A. SPERDUTI.

PIPE WRENCH.

APPLICATION FILED JULY 12, 1920.

1,371,943.

Patented Mar. 15, 1921.

2 SHEETS—SHEET 1.

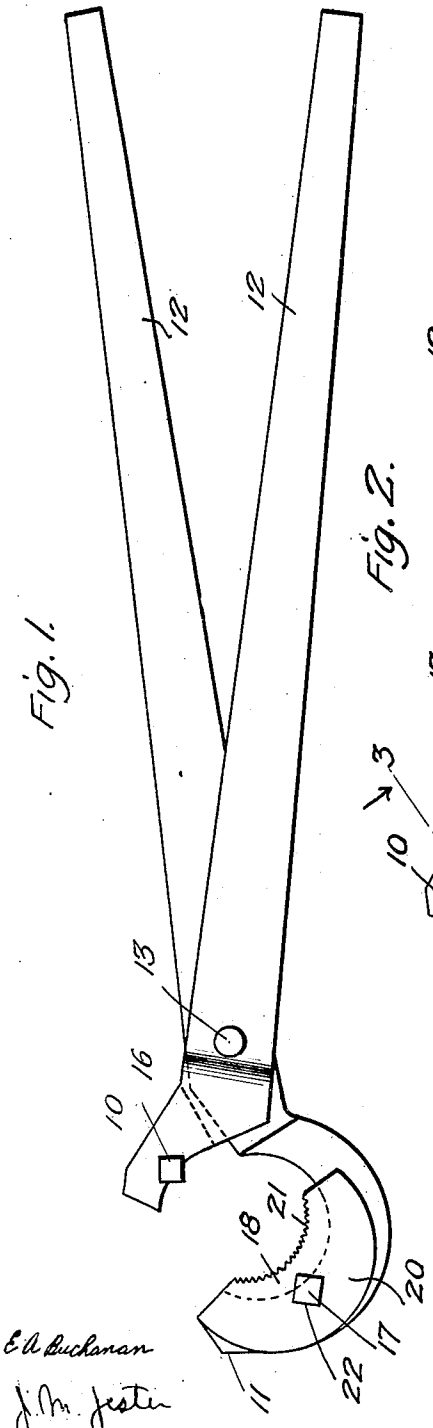


Fig. 1.

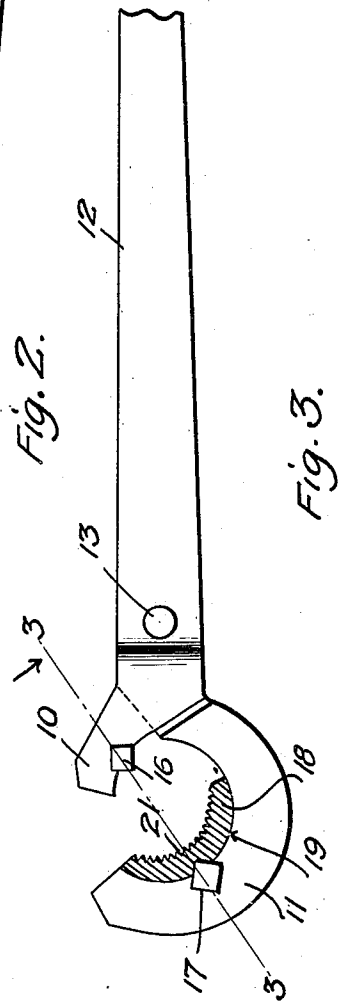


Fig. 2.

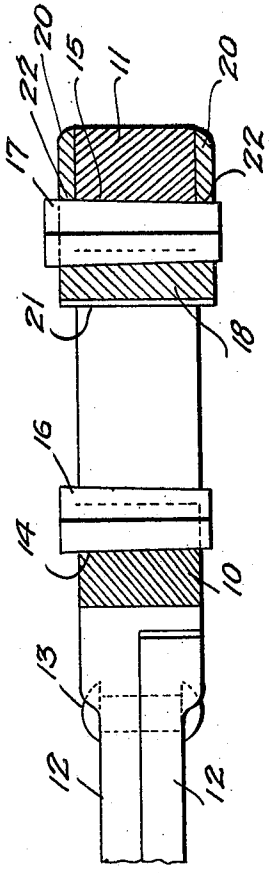


Fig. 3.

