Aug. 14, 1956 B. J. JENKINS 2,758,494

EXTENSIBLE WRENCH SET WITH MAGNETIZED HEADS

Filed May 31, 1955

Fig. 2.

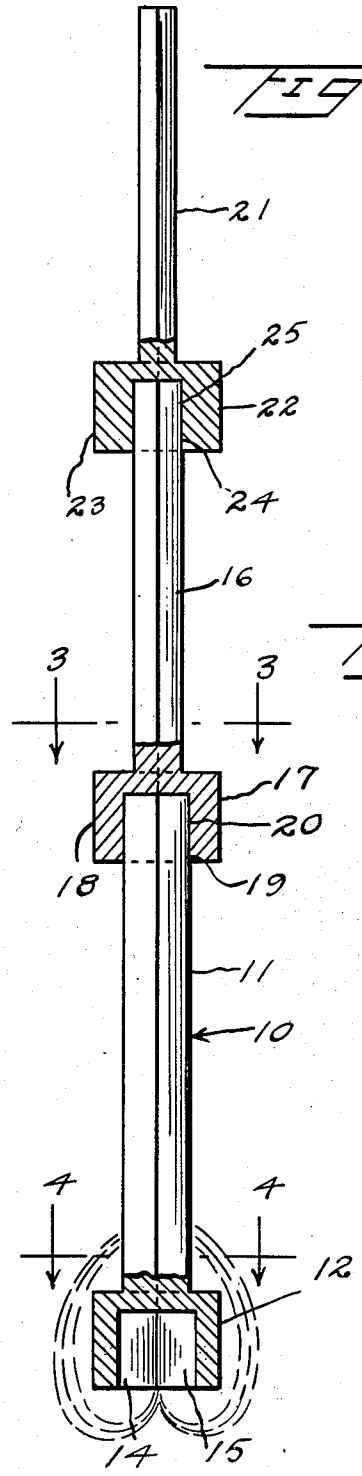


Fig. 1.

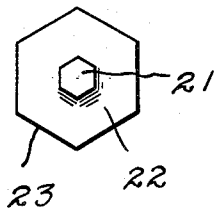


Fig. 3.

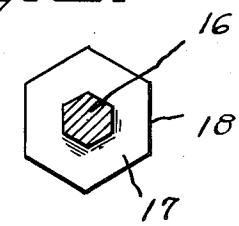
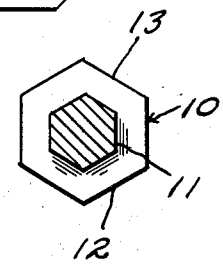


Fig. 4.



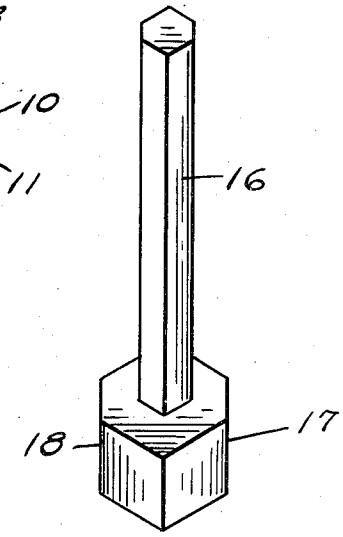


Fig. 5.

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United States Patent Office

2,758,494

Patented Aug. 14, 1956

2,758,494

EXTENSIBLE WRENCH SET WITH MAGNETIZED HEADS

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Application May 31, 1955, Serial No. 512,202

1 Claim. (Cl. 81—71)

The present invention relates to wrenches, and more particularly to wrenches of the internal or "Allen" type provided with means to extend the length of the wrench.

The primary object of the invention is to provide an "Allen" wrench with a head for receiving the shank of the next larger wrench size.

Another object of the invention is to provide a wrench of the class described in which the head is formed with a polygonal outer surface to permit the turning of the wrench by means of other wrenches.

A further object of the invention is to provide a wrench of the class described in which magnetic means are used to maintain the wrenches in engagement with each other while in use.

Other objects and advantages will become apparent from the following specification when read in light of the attached drawings, in which:

Figure 1 is a top plan view of the invention.

Figure 2 is a side elevation of the invention, shown partly in section for purposes of clarity.

Figure 3 is a transverse cross-section taken on line 3—3 of Figure 2, looking in the direction of the arrows.

Figure 4 is a transverse cross-section taken on line 4—4 of Figure 2, looking in the direction of the arrows.

Figure 5 is a perspective view of one of the wrench elements.

Now referring to the drawings in detail, wherein like reference numerals indicate like parts throughout the several figures, the reference numeral **10** indicates, generally, an "Allen" wrench having a polygonal shank **11**. An enlarged head **12** is formed on one end of the shank **11** and has a polygonal outer surface **13**. A socket **14** having a polygonal inner surface **15** is formed in the head **12** and is adapted to fit the shank (not shown) of the next larger wrench (not shown).

A second polygonal wrench shank **16** has a head **17** positioned on one end of the shank **16** and it likewise is formed with an outer polygonal surface **18**. A socket **19** is formed in the head **17** with an inner polygonal surface **20**. The socket **19** is adapted to receive the shank **11** of the wrench **10**.

A polygonal shank **21** is formed with a head **22** on one end thereof with the outer surface of the head **22** having a polygonal surface **23**. A socket **24** extends into the head **22** and has an internal polygonal surface **25** formed therein. The socket **24** is adapted to receive the polygonal shank **16** therein.

Each of the heads **12**, **17** and **22** is magnetized, so that the shanks **11**, **16** and **21** will be magnetically held in the heads after they are inserted in the socket.

In the use and operation of the invention, when an "Allen" head screw must be turned and the screw is remote from the closest point accessible with the normal tools, the wrenches forming the portions of the kit making up applicant's invention are assembled by inserting the shank **11** into the head **17** and the shank **16** into the head **22** to form an "Allen" wrench having a length substantially greater than normal. Obviously, the wrenches can be extended in length as far as necessary to accomplish the desired task. The outer polygonal surfaces **13**, **18** and **23** provide a means whereby end wrenches, pliers, socket wrenches or box wrenches may be used to turn the "Allen" wrench after it has been seated in the head of the "Allen" screw. It should be understood, of course, that various extensions could be made following the teachings of this invention wherein the sockets contained within the heads would be the same size as the shanks, to permit extending the wrench's effective length without decreasing the size of the available "Allen" wrench end.

Having thus described a preferred embodiment of the invention, it should be understood that various modifications and structural adaptations may be resorted to without departing from the scope of the appended claim.

What is claimed is:

A wrench of the type having a plurality of different size members each having a polygonal shaft and a head, and each head being integrally connected to one end of a shaft, and having a polygonal outer surface, each head being provided with a polygonal internal socket extending into said head from the side opposite its shaft, each head being magnetized to hold said wrench in engagement with a metallic body, said members being arranged in end to end relation with each shaft being receivable in the magnetized head of the next smaller member and maintained therein by the magnetic attraction of said head.

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