E. RILEY AND C. YUNCKER.

BOLT AND NUT HOLDER.

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1,382,320. Patented June 21, 1921.

Fig. 1.

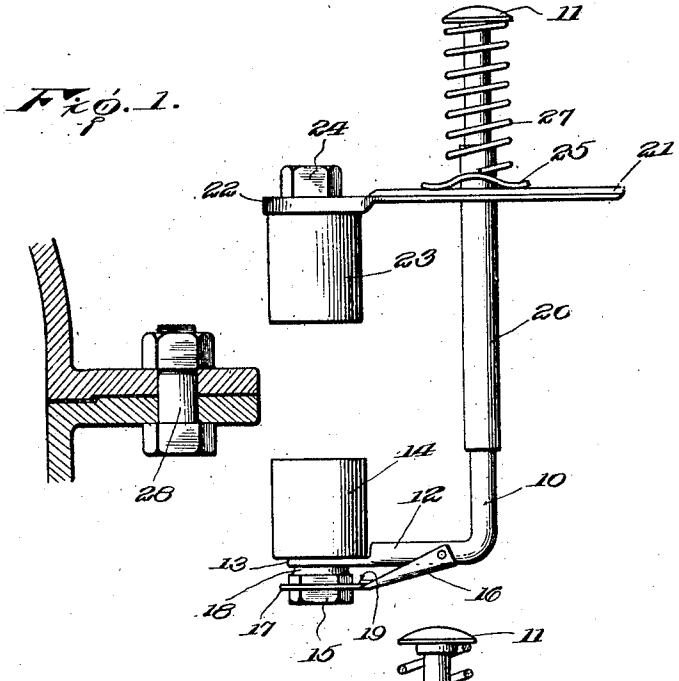


Fig. 2.

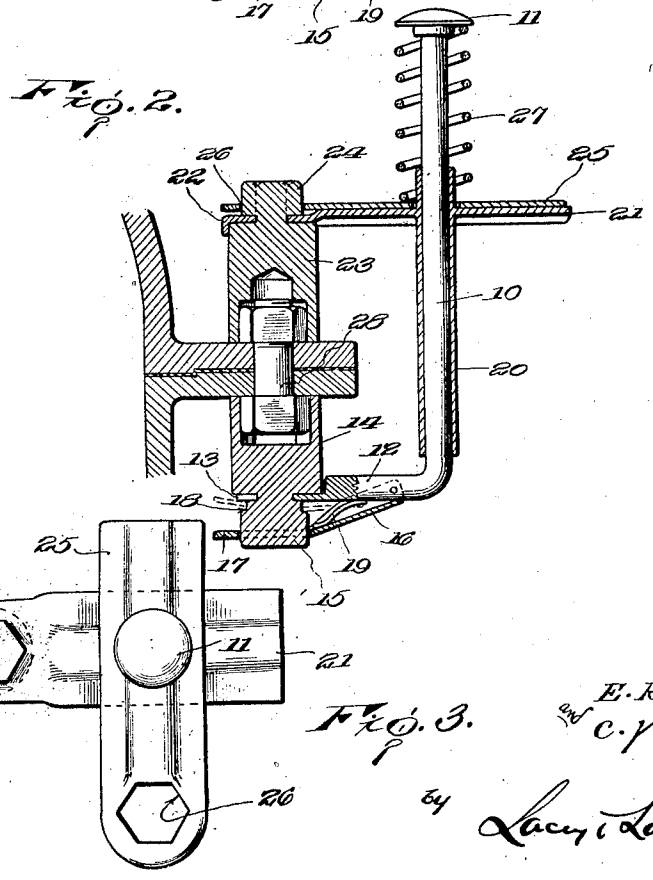


Fig. 3.

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UNITED STATES PATENT OFFICE.

ELMER RILEY AND CLARENCE YUNCKER, OF DODGE CITY, KANSAS.

BOLT AND NUT HOLDER.

1,382,320. Specification of Letters Patent. Patented June 21, 1921.

Application filed March 2, 1920. Serial No. 362,728.

To all whom it may concern:

Be it known that we, ELMER RILEY and CLARENCE YUNCKER, citizens of the United States, residing at Dodge City, in the county of Ford and State of Kansas, have invented certain new and useful Improvements in Bolt and Nut Holders, of which the following is a specification.

This invention relates to an improved bolt and nut holder and has as one of its principal objects to provide a device of this character which may be employed for holding a bolt or, if preferred, its nut, stationary so that, in the first instance, the nut may be rotated while in the latter instance the bolt may be rotated in order that the nut may be removed from the bolt easily and quickly.

The invention has as a further object to provide a device of this character particularly adapted for use in connection with the crank case securing bolts of internal combustion engines, whereby these bolts may be readily removed, it being, at present, quite difficult to effect such removal since it is often necessary to hold each bolt with one wrench while another wrench is used for removing the nut of the bolt.

And the invention has as a still further object to provide a device which may be readily employed upon bolts of different lengths.

