

R. F. SEDGLEY.
WRENCH.
APPLICATION FILED FEB. 5, 1916.

Patented Dec. 31, 1918.

1,289,558.

Fig. 1.

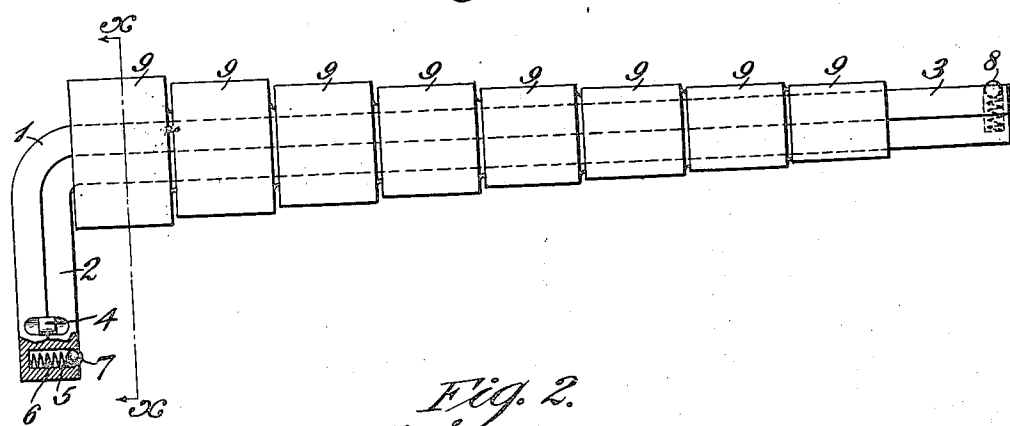


Fig. 2.

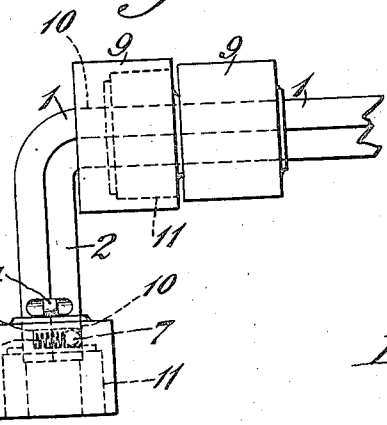


Fig. 3.

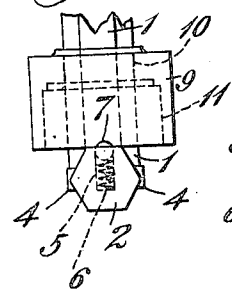


Fig. 4.

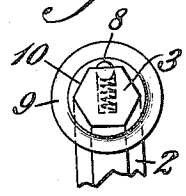


Fig. 5.

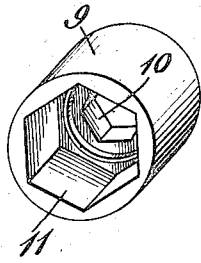
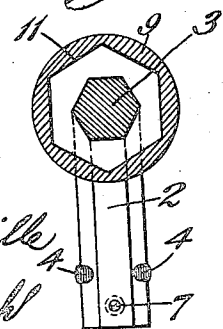


Fig. 6.



WITNESSES

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WRENCH.

1,289,558.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, REGINALD F. SEDGLEY, a subject of the King of Great Britain, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Wrench, of which the following is a specification.

My present invention consists of a novel wrench which is preferably made of an integral piece of material having one end adapted to receive the socket and having a handle corresponding to the shape of the key in combination with sockets having one end adapted to engage the key of the wrench and to normally be received and retained on the handle, and with the other end of said sockets being provided with different sized apertures in order to cooperate with different sized nuts.

It further consists of a novel wrench having a hexagonal contour, and which is bent at an angle to form a key and a grasping portion, the key having means to form a seat for a socket and with a spring pressed ball or plunger to frictionally engage the socket and prevent its accidental displacement, the handle of the wrench being adapted to receive and retain a plurality of sockets and with means to prevent their accidental disengagement from the handle.

Other novel features of construction and advantage will hereinafter more clearly appear in the detailed description of my invention.

For the purpose of illustrating my invention, I have shown herein a preferred embodiment thereof, which is typical of the invention, but it is of course to be understood that this embodiment is typical only and that the various instrumentalities of which my invention consists can be variously arranged and organized, and is not limited to the precise arrangement and organization of these instrumentalities as herein set forth.

Figure 1 represents a side elevation, partly in section, of a wrench and sockets embodying my invention.

Fig. 2 represents a side elevation of a portion of the wrench, showing a socket in position on the key.

Fig. 3 represents an end view of the key and a portion of the handle with the socket on the latter.

