May 2, 1933. R. G. ROGERS 1,906,887

FRUIT JAR HOLDER

Filed June 22, 1931

Fig. 1.

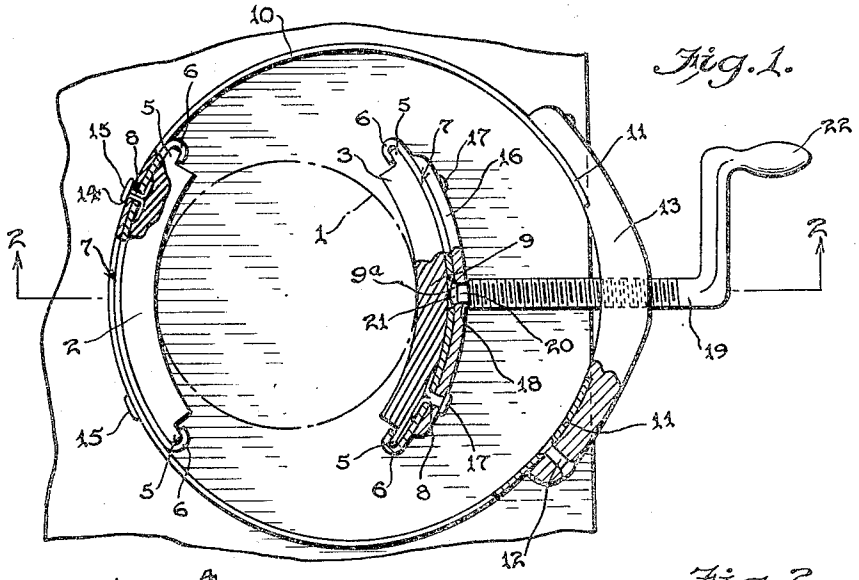


Fig. 2.

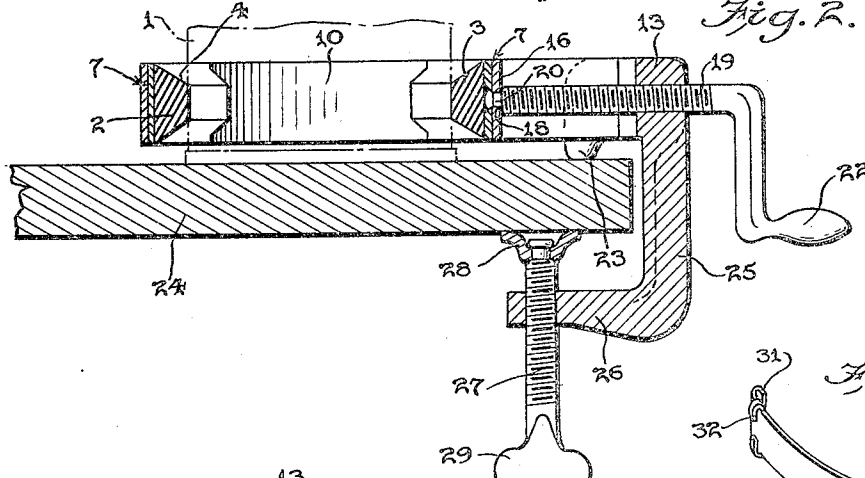


Fig. 4.

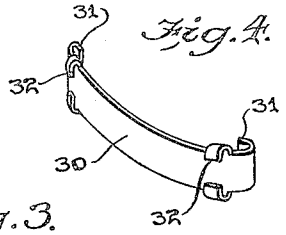
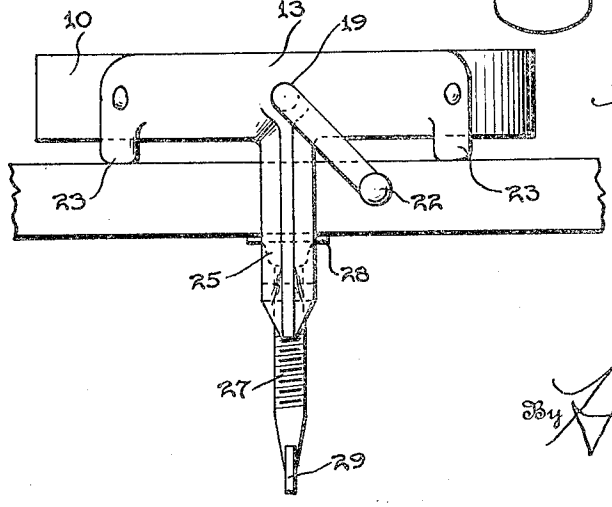


Fig. 3.



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UNITED STATES PATENT OFFICE

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FRUIT JAR HOLDER

Application filed June 22, 1931. Serial No. 546,104.

My invention relates to vises, more particularly to a vise for holding fruit jars, cans, and the like for filling and similar operations with said jars and cans, and it consists in the combinations, constructions, and arrangements herein shown and described.

Devices of this nature have heretofore consisted of a rigid member surrounding the jar or can to be held, which rigid member, because of the expansion and contraction of the jar, usually made of glass and heated for the canning operation, breaks said jar. This is a fact well known to housewives and others utilizing these devices.

It is therefore a primary purpose of my invention to provide a fruit jar holder which by the use of resilient material in the construction which grips the jar accommodates this expansion and contraction of said jar thus enabling the operator to carry out the canning operation without breakage of this receptacle.

A further object of my invention is to provide a fruit jar holder in which the jar-gripping jaws, usually constructed of rubber or other resilient material, are adapted for ready removal and positioning to allow of easy replacement of said jaws when wear and deterioration has taken place due to the pressures and temperatures to which they are subjected.

