoulder terminating in said second notch.

3. A jar having its neck provided with an annular recess, a closure-cap having an annular rib and a gasket thereon, a clamping-

spring to clamp said cap on said jar and press the said gasket into the said annular recess, and an external shoulder having notches therein at diametrically opposite points to receive the ends of said clamping-spring, the said shoulder sloping gradually downward to one of the notches.

Signed at St. Louis, Missouri, this 16th day of June, 1903.

W. D. KEEFER.

In presence of—
JAMES A. CARR,
JULIA B. MEGOWN.