

UNITED STATES PATENT OFFICE.

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IMPROVED PRESERVE-JAR.

Specification forming part of Letters Patent No. 39,327, dated July 21, 1863.

To all whom it may concern.

Be it known that I, P. W. REID, of Birmingham, in the county of Allegheny and State of Pennsylvania, have invented a new and Improved Preserve-Jar; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the top or mouth of my improved jar without the cover. Fig. 2 is a diametrical section through the cover of the jar. Fig. 3 is a top view of the jar with its cover confined in place. Fig. 4 is a sectional view through the mouth and neck of the jar, showing the cover seated therein. Fig. 5 is a perspective view of the cover of the jar.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates more especially to an improvement in the construction of preserving-jars which are of glass, whereby a perfect sealing of the contents in the jar is effected by a very simple manipulation, and by means which are durable, and which will last from year to year without renewing or repairing.

The nature of my invention consists in constructing the mouth of a jar and the stopper thereof in such a manner as to obtain a screw pressure and fastening, and also a wedged or tapering bearing, thus enabling me to secure the stopper in the mouth of the jar very firmly, and at the same time to make a perfectly-tight joint, as will be hereinafter described.

It also consists in constructing a cylindro-conical stopper with an annular recess on its tapering end adapted to receive and to retain in place a rubber gasket or packing-ring, which is used in effecting a tight joint, as will be hereinafter described.

In further consists in combining with a stopper of a cylindro-conical form a transverse handle or finger-plate, which is depressed or let into a concavity formed in the top of the stopper and used for applying the stopper to the jar, or for removing the same therefrom, as will be hereinafter described.

In the accompanying drawings, A represents the body of the jar, only a part of which

is represented. B represents the reduced neck of the jar, and C the enlarged flaring neck of the same. This flaring mouth consists of two right and left circular and tapering grooves, *a a*, which terminate at their ends in vertical spaces *b b* and a vertical rim, *c*. The lower surfaces, *d d*, of the grooves *a a* incline downward toward the neck of the jar and form the rounded and circular shoulder *e*, which is produced by spreading out the plastic glass in the mold in the operation of forming the upper portion of the mouth of the jar. The whole jar is made with this form of mouth in a mold suitably adapted to the purpose, and the operation requires no unusual labor nor ingenuity in performing the operation.

The cover or stopper for the mouth of this jar is made of a cylindro-conical shape, with a depression, *f*, in its top, which is divided centrally by a flat handle or finger-piece, *g*, that is molded with the stopper, as shown in Fig. 3. The upper or cylindrical portion, *h*, of this stopper has two lugs, *i i*, projecting therefrom, which are situated opposite to each other, and these lugs are formed with rounded ends, adapted to be received by the right and left tapering grooves *a a* in the mouth of the jar, as shown in Fig. 3. The distance across the stoppers from the extremity of one lug to that of the other is slightly less than the greatest diameter of the mouth of the jar. The stopper, with its lugs *i i*, may therefore be slipped into the mouth of the jar (by passing the lugs down through the vertical spaces *b b*) and rested upon the shoulder *e*, and then turned, so that the lugs will pass into the grooves *a a* and under the inclined planes thereof. The cylindrical portion *h* terminates in a tapering or beveled portion, *n*, which forms the valve or closing portion of the stopper. The surface of this beveled portion *n* does not, however, impinge upon the surface of the jar, for if this were the case it would be necessary to grind this surface, and also that against which it would bear, (the shoulder *e*), which would add greatly to the expense of the jar; but, in lieu of this objectionable mode, I form a recess, *p*, around the beveled sides of the stopper, and in this recess I introduce an india-rubber band, *r*, as shown in Figs. 2, 4, and 5, and being thus applied the band will be securely

confined in its place. The stopper being completed, it is applied to the jar in the following manner: The lugs *i i* are brought over the spaces *b b*, and the stopper slipped down into the mouth of the jar. This brings the rubber band or packing *r* in contact with the rounded shoulder *e* on the jar and the lugs *i i* opposite the widest ends of their respective grooves *a a*, so that by giving the stopper a turn the lugs will pass into these grooves and bear against the upper or inclined surfaces thereof and gradually depress the stopper into its seat, which operation compresses the rubber band and spreads it out over and around the shoulder *e* and makes a tight joint at this point.

To remove the stopper from the jar it is turned backward; but as the compressed rubber packing *r* will force the lugs *i i* hard up against the upper surfaces of the grooves *a a*, it will be found easier to depress the stopper and to start it in this way. As the grooves widen, the bearing will be diminished, until finally the lugs will be brought into the spaces *b b*, when the stopper may be easily removed.

The finger-piece *g* is used as a handle, as shown in Fig. 5, for holding and removing the stopper from the jar, for introducing it into the mouth of the jar, and for confining it therein. This handle, it will be seen, is seated into the stopper, so that a very small portion projects above the same, and the spaces on each side of this handle allow the fingers to enter the stopper and to grasp the handle very firmly. In this way a purchase can be obtained which will enable any person to force the stopper hard into its seat or to remove it from the jar, and while this is the case there is no portion of the handle which is liable to

be broken in packing the jars in boxes for transportation.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The cylindro-conical stopper, in combination with a depressed handle, *g*, and lugs *i i*, constructed in such a manner with reference to the mouth of a jar that I combine with a screw pressure and fastening a wedge-bearing, substantially as described.

2. Constructing a cylindro-conical stopper with an annular recess formed in its conical or beveled sides, in combination with a rubber packing-ring, *r*, substantially as herein described.

3. Although I do not claim, broadly, a screw-stopper and a rubber packing-ring, I claim constructing the mouth of a jar with tapering grooves *a a*, spaces *b b*, reduced neck *B*, and rounded or beveled shoulder *e*, in combination with a cylindro-conical stopper, and a rubber packing-ring, *r*, applied to the beveled edge thereof, so as to bear upon the rounded shoulder *e* and to form a tight joint, substantially as herein described.

4. A cylindro-conical stopper, with lugs *i i*, and a depressed handle, *g*, constructed substantially as and for the purposes herein described.

Witness my hand in the matter of my application for a patent for a preserve-jar this 1st day of June, A. D. 1863.

P. W. REID.

Witnesses:

GEO. E. SLOCUM,
A. B. STEVENSON.