

Oct. 2, 1951

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CLOSURE WRENCH HAVING PIVOTED
ARM, SLIDABLY ADJUSTABLE
Filed Feb. 3, 1950

2,569,608

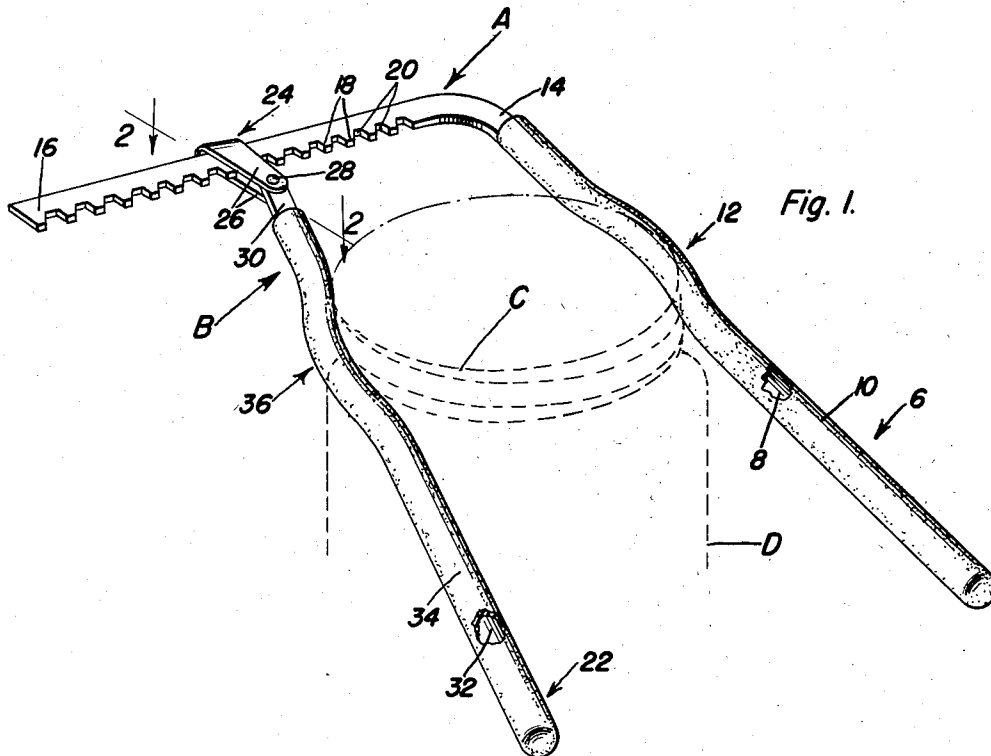


Fig. 2.

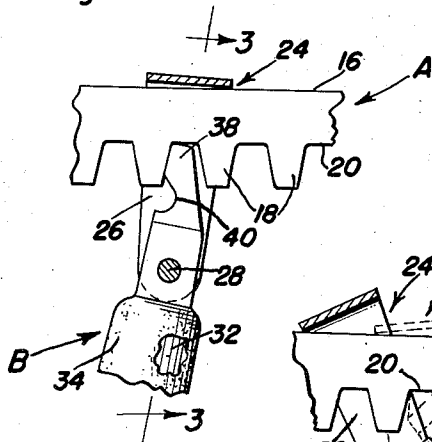


Fig. 3.

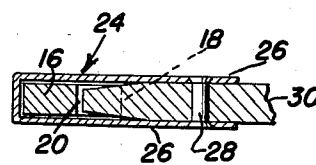
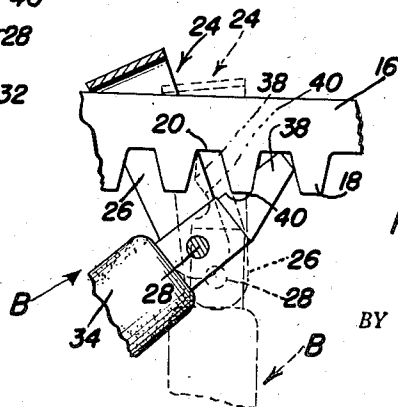


Fig. 4.



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UNITED STATES PATENT OFFICE

2,569,608

CLOSURE WRENCH HAVING PIVOTED ARM,
SLIDABLY ADJUSTABLE

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Application February 3, 1950, Serial No. 142,318

1 Claim. (Cl. 81—3.44)

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The present invention relates to wrenches such as are commonly known and satisfactorily used for applying and removing screw caps on Mason or equivalent jars.

More specifically, the invention is characterized by a pair of handles having gripping portions which are moved toward each other and pressed against diametrically opposite sides of the screw cap, in a well known manner, to aptly handle the step of loosening and removing the cap, especially if it has become stuck to the neck of the jar.

