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WRENCH WITH MULTIPLE TELESCOPING SOCKETS

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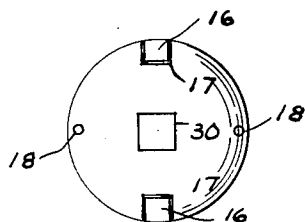


Fig. 2.

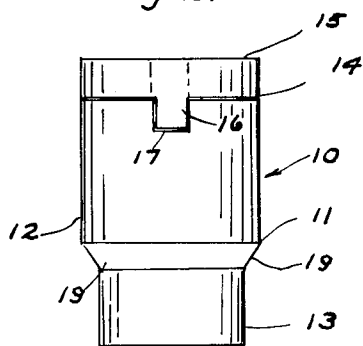


Fig. 1.

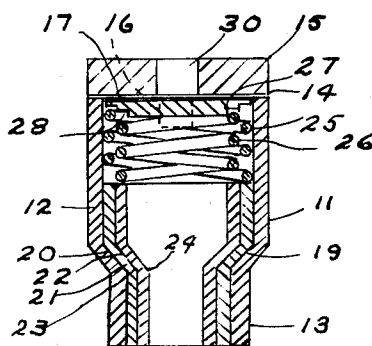


Fig. 4.

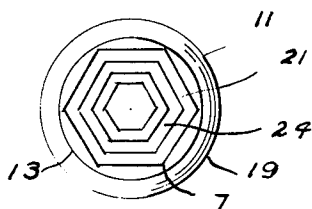


Fig. 3.

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WRENCH WITH MULTIPLE TELE-
SCOPING SOCKETS
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1 Claim. (Cl. 81-185)

My invention is an improvement in socket wrenches, and has for its object to provide a tool of the character specified, wherein a series of sockets is provided, any one of which may be brought into use, the improved wrench comprising a main body of circular formation with a lower depending body which is preferably of hexagonal shape and having moveable sleeves of hexagonal shape within the ends of the same adapted to be moved into and out of operative position.

The applicant is aware of the many combinations of multiple unit socket wrenches wherein many kinds of arrangements are used to aid in the upward movement of one or more of the sockets upon engagement of a nut. There is use of pins sliding in slots and additional means to lock the elevated sockets in position. This applicant has provided a simple, cheap multiple socketed device wherein the socket members are retained in nested relationship on beveled surfaces in the main body of a container. There are no pins sliding in slots nor locking members of any kind.

Another object of my invention, therefore, is to provide a multiple socketed wrench having a minimum number of parts, with no slots and pins moving therein and no locking means of any kind. It is very easy to assemble and economical to manufacture and readily suitable for the purposes intended.

In the drawings:

FIGURE 1 is a view in elevation showing my invention in assembled relationship.

FIGURE 2 is a top view of FIGURE 1.

FIGURE 3 is a bottom view of FIGURE 1.

FIGURE 4 is a cross-sectional view in elevation of the parts making up my invention.

Referring to the figures, the numeral 10 designates the device as a whole and comprises a tubular body 11 having an upper portion 12 of substantial length and diameter and a lower depending portion 13 of lesser diameter.

The body 11 is open at both ends with the upper end 14 temporarily closed by a cover 15 having two equally spaced and oppositely disposed keys 16 fitting in slots 17 cut through the circumferential surface of the upper end 14. This cover is retained on the body 11 by screws 18 which are threaded through the cover and into the body 11.

The area 19 between 12 and 13 is beveled and provides a shoulder to retain a corresponding beveled area 20 of a socket member 21. This member in turn has a beveled area 22 to retain a corresponding beveled area 23 of another socket member 24. These socket members all have a circular upper portion and a lower hexagonal portion which depends down into the lower portion of the body member 11.

As will be seen, the inside area of the lower portion 13 is hexagonal in shape, as designated by 7, with each of

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the lower portions 21 and 22 of socket members 21 and 24, respectively, fitted therein.

As will be seen in FIGURE 4, the socket members 21, 24 nest in beveled relationship and have mounted thereon springs 25 and 26 which rest on the top surfaces 9 and 10 of the socket members 21, 24 respectively, and extend upwardly to be separated by a plate 27 which has flanges 28 of progressively lesser diameters to receive the springs 25 and 26. This plate 27 is held in operative contact with the springs by the cover 15.

In use, when it is desired to use socket area defined by 7, the socket members 21, 24 are pushed out of engaging position. When it is desired to use socket member 21, socket 24 is pushed out of position. This operative relationship would be established regardless of the number of socket members used and dependent only by the size of nut to be engaged. An opening 30 is provided in the cover 15 being adapted to receive a rod (not shown) to permit the wrench to be turned.

With this arrangement, a very compact, simple and inexpensive wrench is provided, capable of engaging different sized nuts. It will be evident that the sockets might be of any desired size, depending upon the purpose for which the wrench is to be used.

I claim:

A wrench of the character specified comprising an outer hollow tubular container made up of an enlarged circular upper portion and a lower circular portion of lesser diameter with a beveled area therebetween, said container open at both ends, said lower portion having the inside surface formed hexagonal in shape, a multitude number of socket members having lower portions of hexagonally similar shape as said inside hexagonal surface of said lower portion slidably mounted in said lower portion and independent of each other, and said lower portion, said socket members having enlarged upper circular portions in each instances separated by beveled areas from said hexagonal portions, said beveled areas of said socket members of similar shape as said outer upper circular portion and, in inoperative relationship, resting on the beveled surface of said container, resilient members disposed on said socket members and extending upwardly inside said upper circular portion, the upper open end of said circular portion temporarily closed by a cover having keys fitting in slots formed in said portion, a plate having flanges of different diameters disposed between said cover and said resilient members and adaptable to receive one of said resilient members in each flange.

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