(No Model.)

W. VOM HOFE.

Closing Fruit Jars and other Vessels.

No. 241,762. **Patented May 17, 1881.**

Fig. 1

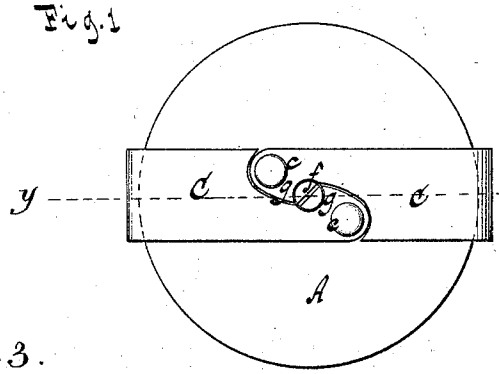


Fig. 5.

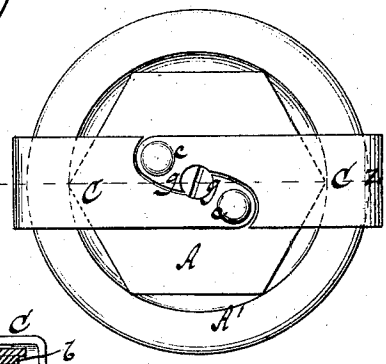


Fig. 3.

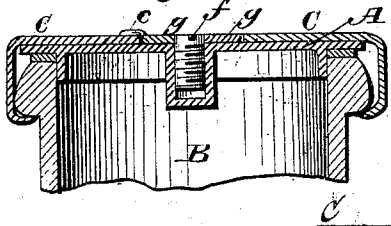


Fig. 2

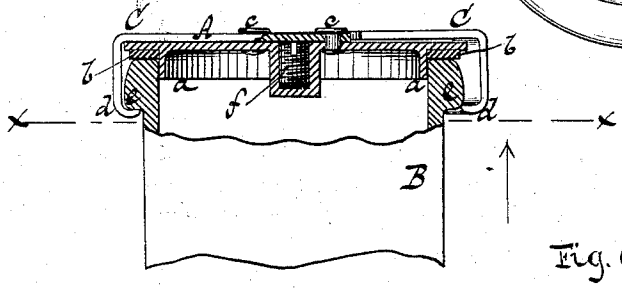


Fig. 6.

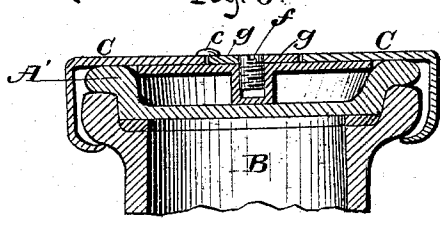
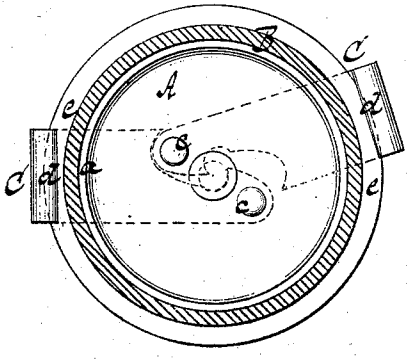


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM VOM HOFE, OF NEW YORK, N. Y.

CLOSING FRUIT-JARS AND OTHER VESSELS.

SPECIFICATION forming part of Letters Patent No. 241,762, dated May 17, 1881.

Application filed November 13, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM VOM HOFE, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Closing Fruit-Jars and other Vessels, of which the following is a specification.

This invention relates to improvements in that class of fruit and other jars in which a plate or cover for the jar is confined in position by flanged locking-arms pivoted near the periphery of the disk and adapted to swing inwardly to embrace the cover and the shoulder on the jar.

The object of my invention is to provide a very simple device which can be employed in connection with the usual recessed cover of a jar or without such cover, as required.

This invention is illustrated in the accompanying drawings, in which Figure 1 represents a plan or top view of my stopper when the eccentric arms are in their closing position. Fig. 2 is a transverse section, showing one of the eccentric arms in its closing position and another in the act of being closed. Fig. 3 is a longitudinal section taken on the line *y y* of Fig. 1. Fig. 4 is a transverse section in the plane *x x*, Fig. 2, looking in the direction of the arrow. Fig. 5 is a plan or top view of my device when used with an ordinary cover. Fig. 6 is a longitudinal sectional view of Fig. 5 on line *z z*.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates a disk, which may be cast or otherwise produced of any suitable material, such as brass, galvanized or cast iron. From the inner surface of this disk projects a rim, *a;* and B designates the jar or vessel, which is to be closed by my device. The edge of the mouth of this vessel is ground off or formed as near as possible flat, so that the inner flat surface of the disk will rest thereon uniformly all around. If desired, however, a bearing-surface for the disk may be formed either on the inside or on the outside of the vessel, a short distance from the edge of its mouth. In the example shown in the drawings the rim *a* is unbroken, and it fits the interior of the mouth of the vessel, so as to prevent a lateral displacement of the disk when the same is placed on the mouth; but said rim may be made in sections, or it may be made over the outer edge of the mouth, according to circumstances, and particularly to the nature of the vessel to which my device is to be applied.

