G. E. OTT.

CAN TOP SET AND WRENCH.

APPLICATION FILED DEC. 6, 1912.

1,077,294. Patented Nov. 4, 1913.

Fig. 1.

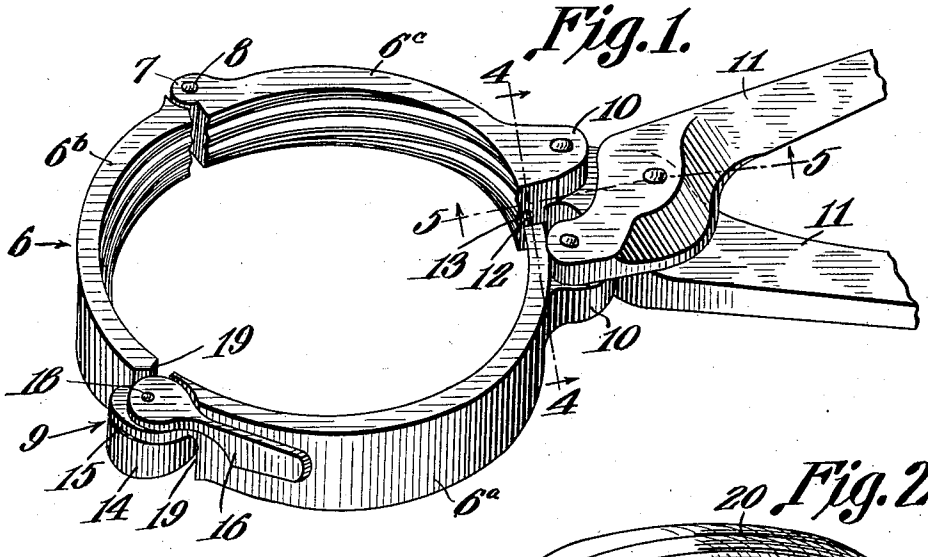


Fig. 2.

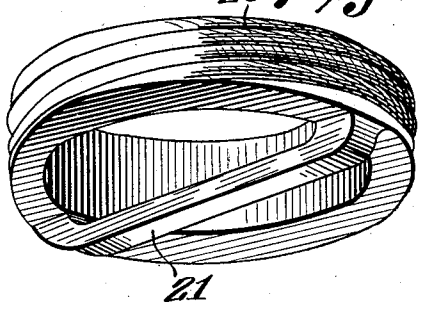


Fig. 3.

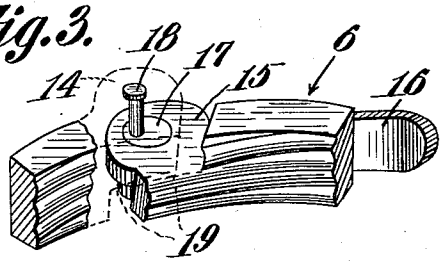


Fig. 4.

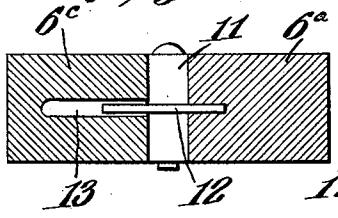
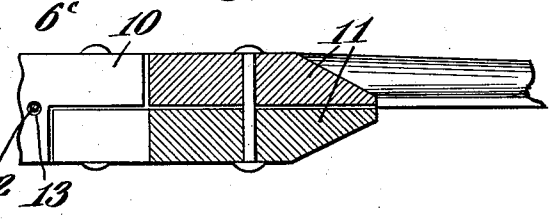


Fig. 5.



Witnesses

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CAN-TOP SET AND WRENCH.

1,077,294. Specification of Letters Patent. Patented Nov. 4, 1913.

Application filed December 6, 1912. Serial No. 735,340.

To all whom it may concern:

Be it known that I, GEORGE E. OTT, a citizen of the United States, residing at Lancaster, in the county of Erie and State of New York, have invented a new and useful Can-Top Set and Wrench, of which the following is a specification.

The present invention relates to an implement or device for setting or shaping the rings or flanges of can or jar tops, and also for serving in the capacity of a wrench for tightening and loosening the tops.

It is the object of the present invention to provide an appliance or implement of the character indicated which shall be comparatively simple, durable, substantial, compact and inexpensive in construction, and which shall be reliable, efficient and convenient in its use.

It is also the object of the present invention to provide a device of the character described embodying a clamping ring to embrace the ring or flange of a can top, the said clamping ring being provided with means for adjusting the same to accommodate different sizes or two sizes of standard can tops.

The present invention also contemplates the provision of a clamping ring of the character indicated embodying a plurality of hinged sections pivoted to a pair of crossed and pivoted levers, means being provided for preventing the sections of the ring from swinging excessively relative to each other in order that the ring will at all times be in position for use.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

The preferred embodiment of the invention has been illustrated in the accompanying drawing, wherein corresponding parts have been indicated by similar reference characters, and wherein:—

Figure 1 is a perspective view of the clamping ring and actuating levers, portions of the latter being broken away. Fig. 2 is a perspective view of a male die or ring over which the ring or flange of the can top may be set or pressed into proper form. Fig. 3 is a fragmental detail of the connection between two sections of the clamping ring, the end of one section being shown in dotted lines to aid in the understanding of the construction. Fig. 4 is a sectional view taken on the line 4—4 of Fig. 1; and Fig. 5 is a sectional view taken on the line 5—5 of Fig. 1.