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WITNESS

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2 SHEETS—SHEET 2.

Fig. 4.

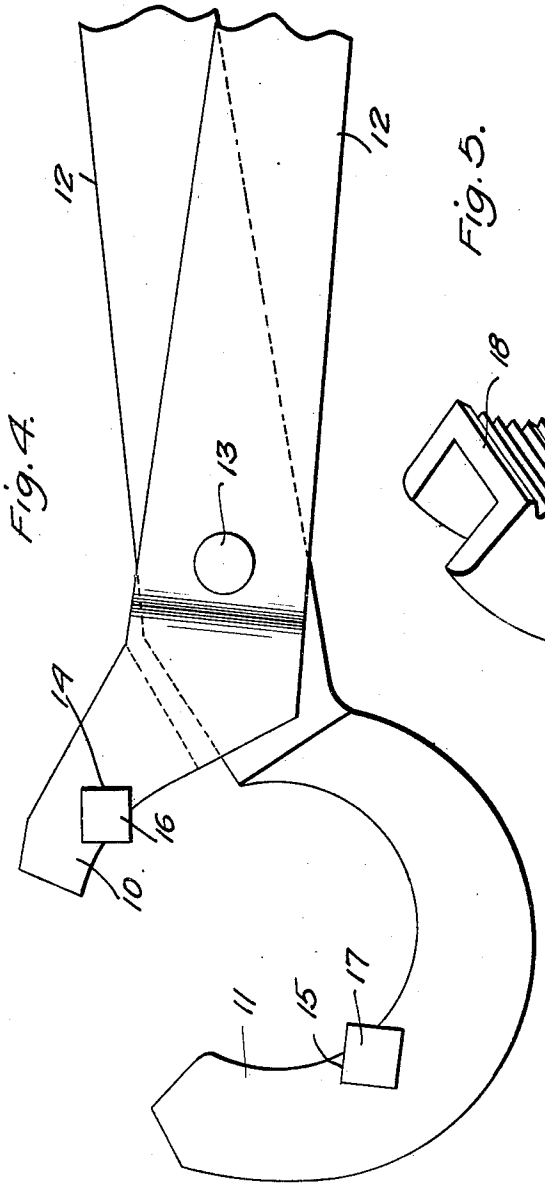
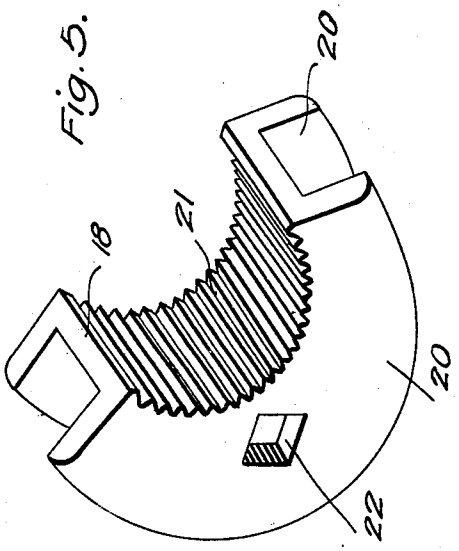


Fig. 5.



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ANTONIO SPERDUTI, OF LEAD, SOUTH DAKOTA.

PIPE-WRENCH.

1,371,943. Specification of Letters Patent. Patented Mar. 15, 1921.

Application filed July 12, 1920. Serial No. 395,806.

To all whom it may concern:

Be it known that I, ANTONIO SPERDUTI, a citizen of the United States of America, residing at Lead, in the county of Lawrence, and State of South Dakota, have invented new and useful Improvements in Pipe-Wrenches, of which the following is a specification.

This invention relates to tools, particularly to wrenches, and has for its object the provision of a pipe wrench of the tongs type and having associated therewith a removable inserted jaw, the wrench being adapted to turn a pipe of one diameter when said insert is in position and being adapted to turn a pipe of a larger diameter or a bushing when said insert is removed.

