

J. T. HUMPHRIES.

WRENCH.

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980,786

Patented Jan. 3, 1911.

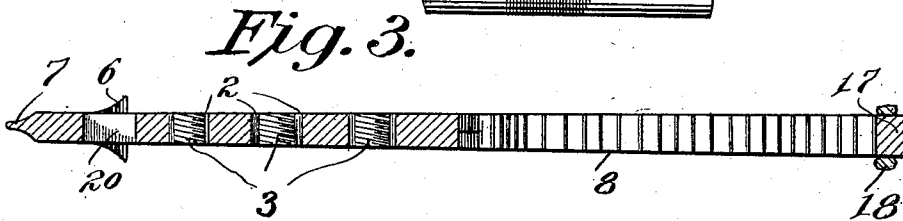
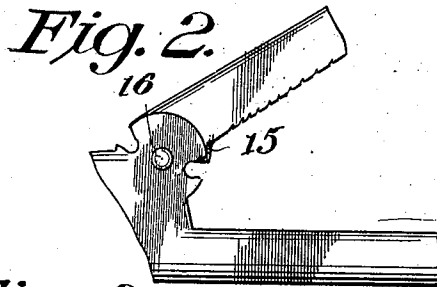
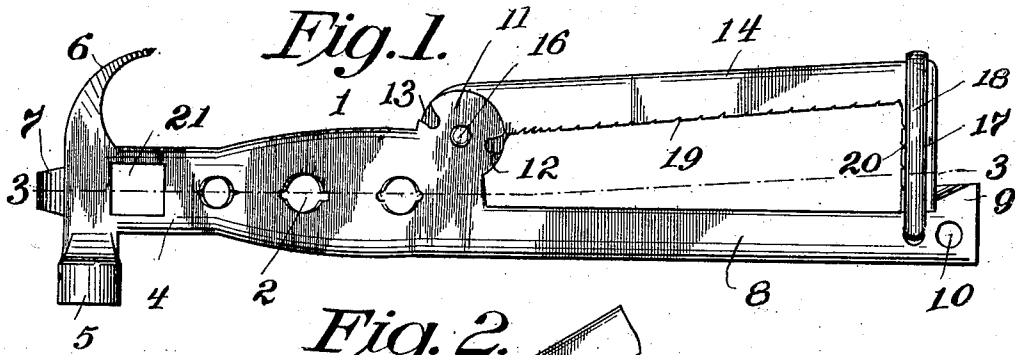


Fig. 4.

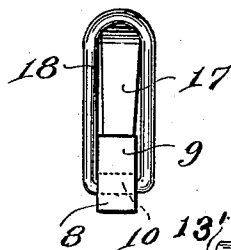


Fig. 5.

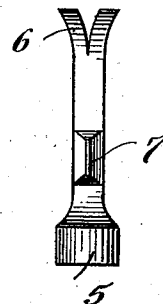
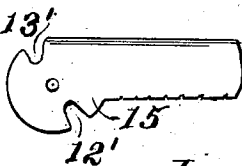


Fig. 6.



Witnesses

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WRENCH.

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To all whom it may concern:

Be it known that I, JOSEPH T. HUMPHRIES, a citizen of the United States, residing at Oakville, in the county of Live Oak and State of Texas, have invented new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to improvements in wrenches, and its object is to provide a simple type of wrench by which nuts or other objects varying in size may be gripped and held or turned without a complicated adjustment of parts to secure this result.

In the accompanying drawing I have shown the embodiment of my invention in a combination tool designed to perform a number of useful functions, but it will be understood that the invention resides exclusively in the wrench structure.

In the drawing:—Figure 1 is a side elevation of a combination tool embodying my invention. Fig. 2 is a fragmentary side elevation showing that portion of the tool forming the wire cutter. Fig. 3 is a longitudinal section on the line 3—3 of Fig. 1. Figs. 4 and 5 are opposite end elevations of the tool. Fig. 6 is a detail view of the wire cutting end of the wrench bar.

The tool comprises in its construction a relatively wide and flat body portion 1 provided with a series of openings 2 varying in size and in which are arranged dies 3, whereby pipes, rods and other like articles of different diameter may be threaded, the body portion of the tool acting as a rotary stock. From the forward end of the body portion projects a flattened reduced extension 4 provided at one side with a hammer head 5 and at its reverse side with a nail extracting claw 6. Between these portions at the front end of said flattened extension is arranged a screw driver bit 7.

Extending from one side of the longitudinal center of the body portion is a straight bar or shank 8 having at its free end a bearing shoulder 9 and formed adjacent thereto with an opening 10 by which the device may be suspended when not in use from a suitable support. The bar 8 is arranged at the side of the tool on which the hammer head 5 is formed, and upon the rear of the body portion at the side beyond which the claw 6 projects, said body portion is formed with a partially circular extension 11 provided at diametrically opposite sides with notches 12 and 13, certain edges of which are beveled

or sharpened to form cutting members. A straight bar 14 is arranged opposite the bar or shank 8 and is provided at its forward end with an inturned or lateral partially circular extension 15 which is disposed upon one side of the extension 11 and pivotally connected therewith by a pin or rivet 16. This extension 15 is provided with notches or recesses 12' and 13' to coact with the recesses 12 and 13, certain edges of said recesses 12' and 13' being beveled or sharpened to form cutters to cooperate with the cutting members of the recesses 12 and 13, so as to provide means whereby wires of different gage or the like may be severed.

The bar 14 is provided at its rear or free end with a right angularly bent arm 17 adapted to bear against the inner face of the shank 8 and abut against the shoulder 9, thus disposing said bar 14 at an inclination to the shank 8 so as to provide an intervening flaring space or opening between them when said bar 14 is in closed position. A link 18 is pivotally mounted upon the rear end of the shank 8 and is adapted to be swung into and out of engagement with the rear end of the bar 14 to hold the same closed or fixed with relation to the shank or to permit it to be swung on its pivot 16 to serve as the operating member of a wire cutter. The inner longitudinal edge of the bar is provided with inclined gripping teeth 19, while the inner face of its arm is provided with similar teeth 20, so that said bar may be employed in conjunction with the shank 8 as a wrench for engaging and holding or turning various objects of different sizes, the flaring space or opening between the bar and shank permitting different sizes of objects to be received and gripped, as will be readily understood.

From the foregoing description, the construction and mode of use of my improved tool will be readily understood without a further extended description, and its advantages in providing in a single tool a number of devices for performing a variety of useful functions will be appreciated.

If desired the extension 4 may be formed with a rectangular nut receiving opening 21, adapting the device for use as a nut wrench.

I claim:—

A tool of the character described comprising a body portion, a straight shank extending longitudinally from one side of the

rear end of the body portion and having at
its free end an upturned lug, a straight bar
disposed opposite said shank and pivotally
connected at one end to the opposite side of
5 the rear end of the body portion, said bar
having its inner face serrated throughout
its length and provided at its free end with
an arm adapted to engage the shank and
rest against the inner face of said lug, said
10 arm being of a length to hold the bar in-

clined at an angle to the shank, and a bail-
shaped locking link pivoted to the shank to
engage over the free end of the bar and to
hold the same in fixed relation thereto.

In testimony whereof I affix my signa- 15
ture in presence of two witnesses.

JOSEPH T. HUMPHRIES.

Witnesses:

JOHN F. CHURCH,
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