A still further object of my invention is to provide a device of the type described which is adapted for mounting on any conventional table, shelf, or similar structure.

A final object of my invention is to provide a device of the type described which has few parts, does not get out of order easily, and is simple to manufacture.

Other objects and advantages will appear as the specification proceeds and the invention will be more particularly defined in the appended claim.

My device is illustrated in the accompanying drawing forming a part of this application, in which

Figure 1 is a top plan view of my invention with parts thereof shown in section for clearness of illustration and with a schematic representation of a fruit jar secured therein,

Figure 2 is a sectional view on line 2—2 of Figure 1,

Figure 3 is an elevational view of my device, and

Figure 4 is a perspective detail view of a modified portion of my invention.

In carrying out my invention I make use of an ordinary fruit jar, 1, which may be made of glass or any other suitable material. For gripping this jar 1, to hold the same in position during the canning or similar operation or for any other purpose, I provide a pair of pads, 2 and 3, constructed of rubber or other resilient material and cut in the form of a portion of an annulus. These may be of tapered formation in cross section, as indicated at 4 in Figure 2, if desired. The end portions, 5, extend beyond the end walls forming lips to engage within the curled ends, 6, of the jaw holders, 7. These jaw holders are bands formed from metal or any similar material. They are provided with apertures, 8, for the reception of securing means for mounting them in position, as will be later described. One of them is equipped with a tapered bore 9*a*, for cooperation with another portion of the device, as will be set forth later on in the specification.

For mounting one of these jaws a resilient band, 10, is provided, secured at its ends, 11, by rivets, 12, or other suitable fastening means, to a frame portion 13. This band, 10, has apertures, 14, corresponding to the apertures 8 in the jaw holder 7. Split rivets, 15, inserted through these aligned apertures mount the jaws in position.

For mounting the opposing jaw 3 in position for movement into and out of engagement with the jar or other receptacle being held, I provide a frame portion 16, mounting the band portion 7 in a manner similar to the mounting of the opposing band portion 7 by means of split rivets 17, and having an aperture 18 therein for reception of a spindle, as will be later described.

For moving the frame portion 16 backwardly and forwardly to bring the jaw 3 into and out of engagement with the jar 1, I provide a screw 19, threadedly mounted in the frame portion 13, and having a reduced por-

tion 20 which projects through the aperture 18 and into the bore 9*a*. It is provided with a head, 21, which is adapted to retain the portion 16 thereon in suitable relationship. This screw, 19, is provided with a lever handle, 22, for use by an operator.

For mounting the vise in spaced relationship to the table, the frame member 13 is provided with a pair of feet 23 which extend downwardly below the band 10.

For securing the vise on a table top 24, or other similar structure, the frame member 13 is provided with a downwardly extending arm, 25, having a horizontal portion 26 for receiving the screw 27. This screw 27 is provided with a washer 28 swivelled thereon in a manner similar to the swivel connection between parts 16 and 19, as set forth above, and a finger-hold 29 for use by an operator. It can readily be seen that this screw 27 in cooperation with the feet 23 form a three-point clamp for securing the device in position.

In Figure 4 I have shown a modified band for supporting the jaw pads. This portion consists of a band, 30, similar to the bands 7, having curled ends, 31. It is not provided with apertures, however, but is adapted to be secured to the part 10 or the part 16, as the case may be, my means of similarly formed and oppositely disposed lapped portions, 32, as shown clearly in this figure.

From the foregoing description the use and operation of my device is easily understood. The operator simply clamps the vise on the table leaf in a manner easily understood from an examination of Figure 2, and places the jar or other receptacle which it is desired to use in the operation between the jaws 2 and 3. He then, by using the screw 19 in a manner easily understood, brings the jaws into the desired relationship with the jar to secure the same in position. The jaw 2 being mounted on the resilient and flexible band, 10, will give so that excessive pressure on the jar is prevented. The elevated position of this resilient band, 10, because of the feet, 23, permits this freedom of movement. Any expansion or contraction of the jar, due to temperature increases or decreases during the operations will be readily accommodated in the pads as well as the resilient and flexible band, 10.

When the operator desires to remove the pads because of deterioration thereof or for any other reasons, he can simply slip the same from the curled edges 6 of the parts 5; or, if said pads, due to heat or other causes, have become so fixed to the bands 7 that it is not feasible to remove them in this fashion, he may remove the entire bands and pads by simply withdrawing the split rivets. It is then easy for him to replace the pads if he so wishes.

The modified portion shown in Figure 4 is capable of as easy removal as the portion shown in Figure 1, as the lapped members can be easily pried upwardly to allow removal of the bands. This modified portion can be placed in any position about the resilient band, 10, by merely sliding the same thereabout as can easily be understood, making the use of two or more of these jaw pads possible in opposed relation to the jaw member 3 if desired.

It is understood that my invention may be applied to the holding of pistons, cans, or any other work or structure used in work to which it is adapted.

It is thus seen that I have provided a device for holding fruit jars, pistons, and the like, which will readily provide for the expansion and contraction of the device held, thus allowing retention of said device without liability of breakage thereof. It is also seen that I have provided a device the jaw members of which are adapted for ready removal and mounting for replacement.

It is further seen that I have provided a device which is adapted to the use of a plurality of jaws as well as a pair of opposed jaws.

What I desire to claim and secure by Letters Patent is:

A fruit jar holder comprising a pair of resilient pads, having shoulders extending outwardly from their ends, bands for mounting said pads having curled ends for receiving said shoulders, said bands having apertures therein, means for mounting said bands in position, and split rivets engageable through said means and said apertures for securing said bands to said mounting means.

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