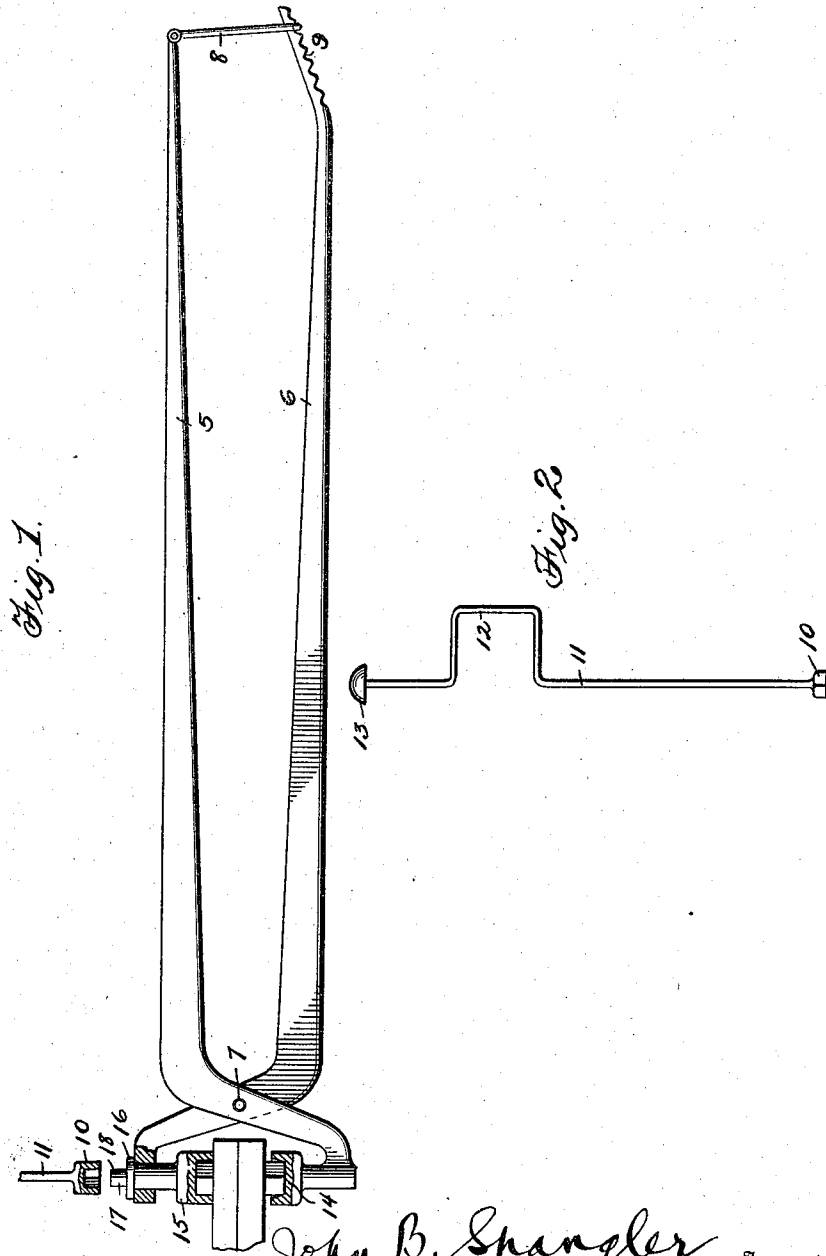


J. B. SPANGLER.
 SOCKET WRENCH AND BOLT HOLDER DEVICE.
 APPLICATION FILED APR. 2, 1918.

1,299,631.

Patented Apr. 8, 1919.



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UNITED STATES PATENT OFFICE.

JOHN B. SPANGLER, OF BISMARCK, NORTH DAKOTA.

SOCKET-WRENCH AND BOLT-HOLDER DEVICE.

1,299,631.

Specification of Letters Patent.

Patented Apr. 8, 1919.

