Dec. 22, 1925. 1,566,764

T. MURPHY

WRENCH

Filed May 15. 1923

Fig.5.

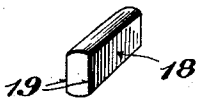


Fig.1.

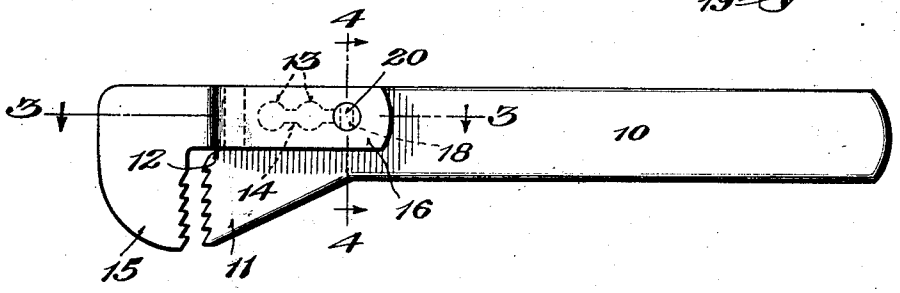


Fig.2.

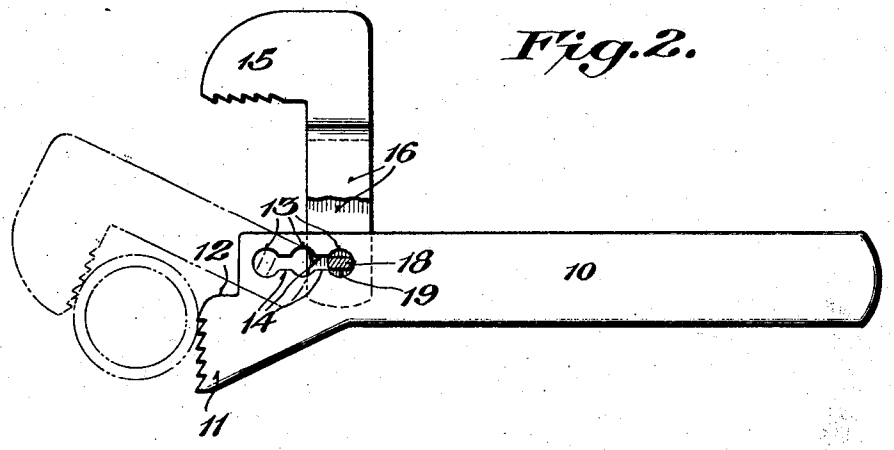


Fig.3.

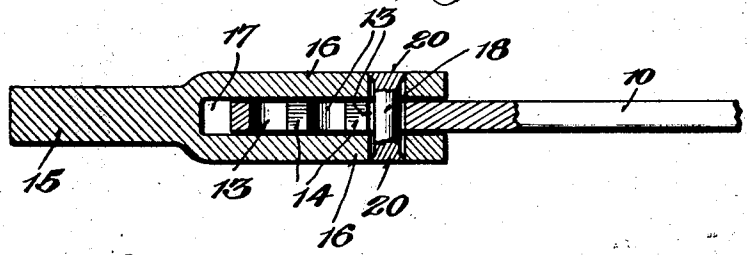
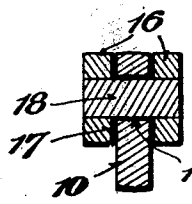


Fig.4.



Inventor

Thomas Murphy

By George P. Hall

Attorney

Patented Dec. 22, 1925. 1,566,764

UNITED STATES PATENT OFFICE.

THOMAS MURPHY, OF MIDDLETOWN, CONNECTICUT, ASSIGNOR OF ONE-HALF TO BERKLEY C. STONE, OF MIDDLETOWN, CONNECTICUT.

WRENCH.

Application filed May 15, 1923. Serial No. 639,075.

To all whom it may concern:

Be it known that I, THOMAS MURPHY, a citizen of the United States, residing at Middletown, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in wrenches and it is the object thereof, among other things, to produce a wrench of maximum efficiency and with the minimum number of parts that are simple in design and economical to construct.

The improvements in details and arrangement of parts of my improved wrench will be apparent from an inspection of the accompanying drawings, in connection with the description hereinafter contained, and wherein a preferred embodiment of the invention is disclosed for the purpose of imparting an understanding of the same.

In the drawings, wherein like numerals of reference designate like parts in the several figures;

Figure 1 is an elevation of my wrench with the movable jaw in its closed position;

Figure 2 is a view thereof with the movable jaw in its open position;

Figure 3 is a sectional view of the parts taken generally upon line 3—3 of Figure 1;

Figure 4 is a transverse sectional view of the parts taken generally upon line 4—4 of Figure 1; and

Figure 5 is a perspective view of the lock-pin.

In the practice of my invention I provide a handle 10, having at its inner end a downwardly and forwardly projecting fixed jaw 11 with a shelf or shoulder 12 upon the upper edge thereof. This handle is provided with a plurality of openings 13 that are connected by the slots 14. The movable jaw 15 is constructed with parallel arm members 16 having an open space 17 therein of substantially the same width as that of the handle 10.

Near the outer end of the arm members is a lock-pin 18 that has substantially parallel flat faces 19 and is secured in a fixed position with the faces 19 substantially parallel to the teeth of the jaw 15 by upsetting the ends thereof, as shown at 20 in Figure 3, or by any other convenient means.

As illustrated herein, this wrench has but three parts,—the handle, jaw and lock-pin, the latter being held against relative movement. The outside edges of the lock-pin 18 are curved and rotate within the openings 13 until the movable jaw is in a position at substantially a right angle to the handle, as shown in Figure 2, at which time the lock-pin 18 may be passed through one of the slots 14 and brought into register with another of the openings 13.

In the drawings there are illustrated three openings 13, these providing for three relative adjustments of the movable jaw, but the number thereof may be either increased or decreased as desired. When in its closed position the movable jaw rests upon the shelf 12 and prevents movement thereof in one direction.

There are minor changes and alterations that may be made within my invention, aside from those herein suggested, and I would therefore have it understood that I do not limit myself to the exact construction herein described, but claim all that falls fairly within the spirit and scope of the appended claim.

Having described my invention, what I claim as new and desire to secure by Letters Patent, is:—

In a wrench, a jaw carrying handle having a series of spaced circular openings diametrically bisected by a longitudinal slot having parallel side walls, a movable jaw carrying member having a bifurcated shank straddling the handle and formed in its sides with registering openings, and a key engageable through a selected one of the openings and composed of a strip like member having parallel side faces and rounded top and bottom edges, the key being arranged with its ends in said registering openings and with its parallel side faces extending at right angles to the longitudinal axis of the movable jaw carrying member, the extreme ends only of the key being upset into the respective openings of the bifurcated shank and with the side faces of the entire remainder of the key preserved in their said parallel relation.

In testimony whereof, I have hereunto affixed my signature.

THOMAS MURPHY.