No. 698,492. Patented Apr. 29, 1902.

W. V. HART.

CLAMPING DEVICE FOR FRUIT JAR LIDS.

(Application filed Apr. 6, 1901.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

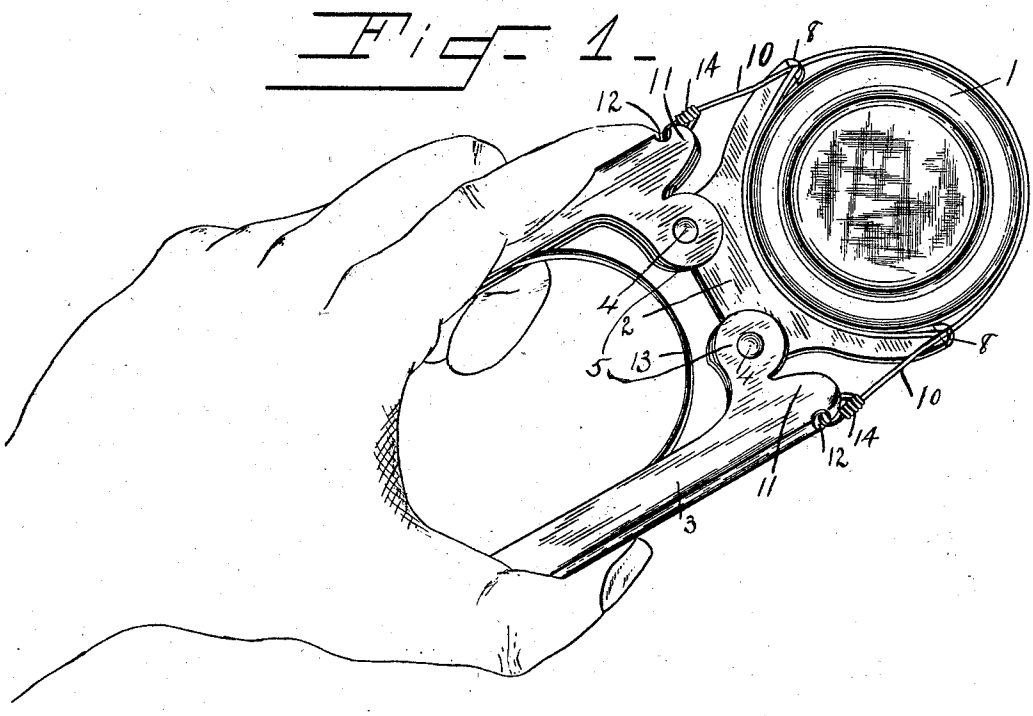
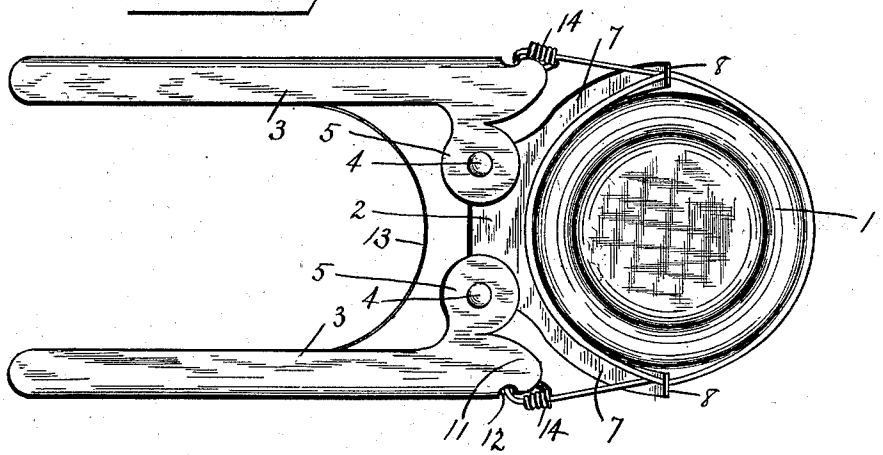


Fig. 2.



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Fig. 3.

