Dec. 4, 1956 J. W. WERRIES 2,772,590

BOLT HOLDING DUAL SOCKET WRENCH

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Fig. 1.

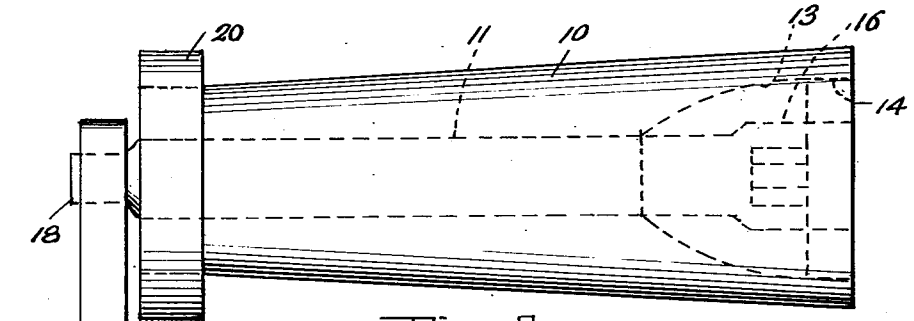


Fig. 2.

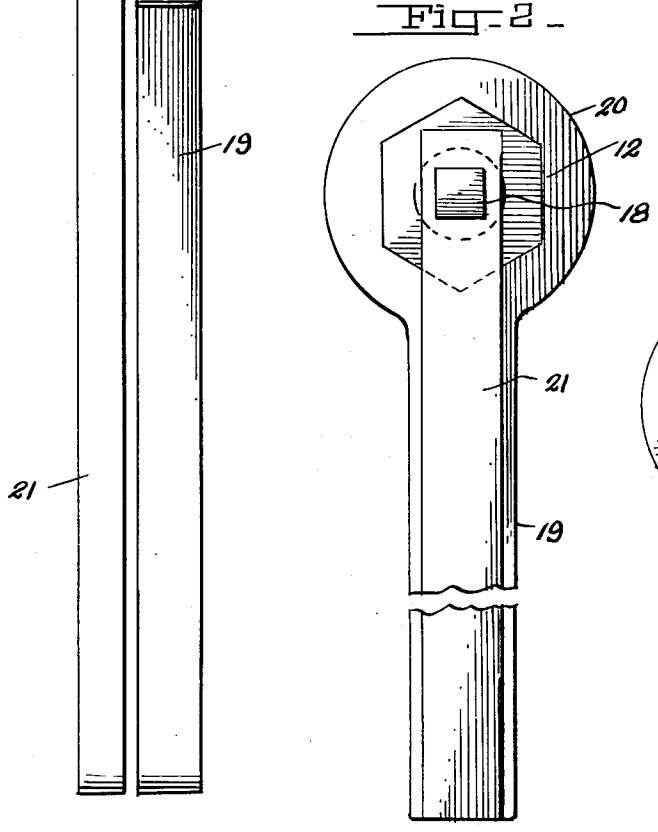
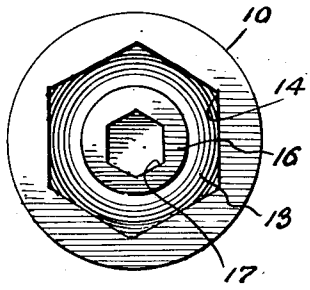


Fig. 3.