Referring specifically to the drawing, the clamping ring or female die has been designated generally by the numeral 6, the same being interiorly screw-threaded in accordance with the pitch of the screw-threads of standard can tops, and comprising the three arcuate sections 6^a, 6^b and 6^c, which sections are of approximately equal length. The sections 6^b and 6^c are provided with the overlapped outstanding ears 7 at their adjoining ends, a rivet or pivot pin 8 passing through the overlapped ears to hinge the said sections together, whereas the sections 6^a and 6^b are hinged together by an adjustable connection designated generally by the numeral 9.

The adjoining ends of the sections 6^a and 6^c are disconnected and the said ends are provided with the outstanding or radially projecting ears 10 lying in different planes and pivoted to the respective short or inner arms of a pair of crossed and pivoted levers 11. The outer or long arms of the lever are properly proportioned so as to be graspable by the hand of the operator in order that the clamping ring may be contracted forcibly.

The clamping ring being constructed of a plurality of sections and the sections being pivoted to the clamping levers will tend to permit the sections to swing relative to each other and thereby become displaced or swung out of position, and to overcome this disadvantage, a pin or finger 12 has been secured to the end of the section 6^a and fits or projects into a socket 13 provided in the end of the section 6^c. The pin 12 in fitting into the socket 13 will prevent the sections 6^a and 6^c from swinging appreciably relative to each other, and as a result, the clamping ring will be maintained in proper position at all times. It being noted, however, that the clamping ring may be readily expanded and contracted by the levers 11 without the interference of the pin 12. The pin 12 is adapted to slide back and forth in the recess 13, the recess being preferably

slightly greater in diameter than the pin so as to permit the sections 6ª and 6ᶜ to swing very slightly relative to each other as the ring is expanded and contracted during the use thereof.

The hinged connection 9 between the adjoining ends of the sections 6ª and 6ᵇ entails the use of the following structure. The section 6ᵇ is provided with an out-standing ear 14, whereas the end of the section 6ª is provided with a similar ear 15 overlapping the ear 14, a short thumb or finger lever 16 having a boss or hub 17 journaled through the ear 15, and a rivet or pivot pin 18 passing through the ear 14 and eccentrically through the boss 17. Thus, as the lever 16 is swung to one side or the other the size of the clamping ring may be adjusted for different sizes of can tops, it being noted, that in practice, there are two different sizes of standard can tops. The adjoining ends of the sections 6ª and 6ᵇ are rabbeted and overlapped as indicated by the numeral 19.

In connection with the clamping ring or female die, there is employed an inner ring or male die 20 having exterior or circumferential screw threads thereon to correspond with the screw-threads of the standard can top. This ring 20 is also provided with a diametrical handle 21 connecting one of its edges for convenience in handling the ring or die. In practice, two of the rings or dies 20 are provided, one for each size of can tops, as will be understood, it being necessary to illustrate one size only.

In use, when the device is to be employed for tightening or loosening can tops, the clamping ring may be readily placed over the ring or flange of the can top so that the threads of the can top and clamping ring register or coincide and then by swinging the operating levers 11 together, the can top will be firmly grasped so it may be turned without slipping. The clamping ring may be adjusted by swinging the lever 16 against one of the sections 6ª or 6ᵇ so as to accommodate two sizes of can tops, and as the use of the device as a can top wrench is clearly apparent, the same need not be further described. When the device or implement is to be employed for setting or shaping the rings or flanges of can tops, the inner ring or male die 20 is screw-threaded into ring or flange of the can top, and the can top together with the male die 20 is partially inserted into the clamping ring. The clamping ring is then contracted by means of the levers 11, and after the first convolutions of the thread of the can top ring or flange have been pressed into shape, the can top may be further screw-threaded into the clamping ring for a new operation. Thus, after several operations, the ring or flange of the can top may be pressed or shaped into position over the male die. This implement may therefore be found useful for setting or reshaping the flanges of can tops which have become spread during their use, and the can tops after being reshaped or reset as above indicated will again become efficient and serviceable.

From the foregoing taken in connection with the drawing, the advantages and capabilities of the present device will be apparent to those versed in the art, and it will be noted that the objects aimed at have been carried out satisfactorily, the present device providing a desirable one for the purpose for which it is designed.

Having thus described the invention what is claimed as new is:—

1. In a device of the character described, a pair of crossed and pivoted levers, and a clamping ring embodying a plurality of hinged sections pivoted to the respective levers, the hinged connection between two of the sections including a lever pivoted to the end of one section and having an eccentric member engaging the end of the adjoining section, the last mentioned lever being adapted to swing against the respective sections.

2. In a device of the character described, a pair of crossed and pivoted levers, a clamping ring embodying a plurality of hinged sections pivoted to the respective levers, two of the sections having overlapped ears, a lever having a boss journaled through one ear, and a pivot pin passing through the other ear and passing eccentrically through the boss, the last mentioned lever being adapted to swing against the respective sections.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

GEORGE E. OTT.

Witnesses:
CELIA BAUER,
CHAS. GOLDBACH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."