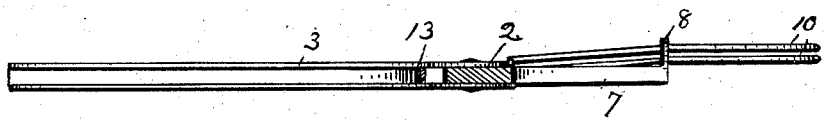


Fig. 4.

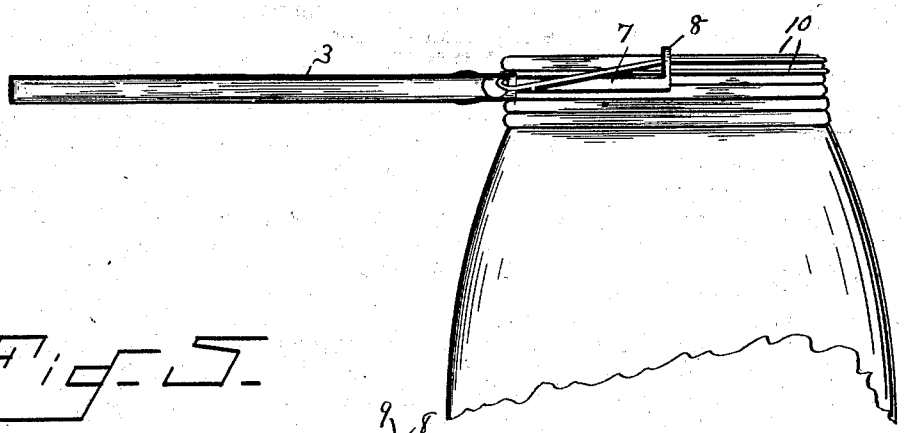
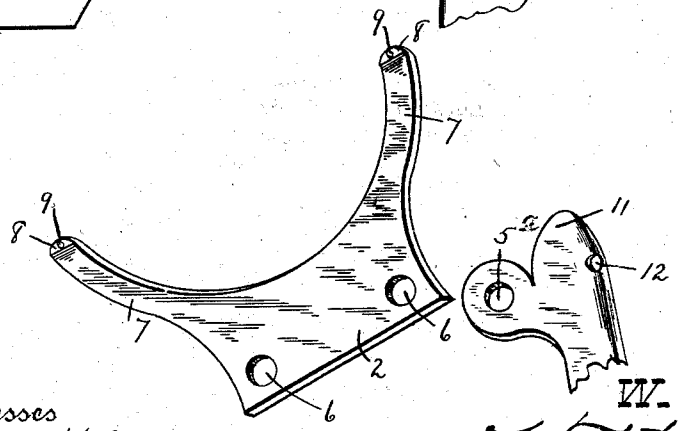


Fig. 5.



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UNITED STATES PATENT OFFICE.

WALTER V. HART, OF HOBART, INDIANA.

CLAMPING DEVICE FOR FRUIT-JAR LIDS.

SPECIFICATION forming part of Letters Patent No. 698,492, dated April 29, 1902.

Application filed April 6, 1901. Serial No. 54,699. (No model.)

To all whom it may concern:

Be it known that I, WALTER V. HART, a citizen of the United States, residing at Hobart, in the county of Lake and State of Indiana, have invented certain new and useful Improvements in Clamping Devices for Fruit-Jar Lids; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a lid holding or clamping device; and my object is to provide a reliably-efficient instrument adapted to engage the cap or lid of a fruit-jar or the like without injury thereto and enable a person to readily remove such lid even though it is very tightly secured in place.

Other objects and advantages will be made fully apparent from the following specification, considered in connection with the accompanying drawings, in which—

Figure 1 is a perspective view showing my invention as applied to use upon the cap or lid of an ordinary fruit-jar. Fig. 2 is a top plan view of the device complete, showing it disposed in engagement with the lid of a fruit-jar. Fig. 3 shows a central section of the device. Fig. 4 shows a side elevation of my cap-remover in its operative position. Fig. 5 illustrates a portion of my lid-remover and also the inner end of the handle.

