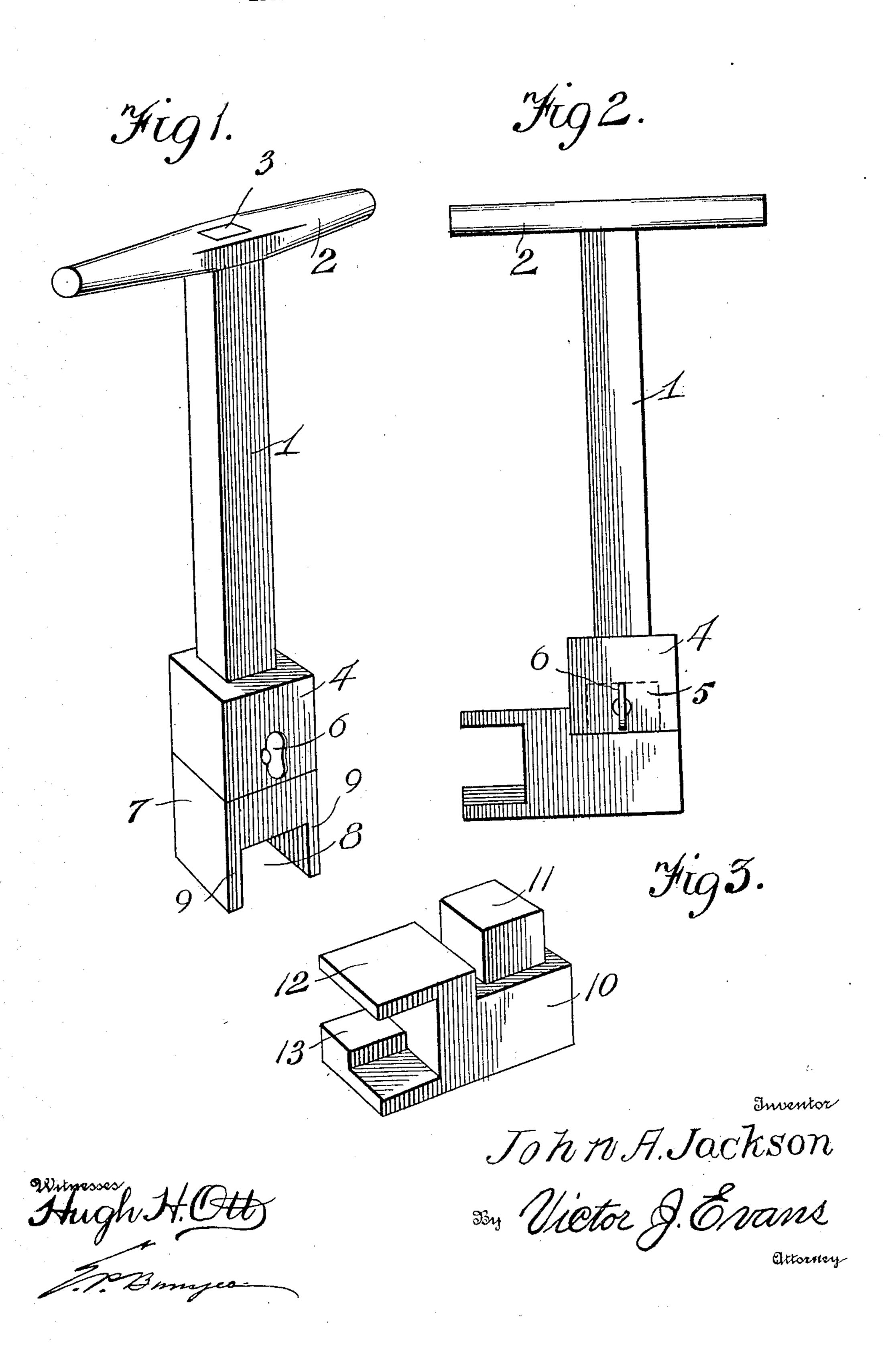
J. A. JACKSON.

