

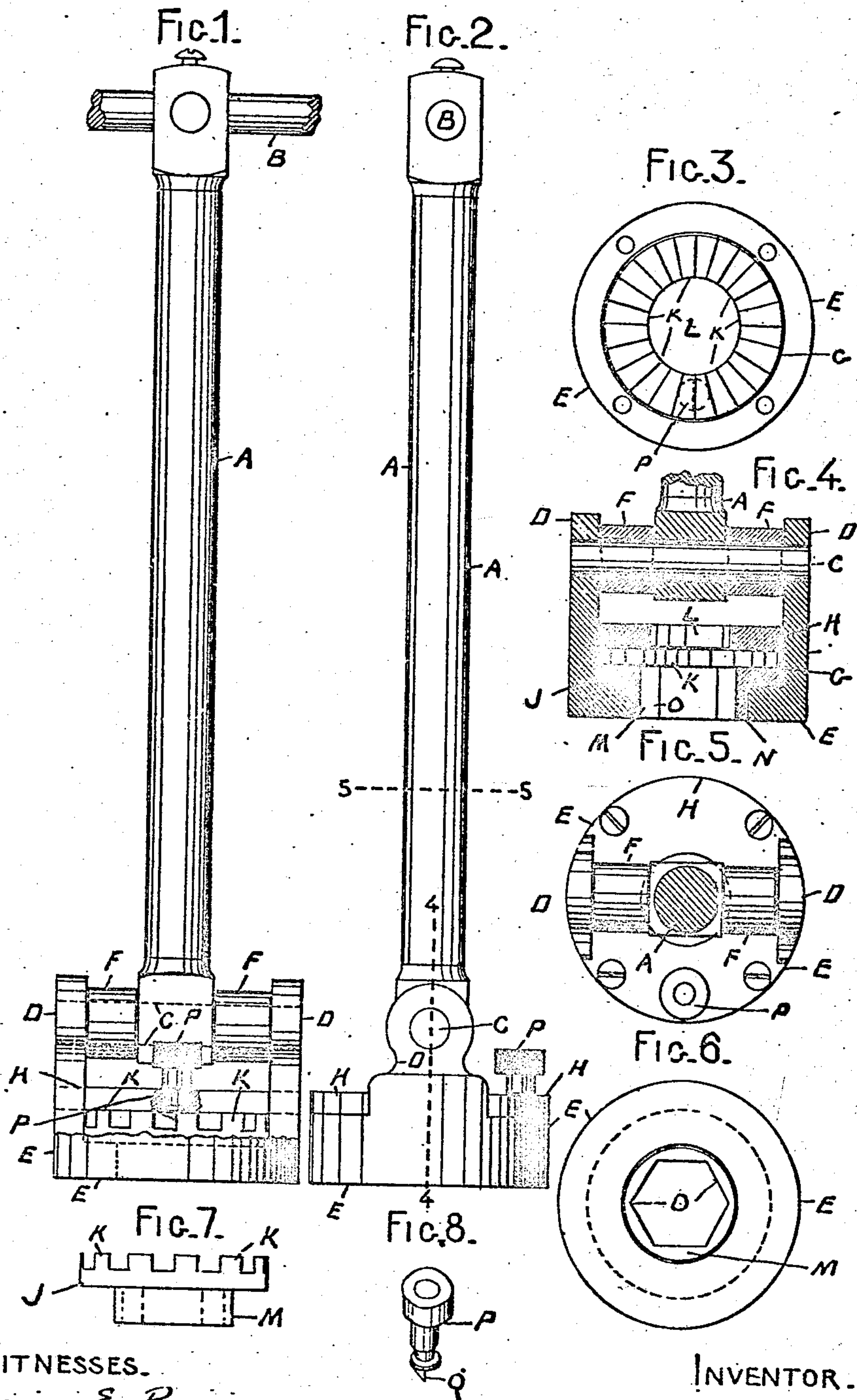
G. P. SPRAGUE.

NUT WRENCH.

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898,996.

Patented Sept. 15, 1908.



WITNESSES.
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GEORGE P. SPRAGUE, OF ARLINGTON, MASSACHUSETTS.

NUT-WRENCH.

No. 898,996.

Specification of Letters Patent.

Patented Sept. 15, 1908.

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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 Middlesex 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 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 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 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 desired, by rotating the handle-bar.

One of the objects 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, and another object is to provide the wrench with improved means for securing the rotation of the socket-member as the handle-bar is rotated. These objects are carried out all as hereinafter described and stated in the claim.

In the drawings, forming part of this specification, Figures 1 and 2 are views at adjacent sides of the wrench, some parts in Fig. 1, being broken away. Fig. 3 is a face view, in detail, as will hereinafter appear. Fig. 4 is a section, on dotted line 4—4 of Fig. 2. Fig. 5 is a cross section, on dotted line 5—5 of Fig. 2. Fig. 6 is a face view of the socket-member. Figs. 7 and 8 are detached detail views as hereinafter appear.

In the drawings, A is the handle-bar having, at one end, a cross-bar B, and said end is adapted for said cross-bar to be entered

therein and removed therefrom in two different directions at right angles to each other, all as well known. The handle-bar A, at its opposite end, is hung on a cross-pin C, secured at its opposite ends in ear-pieces D of a head E and this pin carries free turning ferrules F, confining the handle-bar A against lateral movement on it, said cross-pin C. The head E is chambered and this chamber G is closed or covered by a detachable cap-plate H, and in it is located the socket-member J arranged for free rotation therein. This socket-member J under the cap-plate H has radially running crown ratchet-teeth K, severally ending at a central opening L, which is common to both said cap-plate H and said socket-member J, and furthermore the socket-member has a tubular-extension M, which is free to turn within a central opening N of the head E, at its end opposite to that of the cap-plate H, and this tubular-extension has a socket O, shaped to be engaged or interlocked with a nut, bolt-head, etc.

P is a pawl-pin carried by and capable of rotation in the cap-plate. This pawl-pin P enters by its working-end Q between the teeth K of the socket-member, and thus when the head is turned in one direction it will, by working against one of said teeth, rotate the socket-member J and so turn the nut, etc., with which it, the socket-member, may be engaged, and constitutes the feature of this invention, in connection with the class of wrenches described.

It is plain that the socket-member is free to be removed and replaced at pleasure, and another having a different sized or shaped socket substituted for it.

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

A wrench for nuts, bolt-heads, etc., composed of a handle-bar, a head hung on one end of said handle-bar, so as to be placed axially coincident with, or at an angle thereto, and a socket-member suitable by its socket to grasp a nut, bolt-head, etc., and arranged to turn on said head, and having an axial or central opening, and crown ratchet-teeth in a plane at right angles to said axial-

opening, in combination with a pawl-pin carried by said head and in position and arranged to engage and work on said crown-ratchet-teeth of said socket-member, substantially as described and for the purposes specified.

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.