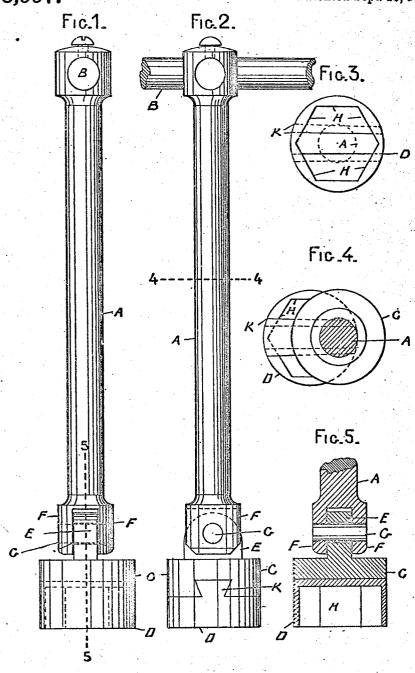
G. P. SPRAGUE. NUT WRENCH. APPLICATION FILED SEPT. 11, 1907.

898,997.

Patented Sept. 15, 1908.



WITNESSES. Marion E. Brown Charles R. Brown INVENTOR.
GEORGE P. SPRAGUE
BY Albert W. Brown
Attorney.

UNITED STATES PATENT OFFICE.

GEORGE P. SPRAGUE, OF ARLINGTON, MASSACHUSETTS.

NUT-WRENCH.

No. 898,997.

Specification of Letters Patent.

Patented Sept. 15, 1908.

Application filed September 11, 1907. Serial No. 392,387.

To all whom it may concern:

Be it known that I, George P. Sprague, a citizen of the United States, residing at the town of Arlington, in the county of Middle-5 sex and State of Massachusetts, have invented new and useful Improvements in Nut-Wrenches, of which the following is a specification.

This invention relates generally to wrenches
10 having a handle-bar, carrying at one end a
head having a socket-member suitable to engage or interlock with a nut, bolt-head, etc.,
and so engaged to secure the turning of the
nut, etc., by rotating said handle and more
15 especially it relates to that class of such
wrenches as have said head hung upon the
handle-bar for it and the handle to be placed
axially as to each other in varying relations,
that is, so as to have both axes either in a
20 line coincident with, or in lines at an angle to
each other, according as may be required in
the use of the wrench, and in whatever position the two, handle-bar and socket-head,
may be to secure the turn of the nut, etc., as
25 desired, by rotating the handle-bar.

The object of this invention is to construct the socket-member and the head to which it is to be attached so that the socket-member can be attached and detached at pleasure and attached be so held as to insure its turning as the handle-bar and head are rotated. This object is carried out by a relative construction and arrangement of the socket-member and its carrying-head, all as hereinafter particularly described and stated in the claim.

In the drawings, forming part of this specification, this invention is illustrated.

Figures 1 and 2 are elevations at adjacent sides of the wrench. Fig. 3 is a face view of 40 the socket-member. Fig. 4 is a cross section, on dotted line 4—4 of Fig. 2, and shows the socket-member as partially drawn out of the head. Fig. 5 is a longitudinal section, in part, on dotted line 5—5 of Fig. 1.

In the drawings, A is the handle-bar, and B is a cross-arm at one end of said bar and which end has holes through it to receive said arm in two directions at right angles to each other, C is the head carrying the socket-member D. This head C has a lug-projection E which is entered between parallel ear-pieces F of the handle-bar, at the opposite end thereof to that carrying the cross-arm B, and so entered, it is hung so as to freely turn, on a

fixed cross-pin G of said ear-pieces F. The 55 socket-member D has a socket H shaped to engage or to interlock with a nut, bolt-head, etc., and so engaged when rotated to turn said nut, etc. The socket-member D and head C carrying it are joined together and 60 the socket-member D held on the head by a diametrically running dovetailed tongue and groove construction K of the two, which construction tapers from end to end, Fig. 4, whereby, as is plain, the socket-member can 65 be attached to and detached from the head, so that a socket-member with a socket of any desired dimension can be used, all as may be desired, and with the socket-member attached and forced to a close joint with the head ob- 70 viously the socket-member will be made most secure against accidental detachment as the wrench is used.

As is plain from the above description the handle-bar and head carrying the socketmember can be placed as may be required either in axial coincident lines, or in lines at an angle to each other as well known in wrenches of this particular class, and further, under this invention, the socket-member is 80 free for ready attachment and detachment so that socket-members having different sized sockets can be substituted as may be desired, and it is this feature of the wrench as described which constitutes this invention. The tongue and groove K taper from end to end as shown, Fig. 4.

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

A wrench for nuts, bolt-heads, and such like, which comprises a bar having, at one end, a handle and, at its other end, a head hung thereon so that it may be axially placed at different angles relative to the axis of said bar, and which is in two separable parts or members joined together by a tongue and groove that tapers from end to end relative to the axis of the head and one of which parts has a socket to engage the nut, etc.

In witness whereof, I have hereunto set my hand in the presence of two subscribing witnesses.

GEO. P. SPRAGUE

Witnesses.
ALBERT W. BROWN,
CHARLES R. BROWN.