Instead of the rim, as shown in Fig. 2, the disk A may be formed with a circular depression in its center, which fits the mouth of the vessel.

To the bearing-surface of the disk A is applied a gasket, *b*, of india-rubber or any other suitable material, to produce a tight joint when said disk is depressed upon the mouth of the vessel. If the bearing-surface on the vessel is formed below the edge of the mouth the gasket may be placed on this bearing-surface, instead of on the bearing-surface of the disk.

With the disk A are combined two or more arms, C C, which swing on pivots *c c*, secured in the disk A in eccentric positions, as shown in Fig. 1. The outer ends of these arms are bent downward to form hooks *d d*, the edges of which are constructed to engage with the shoulder *e* on the vessel B. In the example shown in the drawings the shoulder is slightly rounded, and if the disk A is adjusted on the mouth, and the arms C are swung on their pivots, the edges of the hooks *d d* are gradually forced beneath said shoulder, and the disk is firmly depressed upon the edge of the mouth. The shoulder *e* may, however, be made square, and in that case the bearing-edges of the hooks *d d* will have to be made slightly inclined, so that as the arms are made to swing on their eccentric pivots said bearing-edges will be forced gradually beneath the shoulder.

It will be seen that by the construction of the locking-arms as above described they extend horizontally across the face of the disk, and the pivots of the arms are so arranged that the inner ends of the latter lap or extend beyond each other in opposite directions when said arms are in the same longitudinal plane, as shown in Figs. 1 and 4, and therefore, when the arms are swung into such position, they strike each other and act as counter-stops, one stopping the further swinging movement of the other.

When the disk A has been closed down upon the mouth of the vessel by the action of the eccentric arms C C, said arms can be locked in

their closing position, so that they cannot open spontaneously. To accomplish this in an exceedingly simple and effective manner I provide a screw, *f*, which screws into a corresponding socket in the center of the disk A so as to be flush with its outer surface; and each of the eccentric arms C is provided with a lip, *g*. When the two arms are brought into their closing position, as shown in Fig. 1, the lips *g* of said arms close up so as to leave just room enough for the screw *f* to be unscrewed, and as soon as this is done both arms are locked in their closing position.

My device is applicable to all vessels which have to be closed by depressing a disk on the top edge of their mouths, and which are provided with a suitable shoulder to engage with the eccentric arms C C.

The disk A, with its eccentric arms, may also be used in connection with a cover, A′, of glass or other suitable material, which rests upon the mouth of the vessel, and is provided with a recess to receive the disk or plate, as shown in Fig. 4. In this case said disk or plate A may be made polygonal, oval, or in any other shape adapted to prevent it from turning round in the recess of the cover A′.

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

1. The combination, with a jar having a lateral shoulder, *e*, of a disk, A, and two arms, C C, having hooked outer ends, *d d*, and pivoted upon the face of the disk by pivots *c c*, which are attached to said disk in eccentric positions, said arms extending from the pivots horizontally across the face of the disk, and arranged to strike each other and act as counter-stops when brought into the same longitudinal plane, substantially as shown and described.

2. The combination, with the shouldered jar, of the disk A, having a central screw-threaded socket, the hooked arms C C, pivoted upon the disk by eccentric pivots *c c*, and provided with lips *g g*, and a screw, *f*, arranged in the screw-threaded socket for retaining the locking-arms in a fixed position, substantially as shown and described.

3. The combination of a disk or plate, A, and the pivoted eccentric arms C C, with a jar and a cover, A′, having a recess receiving the disk or plate, all substantially as described.

4. The combination, with a shouldered jar and a recessed cover, A′, of an angular disk, A, arranged in said recessed cover, the hooked locking-arms C C, pivoted upon the face of the disk by pivots *c*, attached in eccentric positions, said locking-arms extending from the pivots horizontally across the face of the disk, and capable of swinging in reverse directions over the disk and to act as stops to each other when brought into the same longitudinal plane, substantially as shown and described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

WILLIAM VOM HOFE. [L. S.]

Witnesses:
W. HAUFF,
E. F. KASTENHUBER.