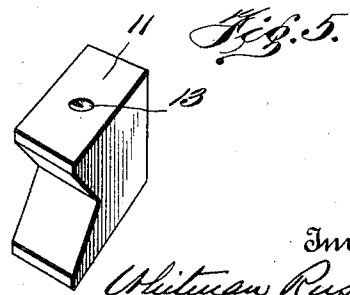
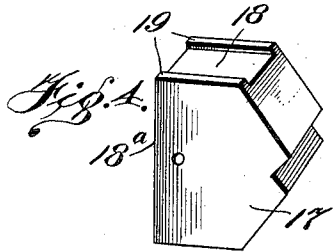
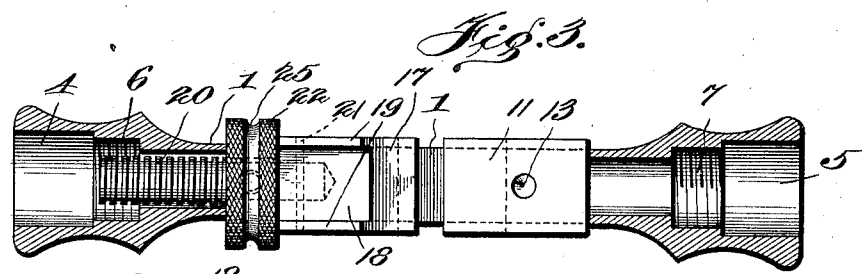
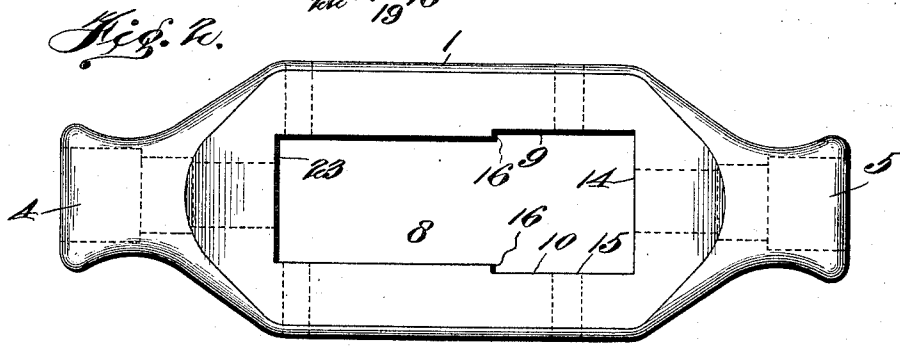
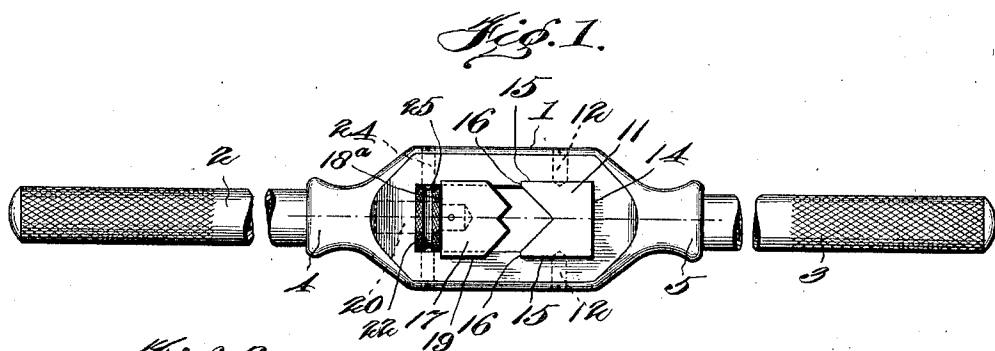


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TAP WRENCH.
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1,038,967.

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UNITED STATES PATENT OFFICE.

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TAP-WRENCH.