In order to conveniently refer to the several features of my invention and their coöperating accessories, numerals will be employed, of which—

1 indicates the cap or lid of a fruit-jar of the usual or any preferred construction, while 2 designates the main or body portion, to which the controlling-levers 3 are pivotally secured, as indicated, by the rivets 4.

Each of the handles or levers 3 may be formed in any preferred way, preferably of a single piece of suitable sheet metal bent upon itself, as more clearly indicated in Fig. 3, each handle or lever being provided upon its inner end with an inwardly-directed extension or bracket 5, having suitable apertures 5^a to receive the rivets 4, which latter extend through apertures 6, provided in each end of the body portion 2.

The body portion 2 is provided with the diverging arms 7, the two arms being so disposed as to present between them a curved recess or opening designed to fit the peripheral edge of the lid of the fruit-jar. The extreme ends of the arms 7 are preferably bent upward, thus providing the ear-sections 8, each of said ears being provided with an aperture 9, as more clearly shown in Fig. 5.

In order to securely engage the lid of the jar and clamp it sufficiently tight to enable it to be readily rotated and unscrewed from its seat upon the top of the jar, I provide the clamping-wire 10, which by reference to the drawings will be observed to be connected at each end with the inwardly-extending end 11 of the handles 3 by means of suitable apertures 12, provided in said ends. The clamping-wire 10 is of sufficient length to pass from one end of the inward extension 11 to the other after first loosely passing entirely around the cap or lid of the jar. The wire 10 should be of proper length to snugly receive the upper end of the cap while the handles are still in an open condition or in a position illustrated in Figs. 1 and 2, and it will be observed that when the free ends of the handles are turned toward each other the extensions 11 will be withdrawn from the ears 8, and thereby cause the wire to tightly engage the cap, and thus permit the same to be removed. The handles are held normally open or substantially parallel with each other by means of the spring 13.

It will be observed that the several parts of my invention may be very cheaply formed of any suitable sheet metal with the addition of the simple continuous wire 10 of proper diameter and the spring 13, the wire 10 being readily anchored into engagement with the extended ends 11, as by passing the end of the wire through the aperture 12 and wrapping the extreme end thereof around a contiguous portion of itself, as indicated by numeral 14. It will be understood, however, that my invention may be made of any preferred material and of any desired size deemed most suitable to meet all the requirements of such an instrument. Inasmuch as the wires tightly grip the entire peripheral surface of the cap or lid of the jar there is no liability to damage said lid, which may be quickly removed no matter how tightly it may have be-

come set in a closed position. Since the caps of fruit-jars are all made substantially the same diameter, very little allowance may be made in providing the loop formed by the wire 10, as it will be found to readily fit all of the caps now in common use, when by moving the free ends of the handles toward each other the cap may be tightly secured.

In using my improved cap-removing appliance the device is first adjusted so that the upper end of the cap will be received by the loop, when the handles should be drawn together and then moved laterally, so as to unscrew the cap, as will be obvious.

While I have described the preferred construction and combination of parts deemed necessary to materialize my improved cap-removing appliance, it will be understood that I desire to comprehend in this application all such substantial equivalents and substitutes as may be considered to fall fairly within the scope of my invention.

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

1. The combination with a pair of levers having inwardly-extending ears, of a body portion pivoted in said ears and having diverging arms terminating in upturned ears, and a clamping-wire connected at each end to the ends of the said levers and passed twice through said upturned ears and forming a circular loop doubled outside said arms, all substantially as shown and described.

2. The combination with a pair of levers having inwardly-extending ears and end portions 11 with apertures 12, of a body portion pivoted in said ears and having diverging arms terminating in upturned ears substantially in line with said apertures, and a clamping-wire connected at each end to said levers at the ends thereof in said apertures and passed twice through the upturned ears of said arms in different planes and forming a circular loop doubled outside said arms with the portion between said ears of the arms and the ends of the body portion inclined, all substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

WALTER V. HART.

Witnesses:
WM. STOMMEL,
B. W. STRATTON.