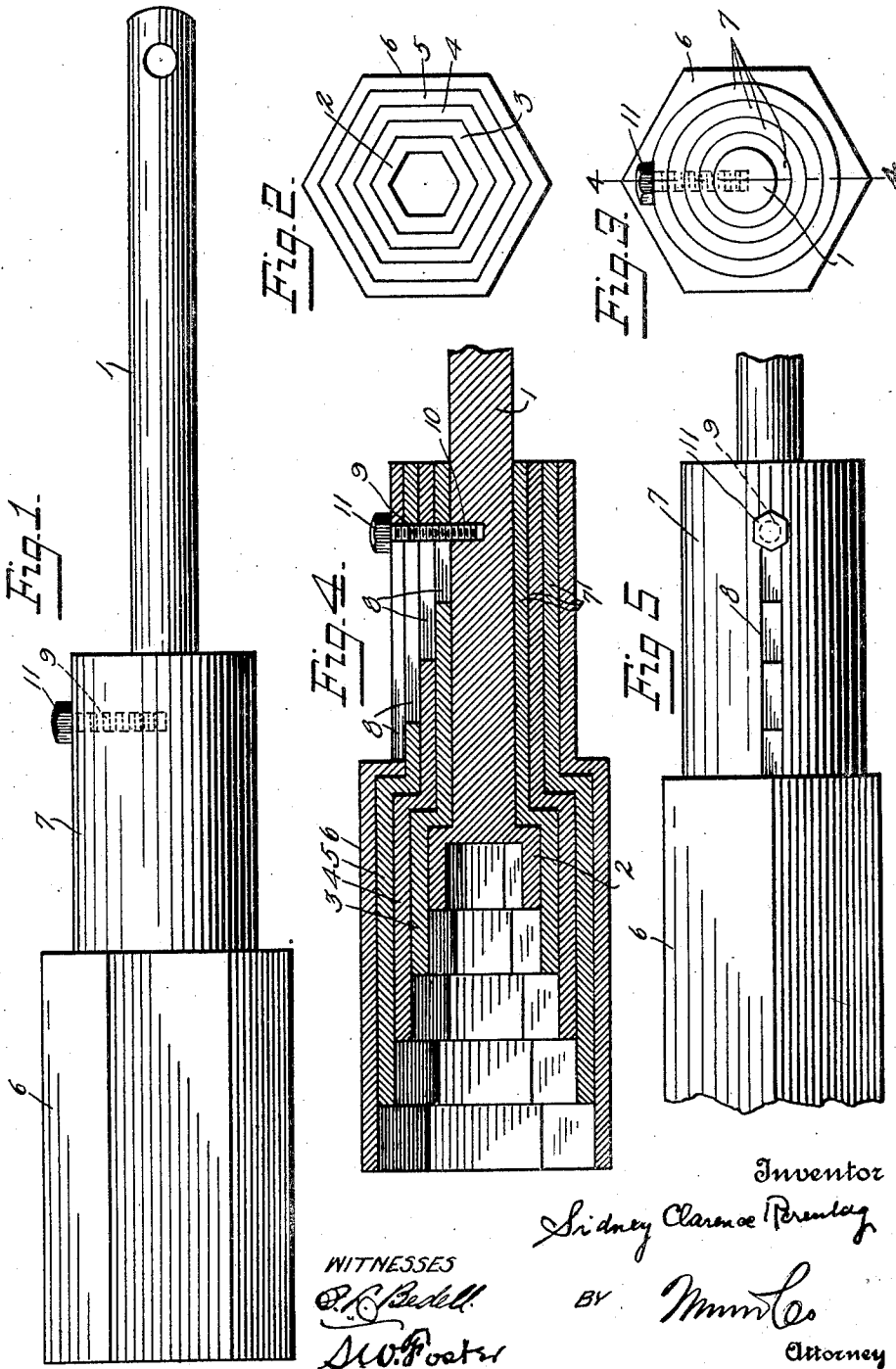


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WRENCH.
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1,346,061.