An important object is the provision of a wrench of this character in which the jaw members carry keys which are rectangular in cross section and each of which has one edge projecting beyond the inner surface of the jaws whereby to constitute a grip, the keys being removable and capable of insertion within a different position to bring another edge in operative position when one edge has become worn.

Another object is the provision of a wrench of this character in which the adjustment from one adaptation to another is quickly and easily effected.

An additional object is the provision of a wrench of this character which will be simple and inexpensive in manufacture, highly efficient in use, durable in service, and a general improvement in the art.

With the above and other objects and advantages in view, the invention consists in the details of construction to be hereinafter more fully described and claimed, and illustrated in the accompanying drawings in which—

Figure 1 is an elevation of my wrench showing it arranged for gripping a pipe of minimum diameter,

Fig. 2 is a similar view showing one side plate of the inserted jaw removed or broken away,

Fig. 3 is a cross sectional view taken through both wedge members,

Fig. 4 is an elevation with the inserted jaw removed, and

Fig. 5 is a perspective view of the inserted jaw alone.

Referring more particularly to the drawings, the numerals 10 and 11 designate broadly the two jaws of the wrench and these jaws terminate in elongated handles 12 which are crossed and pivotally connected, as shown at 13. The jaws proper are relatively wide compared with the handles and are cut away in the usual manner at the point of crossing. The jaws are formed with key-ways 14 and 15, respectively, which are square in cross section and tapered longitudinally and which extend slightly into the inner walls of the jaws, as clearly shown. The jaw 11 is longer than the jaws 10 so as to extend more than half way around a pipe engaged between the jaws. Disposed within the key-ways 14 and 15 are keys 16 and 17, respectively, which when in position, have one edge extending beyond the inner wall of the associated jaw.

Association with the jaw 11 is a removable jaw 18 which includes an arcuate face portion 19 which engages against the curved inner face of the jaw 11 and which further includes flanges 20 which are disposed against opposite sides of the jaw 11. The outer face of the arcuate portion 19 is preferably serrated, as indicated at 21, whereby to form an efficient gripping surface. The flanges 20 are formed with rectangular holes 22 registering with the key-way 15 and when this auxiliary jaw is placed in position it is necessary to remove the key 17, place the jaw member 18 in position, and then reinsert the key through the holes 22 and key-way 15.

In the use of the device when the auxiliary jaw member 18 is positioned as above described, it will be apparent that the opening between the jaws is relatively constricted. The device is used by swinging the handles 12 apart so as to engage the pipe or other object to be turned between the jaws 10 and 18 whereupon the handles are pressed together to grip the pipe which may then be turned.

By removing the auxiliary jaw member 18 and then reinserting the key 17 within the key-way 15, it will be apparent that the device may be used in the same manner for gripping a pipe of larger diameter or for gripping a bushing adapted to be threaded onto a pipe of the first mentioned diameter. In this way it will be seen that the device may be used upon objects having different diameters within certain limits. When the auxiliary jaw member 18 is not used it is apparent that it is the edges of the keys 16

and 17 which exert the gripping action and prevent slippage of the jaws upon the article to be turned.

From the foregoing description and a study of the drawings it will be apparent that I have thus provided a simply constructed and consequently inexpensive wrench by means of which pipes, bushings, or other round objects may be easily turned, the device being adjustable as above described and being highly efficient and durable.

While I have shown and described the preferred embodiment of my invention, it is of course to be understood that I reserve the right to make such changes in the form, construction, and arrangement of parts as will not depart from the spirit of the invention or the scope of the subjoined claim.

Having thus described my invention, I claim:

A pipe wrench comprising a pair of jaw members terminating in handles and pivoted in crossed relation, each jaw member being formed with a transverse tapered key-way adapted to receive a key having one edge extending through the inner face of each jaw, and a removable jaw member associated with one of said jaws and formed as an arcuate portion conformingly engaging against the inner face of the associated jaw and serrated, said removable jaw member further including flanges disposed on opposite sides of the associated jaw and formed with holes registering with the key-way therein, and keys disposed within said key-ways.

ANTONIO SPERDUTI.