C. R. KEERAN.

APPLIANCE FOR RECEPTACLE CAPS OR COVERS.

APPLICATION FILED SEPT. 14, 1914. RENEWED MAY 8, 1916.

1,207,560. Patented Dec. 5, 1916.

Fig. 1.

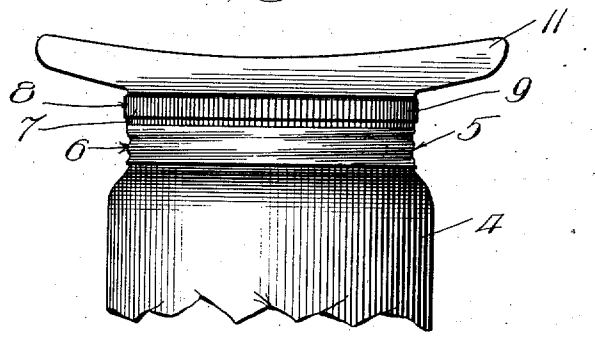


Fig. 2.

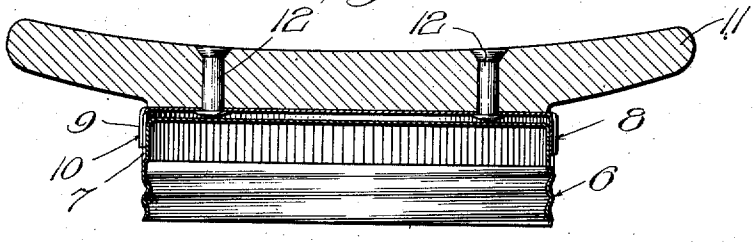
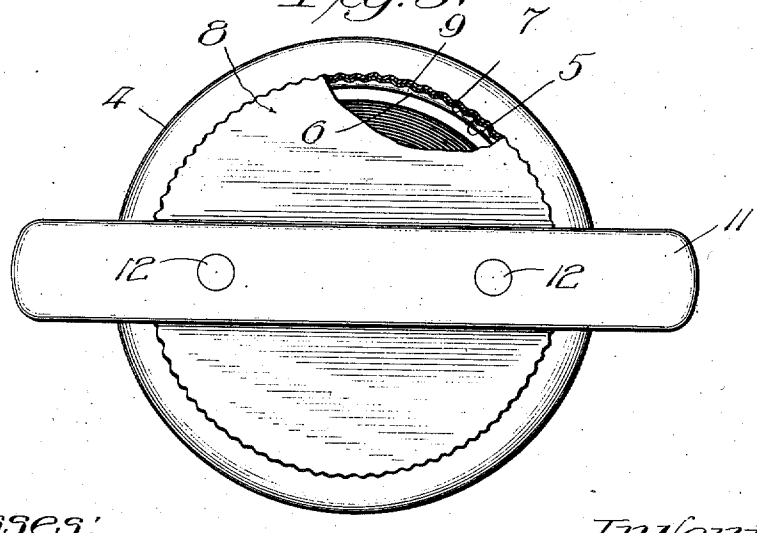


Fig. 3.



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UNITED STATES PATENT OFFICE.

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APPLIANCE FOR RECEPTACLE CAPS OR COVERS.

1,207,560. Specification of Letters Patent. Patented Dec. 5, 1916.

Application filed September 14, 1914, Serial No. 861,606. Renewed May 8, 1916. Serial No. 96,248.

To all whom it may concern:

Be it known that I, CHARLES R. KEERAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Appliances for Receptacle Caps or Covers, of which the following is a specification.

The present invention relates to an appliance adapted particularly for use in connection with threaded metal caps or covers for closing the open end of receptacles, for the purpose of affixing or removing such caps.

The objects of the present invention are to provide a device of the character above specified which is cheap and simple of construction, easy of operation, and which will remove and affix a receptacle cap without in any way mutilating the same, or impairing its future use.

The invention further consists in the features of construction and combinations of parts hereinafter described and claimed.