WRENCH.

APPLICATION FILED OUT. 10, 1907.



UNITED STATES PATENT OFFICE.

JOHN A. JACKSON, OF MOWEAQUA, ILLINOIS.

WRENCH.

No. 887,643.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, John A. Jackson, a citizen of the United States of America, residing at Moweaqua, in the county of Shelby 5 and State of Illinois, have invented new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to wrenches, and one of the principal objects of the invention 10 is to provide a wrench handle to which a series of wrench bits may be connected, thus making the wrench capable of operation upon various sizes of nuts and for other purposes to which a wrench may be applied.

15 Another object of the invention is to provide a wrench of simple construction comprising a shank and a cross bar or handle for turning the same, said wrench having a bitholding socket and thumb screw for holding 20 various wrench bits in place thereon.

These and other objects may be attained by means of the construction illustrated in | 11 in Fig. 3. the accompanying drawing, in which:—

Figure 1 is a perspective view of a wrench 25 made in accordance with my invention, and having a certain form of wrench bit secured thereto. Fig. 2 is a side elevation of the wrench, showing a different form of wrench bit secured to the wrench. Fig. 3 is a per-30 spective view of one form of wrench bit which I may use with my wrench.

Referring to the drawing for a more specific description of my invention, the numeral 1 designates the shank of the wrench, and 2 35 is a cross handle secured to the upper end of the shank in any suitable manner, as by forming a reduced squared end 3 upon the upper end of the shank and forming a similar opening in the cross handle 2. However, 40 other means of connecting the handle to the shank may be resorted to. Formed upon or secured to the lower end of the shank 1 is a bit holder 4, said bit holder having a squared 45 screw 6 extending through one wall of said socket to bear upon the shank of the bit to be secured in said socket.

Various forms of bits may be used. As shown in Fig. 1 the bit 7 is provided with a 50 squared shank to fit the socket 5, said bit being held in place by means of the thumb screw 6. In the bottom of the bit 7 is a nut recess 8 having plain side walls 9.

The brace bit shown in Figs. 2 and 3 comprises a body portion 10 having a project- 55 ing rectangular shank 11 designed to fit the socket 5 in the wrench. A flange 12 projects from the opposite side of the body portion 10, and a stepped flange 13 projects from the same side of the bit and is spaced from the 60 flange 12 to provide nut-holding jaws of different contours or dimensions. The side of the bit from which the shank 11 projects is stepped so as to present a wall disposed parallel with and spaced from the shank and 65 this wall is adapted to engage one side of the socketed head 4 as shown in Fig. 2 so as to coöperate with the non-circular projection or shank 11 for preventing the bit from turning in the wrench.

From the foregoing it will be obvious that many forms of bits may be secured to the wrench so long as said bits are provided with squared shanks similar to that designated at

My invention is of simple construction; bits of various kinds can be quickly attached to the brace or wrench portion of the device, and great power may be exerted owing to the cross handle and its position relative to the 80 shank 1.

Having thus described the invention, what is claimed as new, is:—

A wrench comprising a shank, a head integrally connected with one end thereof and 85 having a non-circular socket, one wall of the socket being provided with a tapped opening, a clamping screw threaded in the opening, and a bit secured in the head, said bit comprising a body having a non-circular shank 90 and provided with a wall spaced from and disposed parallel with one side of the shank for engaging the outer surface of said head when the non-circular shank is in the socket of the latter, said wall coöperating with the 95 non-circular shank for preventing the bit socket 5 in the underside thereof and a thumb | from turning on the said head, and a pair of parallel jaws on the bit, one of the jaws having a stepped inner face.

In testimony whereof I affix my signature 100 in presence of two witnesses.

JOHN A. JACKSON.

Witnesses:

J. E. Gregory, H. R. Gregory.