1,038,967.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WHITMAN RUSSELL, a citizen of the United States, residing at Greenfield, in the county of Franklin and State of Massachusetts, have invented certain new and useful Improvements in Tap-Wrenches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to tools, more especially to improvements in tap and reamer wrenches, and has for its purpose to provide a construction wherein the fixed and movable jaws are more rigidly secured, and wherein the manner of assembling those parts is more readily facilitated than is the case with tools of this type now employed. The invention further proposes a construction wherein the fixed and movable jaws, and the adjusting nut are more rigidly braced, to the end of withstanding greater strain on those parts, and consequently increasing the life of utility of the tool.

With these and other objects in view the invention consists in the novel details of construction and combinations of parts more fully hereinafter disclosed and particularly pointed out in the claim.

Referring to the accompanying drawings forming a part of this specification in which like numerals designate like parts in all the views:—Figure 1 is an elevational view of the tool complete; Fig. 2 is an enlarged elevational view of the stock member thereof; Fig. 3 is a longitudinal view, partly in section, of the stock member, the fixed and movable jaws, and the adjusting device; Fig. 4 is a detail perspective view of the movable jaw; and Fig. 5 is a detail perspective view of the fixed jaw.

Referring to the construction in detail, the tool consists essentially of a stock member 1 provided at either end thereof with manipulating handles 2 and 3, which fit within sockets 4 and 5, respectively, and are secured through screw-threaded engagement with said sockets 6 and 7 (see Fig. 3). Said handles 2 and 3 are constructed of tubular bars, and have the gripping ends thereof machined after the usual manner whereby the tool may be readily manipulated.

The stock 1 is provided with a central and rectangular opening 8, which at one end

is mortised, as at 9 and 10. Said mortised section of the opening receives, and has mounted therein, the fixed or immovable jaw 11, which is secured through the medium of oppositely disposed screws 12 engaging in notches 13 of said jaw. In this manner of securing the fixed jaw in the stock member 1, said jaw is more rigidly seated to withstand the strain thereon when the tool is in use, and has, in fact, a substantial bearing on four of its faces, viz: 14, 15 and 16.

The movable jaw 17 is constructed of a solid block similar to the fixed jaw 11, and on opposite faces thereof is recessed, as at 18, to provide channels that engage with the sides of the stock 1. The projecting portions or ribs 19, formed by the channels 18, act to keep the movable jaw within the opening 8, as will be understood.

The movable jaw is fitted into position by inserting within the mortised section of the central opening, and from which place it is moved to engage with the stock member to either side of the central opening 8, as will be understood. As in the case of the fixed jaw 11, the movable jaw 17 is likewise adapted to be rigidly braced within the stock by having its channeled faces 18 and face 18^a engaging respectively with the sides of the stock and the adjusting nut.

The adjusting device of the movable jaw consists in a screw-shank 20, that is carried by said jaw, and to which it is fixed by a pin 21 passing therethrough. A knurled nut 22 is threaded on the shank 20, and is located within the opening 8 of the stock between the movable jaw 17 and the end wall 23 of the stock, and in which position it is secured through the agency of a pair of screws 24 having reduced inner ends engaging within the annular channel 25, formed between the knurled faces of the nut. Said screw-shank 20 is adapted to move within the tubular handle 2, as will be readily understood.

It is obvious that those skilled in the art may vary the details of construction and arrangement of parts without departing from the spirit of my invention, and therefore I do not wish to be limited to such features except as may be required by the claim.

What I claim is:—

In a tap wrench, the combination of a stock member having a central rectangular opening with a mortised section; handles

secured to said stock member; a jaw fixed within said opening and seated against the four surrounding faces of said mortised section; a jaw movably mounted on the stock member within said opening; a screw shank carried by said movable jaw; and an adjusting nut for the movable jaw mounted on said screw shank intermediate the movable jaw,

and an end wall of said stock member, substantially as described.

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

WHITMAN RUSSELL.

Witnesses:

MARION E. HANDFORTH,
ELLEN K. O'KEEFE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."