Fig. 4 represents an end view of Fig. 1.

Fig. 5 represents, in perspective, one of the sockets in detached position.

Fig. 6 represents a section on line $x-x$ of Fig. 1.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings:—

My present invention, while not limited to such use, is especially adapted for automobile work, since the different sized sockets are carried by the handle in such a manner that they cannot accidentally become lost. The wrench is constructed from a polygonal shaped bar and preferably from a bar having a hexagonal contour.

1 designates a wrench embodying my invention, which is bent to form a key 2 and a handle 3, which for purposes of illustration, has been shown as having a hexagonal contour. The key 2, a desired distance from the end, has the metal upset to form the lugs or seats 4 which are preferably located diametrically opposite each other. The key 2 is provided with a laterally extending recess 5, within which is located a spring 6, one end of which presses against a wall of the recess, while the other end thereof engages the ball or plunger 7, which latter is prevented from moving out of the recess 5 by indenting the metal at the outer wall of the recess 5. The handle 3 is illustrated as having a hexagonal contour, as will be clearly understood by reference to Fig. 4 and is provided with a spring pressed ball 8 which is constructed and mounted in the handle in a similar manner with that just described with reference to the ball 7, and a detailed description is therefore believed to be unnecessary.

9 designates the sockets, each of which is provided at one end with a polygonal shaped aperture 10, which is illustrated as being hexagonal, in order that it will closely fit upon the outer walls of the key 2 and also on the outer walls of the handle 3. The aperture through a socket 9 at its opposite end is made of any desired diameter, as is indicated at 11 in Fig. 5, so that it will engage, in the present instance, a hexagonal nut, it being understood that the apertures 11 of the different sockets are of different dimensions, so that they will engage with different sized nuts. The sockets when they are on the handle may, if desired, form a grasping portion, but in practice, the handle

is preferably of such length as to provide a grasping portion without rendering it necessary to take hold of the socket.

When a socket is inserted on the key, it slips over the spring pressed ball and engages the seats on the jaw and is frictionally retained on the socket by the spring pressed ball. The spring pressed ball on the handle prevents the socket from accidental displacement, so that they are always ready for immediate use.

So far as I am aware, I am the first in the art to devise a wrench formed from a polygonal bar with the key and handle having the same contour, in combination with sockets having apertures therethrough which at one end have the contour of both the key and the handle, while at their opposite ends, the apertures are of different dimensions, so as to cooperate with nuts of different sizes.

For convenience of illustration, I have shown the sockets as having a hexagonal recess at one end to cooperate with correspondingly shaped nuts, but it is, of course, to be understood that it is within the scope of my invention to form the nut engaging portion of the socket in any desired manner, in order to adapt it to cooperate with nuts of any desired or conventional shape. It will be apparent from the foregoing that I have devised a self-contained multiple socket wrench, which is cut from a stock bar. This bar is bent intermediate its ends and has stops resiliently mounted at each end to prevent falling off of the sockets.

It will now be apparent that I have devised a novel and useful wrench, which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description, and while I have, in the present instance, shown and described a preferred embodiment thereof which will give in practice satisfactory and reliable results, it is to be understood that the same is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A self-contained multiple socket wrench

cut from a stock bar polygonal in cross-section, bent intermediate its ends and having stops resiliently mounted at both ends to prevent falling off of the sockets, in combination with sockets adapted for various size nuts strung on said bar.

2. A self-contained multiple socket wrench cut from a stock bar hexagonal in cross section, bent intermediate its ends and having stops resiliently mounted at both ends to prevent falling off of the sockets, in combination with sockets adapted for various size nuts strung on said bar.

3. A self-contained multiple socket wrench cut from a stock bar polygonal in cross-section, bent intermediate its ends and having stops resiliently mounted at both ends to prevent falling off of the sockets, in combination with sockets adapted for various size nuts strung on said bar and each having one end provided with a recess conforming to the shape of said bar.

4. A wrench, comprising a polygonal metal bar of uniform cross section and bent intermediate its ends, each end forming a key, a socket strung on said bar and having one end provided with a polygonal recess with the walls of which either end key is adapted to engage, and a spring pressed member within each key and extending through a side thereof to frictionally engage said socket.

5. A self-contained multiple socket wrench, comprising a polygonal metal bar bent intermediate its ends with the free ends forming keys and with a grasping portion, sockets adapted for various size nuts strung on said bar and each having an opening there-through, one end of which has polygonal walls to engage either of said keys and to slide on said grasping portion, and friction means resiliently mounted at each key to prevent the disengagement of a socket therefrom, and a bent portion of said wrench and one of said friction means being adapted to prevent accidental removal of a socket from said grasping portion.

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Witnesses:

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