Patented July 6, 1920.



WITNESSES
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WRENCH.

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To all whom it may concern:

Be it known that I, SIDNEY C. ROSENBERG, a citizen of the United States, and a resident of New Haven, in the county of New Haven and State of Connecticut, have invented a new and Improved Wrench, of which the following is a full, clear, and exact description.

This invention relates to improvements in wrenches, and more particularly to a combination socket wrench, an object of the invention being to provide a wrench having a series of telescoping nested socket members adapted to be adjusted and secured in various longitudinal positions relative to each other so as to present any of the sockets for operation in accordance with the size of the nut or bolt head.

A further object is to provide a wrench of the character stated, which can be manufactured and sold at a reasonably low price, which can be quickly adjusted to utilize the desired size of socket, and which will economize time and labor in use.

With these and other objects in view the invention consists in certain novel features of construction, and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings—

Figure 1 is a view in side elevation illustrating my improved wrench;

Figs. 2 and 3 are views of opposite ends of the wrench;

Fig. 4 is a view in longitudinal section; and

Fig. 5 is a fragmentary plan view of Fig. 1.

1 represents a handle which is in the form of a rod having at one end an integral nut receiving socket 2. On the handle 1 and the socket 2 a series of socket members 3, 4, 5 and 6 are located. These socket members 3, 4, 5 and 6 increase in diameter in regular succession and increase in length in regular succession and in regular proportion.

These members 3, 4, 5 and 6 have nested sleeves 7 which are located around the handle 1 and are adapted to slide thereon and said sleeves 7 have longitudinal slots 8 therein, the slots 8 of the respective sleeves being of varying length and increasing in

length in relative ratio from the inner to the outer sleeve.

A set screw 9 is positioned in all of the slots 8 and screwed into a threaded socket 10 in the handle 1 and is provided at its outer end with a wrench receiving head 11 overlapping the outer sleeve 7. When the set screw 9 is loosened, the socket members 3, 4, 5 and 6 can be moved longitudinally on the handle 1 so as to project either the smallest socket 2 or any of the larger sockets to engage a nut, and when properly positioned, the set screw 9 is screwed home to clamp the socket members in this position.

While I have illustrated the sockets as of hexagonal shape, it is obvious that they may be made of any desired shape in conformity to the shape of the nuts or bolt heads on which they are to be used.

Various slight changes might be made in the general form and arrangement of parts described without departing from the invention, and hence I do not limit myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

I claim:

1. A wrench, comprising a handle, a nut engaging socket on one end of the handle, a series of telescoping nested socket members on the handle and on the first-mentioned socket, said socket members having longitudinal slots therein, said slots of varying lengths increasing in length in relative ratio from the inner to the outer of said socket members, and a clamping device projected through the slots and clamping said members against movement.

2. A wrench, comprising a handle, a nut engaging socket on one end of the handle, a series of telescoping nested socket members on the handle and on the first-mentioned socket, said series of socket members increasing in diameter in regular succession, telescoping sleeves on the series of socket members movable on the handle, said sleeves having longitudinal slots therein, and a set screw projecting through the slots and screwed into the handle, said slots of varying lengths, the slots of the respective sleeves increasing in length in relative ratio from the inner to the outer sleeve.

3. A wrench, comprising a handle, a nut
engaging socket on one end of the handle, a
series of telescoping nested socket members
on the handle and on the first-mentioned
5 socket, said series of socket members in-
creasing in diameter and in length in regu-
lar succession, telescoping sleeves on the
series of socket members movable on the
handle, said sleeves having longitudinal
slots therein, and a set screw projecting 10
through the slots and screwed into the han-
dle, said slots of varying lengths, the slots
of the respective sleeves increasing in length
in relative ratio from the inner to the outer
sleeve.

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