INVENTOR.
JOHN WILLIAM WERRIES
BY
Patrick D Beavers
ATTORNEY

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Fig. 4

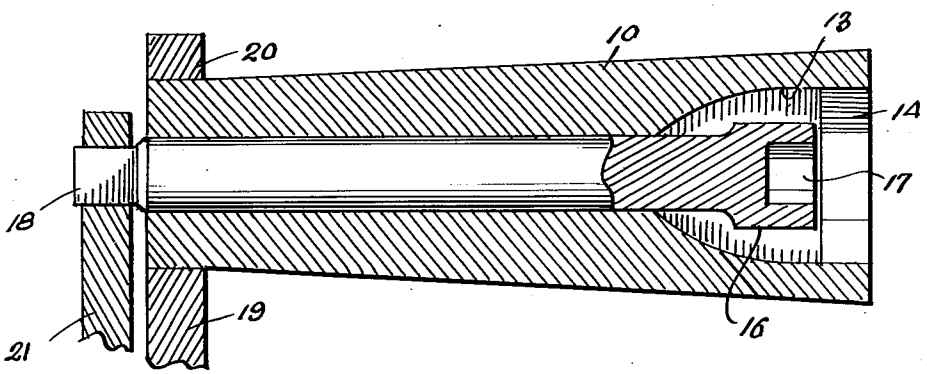


Fig. 5

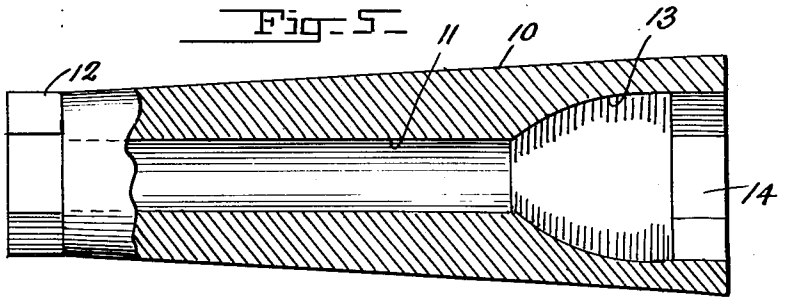


Fig. 6

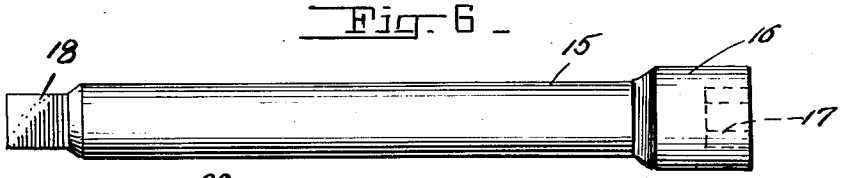


Fig. 7

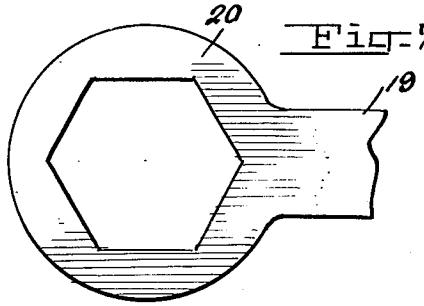
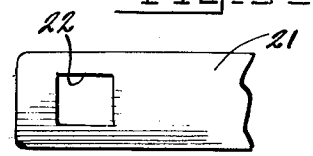


Fig. 8



INVENTOR.
JOHN WILLIAM WERRIES

BY

Patrick D Beavers
ATTORNEY

United States Patent Office

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BOLT HOLDING DUAL SOCKET WRENCH

John William Werries, Salina, Kans.

Application July 22, 1955, Serial No. 523,661

1 Claim. (Cl. 81—55)

The present invention relates to improvements in wheel wrenches and more particularly to a wrench for dual wheels such as are used on trucks.

The principal object of the present invention wrench is to provide an implement whereby the inside nut can be held firmly while the outside nut is being turned. This is desirable because often the two nuts stick together and this wrench takes care of that difficulty.

Another important object of the invention is to provide a wrench of the character stated which is of simple construction and capable of being manufactured and retailed at a low monentary figure.

Still another object of the invention is to provide a wrench of the character stated which is positive acting and not susceptible to the ready development of defects.

These and various other objects and advantages of the invention will become apparent to the reader of the following description.

In the drawing:

Figure 1 is a side elevational view of the tool.

Figure 2 is an end elevational view looking at the handle end.

Figure 3 is an end elevational view looking at the socket end.

Figure 4 is a fragmentary longitudinal sectional view through the assembled structure.

Figure 5 is a fragmentary longitudinal sectional view through the shell.

Figure 6 is a side elevational view of the shaft.

Figure 7 is a fragmentary elevational view of the head of the shell holding handle.

Figure 8 is a fragmentary elevational view of one end of the shaft turning handle.

Referring to the drawings wherein like numerals designate like parts, it can be seen that numeral **10** denotes a shell having a bore **11** therethrough. One end, that is the smaller end of the shell **10** has a polygonal formation **12** at its outer side. The other or large end of the shell **10** has a cavity **13** therein and to which the bore **11** opens and the interior of this end of the shell **10** is provided with a polygonal nut engaging formation **14**, as is clearly shown in Figure 5.

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An elongated shaft **15** has a socket head **16** at one end, containing a polygonal shaped socket **17** while the other end of this shaft **15** is provided with a squared reduced end **18**. In assembling the aforementioned parts, the shaft **15** is slipped through the bore **11** so that the squared end **18** will protrude beyond the polygonal formation **12** of the shell **10**, as shown in Figure 4. This places the socket head **16** within the cavity **13**.

Before the polygonal formation **12**, there is an elongated handle **19** having a polygonal head formation **20** for disposition over the polygonal formation **12** for the purpose of holding the shell **10** stationary while the shaft **15** is being turned.

The shaft **15** is also provided with a handle **21** which has a square opening **22** in one end thereof to receive the squared end **18** of the shaft **15**.

Thus it can be seen that when this wrench is disposed in place, the polygonal formation **14** at the outer end of the cavity **13** is placed over the outer nut on the dual wheel and the socket end **16** then engaged over the inner nut. By holding the handle **19**, the shell **10** can be held stationary while the shaft **15** is rotated by the handle **21** in order to turn the outside nut and remove the same.

While the foregoing description sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention what is claimed as new is:

A wrench structure for dual wheels having inside and outside nuts, comprising a shell having a wrench end for engaging the outside nut and a supplemental wrench for engaging the inside nut, manual means for holding the shell and manual means for actuating the supplemental inside nut wrench, said supplemental wrench consisting of an elongated shaft disposed through the shell and provided with an inside nut engaging socket head, the other end of the shaft being provided with a laterally disposed handle, said last mentioned end of the shaft being provided with a polygonal shaped portion, said handle being formed with a polygonal shaped opening for detachably receiving the polygonal shaped portion of the shaft.

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