Other and incidental objects will appear hereinafter.

In the drawings:

Figure 1 is a side elevation showing the sockets of the device spread apart for engagement with the head and nut of a conventional type of bolt.

Fig. 2 is a sectional view showing the device applied, and

Fig. 3 is a plan view of the device.

In carrying the invention into effect, we employ a preferably cylindrical shank 10, at one end of which is fixed a head 11 while at its opposite end portion the shank is bent to provide a laterally directed arm 12. Upon the free end of this arm is formed an eye 13 and swiveled through said eye is the reduced neck of a socket 14, said neck carrying below the eye an enlarged wrench receiving head 15. Pivoted upon the arm 12 is a locking member 16 for the socket. At its free end this locking member is formed with a head 17 freely fitting over the head 15 of the socket and provided with flat faces to coact with the flat faces of the socket head. However, in this connection, it will be observed that the flat faces of the socket head do not extend to the base of said head. On the other hand, the socket head is formed with an annular portion 18 beneath its wrench receiving faces. Consequently, the locking member may be depressed to dispose the head thereof out of engagement with the flat faces of the socket head lying about the annular portion 18 of the socket head, when the socket may be freely rotated. Bearing between the locking member and the arm 12 is a spring 19 normally holding the locking member in active position so that under ordinary circumstances the socket will be locked against rotation.

Slidable upon the shank 10 is a sleeve 20 and integrally formed on or otherwise secured to this sleeve is an arm 21. At one end the arm is formed with an eye 22 and swiveled through said eye is the reduced neck of a socket 23 normally confronting the socket 14, the neck carrying, above the eye, a wrench receiving head 24. Overlying the arm 21 is a locking member 25, one end portion of which is provided with an opening 26 therethrough for freely receiving the wrench head 24 of the socket coacting with the flat faces of said head for locking the socket against rotation and bearing between the locking member and the head 11 upon the shank is a helical spring 27 surrounding the shank and acting to hold the locking member tightly against the arm. In this connection it will be observed that the sleeve 20 is elongated and, at its lower end, will contact with the arm 12 of the shank for maintaining the arm 21 spaced away from the former arm against the action of said spring.

In Figs. 1 and 2 of the drawings, we have shown our improved device in connection with a conventional type of bolt 28, the bolt being shown as engaged through the flanges of an ordinary engine crank case. In applying the device, the sockets thereof are, as shown in Fig. 1, first spread apart so that, as shown in Fig. 2, one of the sockets may be engaged over the bolt head and the other over the nut of the bolt when the spring 27 will serve to clamp the sockets in engagement therewith. Should it be desired to turn the nut, the locking member 25 may then, as shown in Figs. 1 and 3, be swung to one side, when a wrench may be applied to

the socket head 24 for rotating the socket and consequently rotating the nut, the socket 14 serving to hold the bolt stationary. On the other hand, should it be desired to turn the bolt, the locking member 25 may be lifted into engagement with the socket head 24 when a wrench may be applied to the socket head 15 for rotating the socket and consequently rotating the bolt, the socket 23 serving to hold the nut stationary. As will be noted, a wrench applied to the socket head 15 will serve to depress the locking member 16, as previously described, so that the socket 14 may be freely rotated. However, as soon as the wrench is removed, the spring 19 will serve to return the locking member to its normal position securing the socket 14 against rotation. It will accordingly be seen that we provide a device which may be employed for holding either the bolt or its nut stationary so that the nut may be removed with facility either by turning the bolt in the one instance or turning the nut in the other instance. In the present embodiment of the invention we have shown both of the sockets of the device mounted for rotation. However, as will be perceived, either one of the sockets could well be permanently fixed while the other socket could, in the manner shown, be mounted for rotation. We accordingly reserve the right to all such minor variations as may fall within the spirit of the appended claims.

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

1. A device of the character described including spring-pressed confronting sockets, one mounted for rotation, a support for said sockets and means on the support for locking said sockets against movement.

2. A device of the character described including confronting rotatable sockets, a support for the sockets and means on the support respectively operable for locking either of the sockets against rotation.

3. A device of the character described including confronting sockets, one mounted for rotation and provided with a wrench receiving head, a support for said sockets and means on the support adapted to coact with said head for locking said socket against rotation.

4. A device of the character described including coacting arms, a support for the arms, yieldable means urging the arms toward each other, confronting sockets carried by the arms, one of said sockets being mounted for rotation, and means on the support for locking said socket against rotation.

5. A device of the character described including a shank having an arm extending therefrom, a sleeve slidable upon the shank and provided with an arm to coact with the first arm, yieldable means coacting with the latter arm for urging the arms toward each other, confronting sockets carried by the arms, one of said sockets being rotatable, and means for locking said socket against rotation.

6. A device of the character described including confronting sockets, one of said sockets being rotatable and provided with a wrench receiving head, a support for the sockets and a locking member on the support adapted to coact with said head for locking against rotation.

In testimony whereof we affix our signatures.

ELMER RILEY. [L. S.]
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