Application filed April 2, 1918. Serial No. 226,180.

To all whom it may concern:

Be it known that I, JOHN B. SPANGLER, a natural born citizen of the United States, residing at 607 Fifth St., Bismarck, in the county of Burleigh and State of North Dakota, have invented certain new and useful Improvements in Socket-Wrench and Bolt-Holder Devices, of which the following is a specification.

The present invention relates to a double socket wrench and bolt holder, its object being to provide an improved article of this nature adapted to be quickly placed in position to engage the head of a bolt and the nut screwed upon said bolt, the device being self retaining in position thereby leaving the hands of the operator free to manipulate the tool for the purpose of removing the nut from the bolt. The present invention is particularly adapted to remove the nuts from the bolts of engine crank cases and particularly engines of the Ford type, wherein there are a number of bolts passing through overlapping flanges of the engine crank case, these bolts having nuts screwed upon their upper ends. It is a laborious and awkward task to remove these bolts for the reason that frequently these bolts turn with the nuts. The present tool is particularly adapted to embrace these flanges and engage and hold the bolts against turning and to engage the nut by means of a rotative socket element which may be manipulated from above by a tool of the proper shape.

Further objects and advantages of the invention will be set forth in the detailed description which now follows.

In the accompanying drawing:

Figure 1 is a view partly in side elevation and partly in section of a tool constructed in accordance with the invention; and;

Fig. 2 is a detail view of a socket wrench employed in conjunction therewith.

Referring to the drawing it will be seen that the tool comprises cross handles 5 and 6 that are pivoted to each other at 7. The rear end of one of these handles carries a bail 8 that is adapted to engage with notches 9 formed in the terminal end of the other of said handles, to thereby hold the tool in place and to leave the hands of the operator free to manipulate a socket wrench com-

prising a socketed lower end 10, a shank 11, an offset crank 12, and a head 13. Socket wrenches of this kind are well known and are in common use in garages. The forward end of the handle 5 carries a socket 14, adapted to engage the head of a bolt and slightly tapering to facilitate its easy application and removal. The forward end of the handle 6 carries a socket 15 that is mounted for rotation in the end of said handle and a collar 16 is shrunk upon a reduced portion 17 of the stem of said socket and prevents the accidental displacement of the socket from the end of the handle. The upper end of the stem 17 is angular in cross section as indicated at 18 and is adapted for engagement with the socket 10.

In use the tool is placed in position with the socket 14 engaged with the head of the bolt upon the under side of the flange portion of the crank case and the bail 8 is engaged with the notches 9 to thereby hold the socket 15 in engagement with the nut and the socket 14 in engagement with the head of the bolt. By then rotating the socket 15 through the medium of the tool comprising the portions 10, 11, 12, and 13, the nut may be unscrewed. It is to be noted that the distance between socket 15 and collar 16 is such as to permit a limited sliding movement of the stem of socket 15 through the jaw of handle 6 so that as the nut unscrews it may have the necessary upward movement.

While the elements shown and described are well adapted to serve the purposes for which they are intended, it is to be understood that the invention is not limited to the precise construction set forth, but that it includes within its purview whatever changes fairly come within the spirit of the appended claim.

Having described my invention what I claim is;

A device of the character described comprising a pair of crossed jaw carrying handles pivotally connected to each other, means for holding said jaws in closed position, a fixed socket carried by the lower jaw of one of said handles, said socket being adapted to engage the head of a bolt to hold the same from turning, a rotative socket disposed in

alinement with the fixed socket and adapted to engage and rotate a nut upon said bolt, a stem carried by said socket said stem being mounted to turn in the jaw of the other
5 handle, means upon the stem for limiting the downward movement thereof, said stem being of such length as to permit a limited sliding movement thereof through the jaw

and a tool engaging extremity upon said stem outwardly of said means.

In testimony whereof I affix my signature in the presence of two witnesses.

JOHN B. SPANGLER.

Witnesses:

JOHN F. FORT,
R. H. NEFF.

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