In the drawing: Figure 1 is an elevation showing the upper part of a receptacle and threaded cap thereon, with the appliance of the present invention in operative position; Fig. 2 is a vertical section on a somewhat enlarged scale, showing a similar cap with the appliance of the present invention in operative position; and Fig. 3 is a plan view of a similar cap with the appliance of the present invention in operative position.

In the art to which the present invention relates, difficulty has been experienced in screwing metal caps upon receptacles with the degree of tightness necessary to secure a perfect seal, due largely to inability to get a satisfactory hold on the cap. This is true even when the cap is knurled as shown. The same difficulty is also encountered after the jar has been sealed, when it is desired to remove the cap.

It is the primary object of the present invention to provide an efficient means for tightening and loosening receptacle caps, which will not cause mutilation during the tightening or loosening operations, and which further will afford to the operator a firm hold and increased leverage.

Referring now to the drawing, and particularly to Fig. 1, the device is shown in connection with a receptacle 4 which may be of any suitable style and size, the receptacle being provided at its upper end with the ordinary neck 5 formed with exterior threads. Upon this neck is threaded a metal cap 6 having interior threads at its lower end meshing with the exterior threads of the neck. The upper portion of the cap is unthreaded, and in the construction shown is of corrugated or undulating formation producing a ribbed surface 7.

The appliance of the present invention consists of a relatively shallow cup-shaped member 8 having undulations or corrugations 9 on the depending portion 10 thereof. These corrugations or undulations upon the cup-shaped member correspond to the corrugations or undulations 7 on the upper portion of the cap 6. The appliance is further provided with a suitable hand piece 11 which may be of any convenient shape and size, and of any suitable material. In the construction shown, this hand piece is attached to the cup-shaped member 8 by means of rivets 12, although the means of connection is obviously a matter of choice.

In practice, the cup-shaped member 8 of the appliance is forced downwardly around the upper end of the cap 6, as will be apparent from Figs. 1 and 2. The corrugated surfaces on the member 8 and cap 6 will interengage to form an interlocking connection between the appliance and the cap, whereby an operator is enabled to apply rotary pressure to the appliance through the medium of the hand piece 11. In this manner, the cap can be easily removed or affixed as desired. It is obvious that during either of these operations the cap or cover will undergo no mutilation or distortion, since the appliance fits snugly over the top portion of the entire cap whereby the pressure is distributed evenly around the entire periphery of the cap. Pressure concentrated at one or more points on a receptacle cap of this general style would likely cause the metal to bend and become mutilated, as relatively soft and bendable material is ordinarily used in its construction. By means of this simple appliance, it is manifest that a cap can be readily and tightly affixed to the closure, and can be as readily removed without any danger of mutilation or distortion such as would impair its future use.

I claim:

1. An appliance for removing and affixing jar caps, comprising an engaging member formed of a single piece of metal of cup-shaped formation embodying a continuous

depending flange extending in a downward direction only, said depending flange being formed with a corrugated surface adapted to engage with the sides of a jar cap, and a handle attached to the top portion of said engaging member, substantially as described.

2. An appliance for removing and affixing jar caps, comprising a cup-shaped engaging member formed with a depending flange therearound, the inner side of the flange being corrugated to engage and interlock with a similarly corrugated exterior surface on the jar cap, and a handle attached to the engaging member for manipulating the same, substantially as described.

3. An appliance for removing and affixing jar caps, comprising an engaging member formed with a depending flange thereround, the inner side of the flange being corrugated to engage and interlock with a similarly corrugated exterior surface on the jar cap, and a handle attached to the engaging member for manipulating the same, substantially as described.

4. An appliance for removing and affixing circular jar caps having corrugations on the periphery thereof, comprising a member formed to engage with the cap at substantially every point in its periphery, the engaging surfaces of the member being substantially equidistant from a central point therein, and having corrugations to engage and interlock with the corrugations on the cap, and a handle attached to the engaging member for manipulating the same, substantially as described.

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