As implied in the foregoing paragraphs, the art to which the invention relates is highly active and well developed and discloses many and varied forms of jar cap wrenches, most of which operate along similar structural lines. It is therefore an object of the invention to structurally, functionally and otherwise improve upon prior art jar wrenches by providing a simple and practical construction in which manufacturers, users and others will find their primary needs fully met, contained and readily available.

Briefly summarized, the preferred embodiment of the invention has to do with a substantially L-shaped relatively stationary unit having one branch thereof formed into a toothed rack, and a complemental relatively shiftable unit, the latter being joined with the rack by way of a shackling and a hinging yoke and embodying a handle whose pivoted end is formed with a detent to be selectively engaged with the rack teeth.

Other objects and advantages will become more readily apparent from the following description and the accompanying illustrative drawings.

In the accompanying sheet of drawings wherein like numerals are employed to designate like parts throughout the views:

Fig. 1 is a perspective view showing a conventional Mason jar in dotted lines, and showing the improved jar wrench as constructed in accordance with the invention and the manner in which it is used.

Fig. 2 is a cross section on an enlarged scale taken on the line 2—2 of Fig. 1, looking in the direction of the arrows.

Fig. 3 is a view taken approximately on the plane of the line 3—3 of Fig. 2, looking in the direction of the arrows.

Fig. 4 is a view similar to Fig. 2 showing the manner in which the shackling and shifting yoke adjusts itself to allow proper angling of the movable handle and the detent means carried by said handle.

Referring now to the drawings by numerals

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and lead lines there are two principal units A and B. The unit A is of general angular form and embodies a handle or lever portion 6 which embodies a metal or equivalent rod or the like 8 with a rubber or equivalent covering 10. This lever member has an arcuate bend at 12 to clamp against one side of the screw cap C of the jar D. The outer end portion of the rod 8, the portion 14, is flattened and merges into a correspondingly flat right angularly disposed limb 16 having a serrated edge portion including teeth 18 and intervening spaces 20. These elements form what may be conveniently referred to as a linearly straight rack.

The rack is adapted to accommodate a U-shaped yoke which serves to saddle or shackle the lever or handle portion 22 of unit B in place. More specifically, the yoke is denoted by the numeral 24 and the arm portions thereof 26 reach beyond the rack to accommodate a pivot 28. The pivot serves to hingedly mount the end portion 30 of the rod or bar member 32 in place. Here again, a rubber or equivalent covering 34 is provided and a suitable bend 36 is used to correspond with the first named bend 12. The portion of the rod member beyond the pivot means 28 is bevelled to provide a detent 38 to engage in the notches between the rack teeth. The detent, in turn, is provided with a clearance notch 40 which assists in shiftablely adjusting the shackling yoke along the rack bar in order to move the handles closer to or farther from each other.

The notched detent 38, the pivotal connection 28 and yoke provide a novel adaptation for shiftablely attaching the relatively movable lever means or unit B to the rack bar of unit A in order that the user may quickly set the two lever or handle members to the approximate relationship wanted when it is desired to bring said units in clamping or gripping positions against the screw cap C. Not only is there sufficient freedom and play between the pivoted detent and yoke but the detent has a clearance notch 40 which comes in handy in expediting the step of adjusting and setting the unit B in relation to the unit A. For instance, by swinging the lever or handle means 36 to the left in Figure 4 compared to Figure 2 it is obvious that the detent takes a position which is at an acute angle to the arms of the yoke. This allows the yoke to slide along the rack easily and also enables the clearance notch to function against the selected rack tooth with which the unit B is to be "locked" in order to bring about the desired squeezing and clamping result of units A and B. The construction is of such obvious simplicity

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that almost as soon as the user picks up the tool he knows how to angle the lever unit 36 in respect to the rack for shifting the unit B toward and from unit A. Then too, it will be obvious to him that when the detent is "locked" in position it takes the position illustrated in Figure 2, at which time the yoke steadies and holds the detent against accidental displacement from its selected locking position.

Changes in shape, size, materials and rearrangement of details and parts may be resorted to in actual practice, so long as they do not depart from the spirit of the invention or the scope of the appended claim, as is well understood.

Having described the invention, what is claimed as new is:

A jar cap wrench of the class shown and described comprising a linearly straight rack bar having rack teeth along one longitudinal edge and provided at one end with a right angularly disposed rigidly attached handle, a U-shaped yoke having its arm portions straddling the rack bar and projecting beyond the rack teeth, a second handle having an end portion pivotally mounted

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between the arms of said yoke, said pivotally mounted end portion being provided with a detent shaped and sized to engage rockably in the notches between said teeth, said detent being provided on one side with a tooth accommodating and clearance notch to assist one in angling the detent and shifting the yoke to a desired position in respect to said rack bar.

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