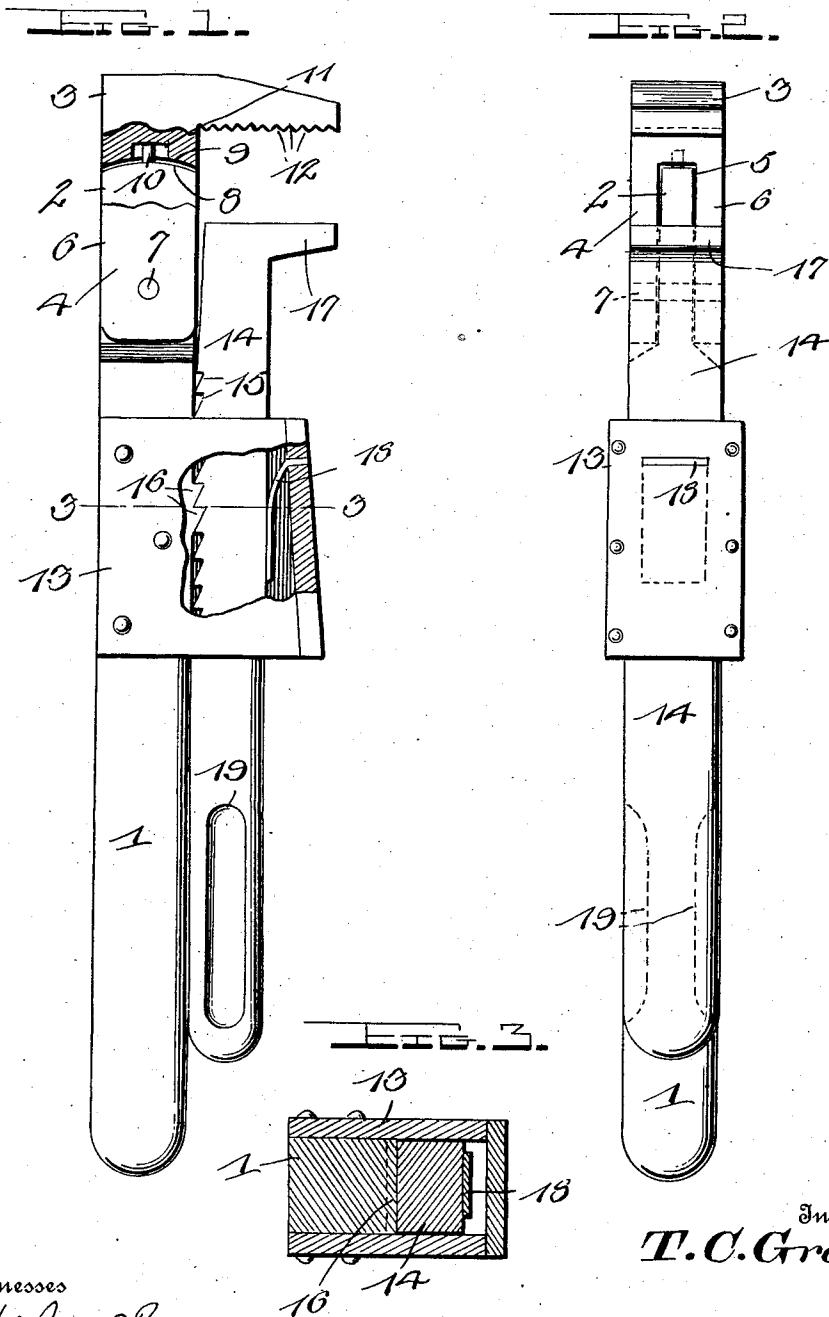


T. C. GRAY.
WRENCH.
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1,048,067.

Patented Dec. 24, 1912.



Witnesses

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THOMAS C. GRAY, OF CRAWFORD, MISSISSIPPI.

WRENCH.

1,048,067.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, THOMAS C. GRAY, a citizen of the United States, residing at Crawford, in the county of Lowndes and State of Mississippi, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to new and useful improvements in wrenches and more particularly to the quick adjustable type, the object of the invention being to provide a wrench of the above character that may be quickly and easily adjusted to manipulate various sizes of pipes, nuts and other similar objects.

Another object of the invention is to provide a wrench of the above character which will possess advantages in points of efficiency and durability, is inexpensive to manufacture and at the same time is simple in construction and operation.

With the above and other objects in view, the invention consists in the novel features of construction and the combination and arrangement of parts hereinafter more fully described, pointed out in the claim and shown in the accompanying drawings, in which—

Figure 1 is a side elevation, parts being broken away and in section. Fig. 2 is a front elevation and Fig. 3 is a sectional view on the line 3—3 of Fig. 1.

Referring more particularly to the drawings, 1 indicates the stationary shank of the wrench, the upper end of which is cut away upon both sides to form a reduced portion 2. Pivotaly secured to the upper end of the shank 1 is a jaw 3, said jaw being provided with a shank 4 extending at right angles thereto. The shank 4 is bifurcated as shown at 5 to form the spaced arms 6 which are arranged upon each side of the reduced portion 2 and pivotaly secured thereto by means of the pin 7.

The upper end of the reduced portion 2 is slightly curved as shown at 8 to coincide with the curved portion 9 of the bifurcation 5. Formed integral at the outer end of the reduced portion 2 and centrally arranged is a stud 10 which is movably disposed within a slot 11 formed at the inner end of the bifurcation 5. The slot 11 allows a slight oscillating movement of the jaw 3 so that the teeth 12 thereof may be disposed at an

angle to the object which is to be grasped by the wrench so that when the wrench is manipulated it will assure a firmer hold upon the object.

Secured to the shank 1 at substantially the intermediate portion thereof, is a housing 13 in which is slidably mounted a movable shank 14, the shank 14 being provided upon its inner face with a plurality of serrations 15 adapted to engage with the teeth 16 formed upon the face of the shank 1 and arranged within the housing 13. Formed integral with the upper end of the shank 14 is a jaw 17 which is adapted to cooperate with the jaw 3 to manipulate various objects. The serrations 15 are held securely into engagement with the teeth 16 by means of a spring member 18, one end of which is rigidly secured to the housing 13 and the free end bears against the outer face of the shank 14. The outer end of the shank 14 is provided with longitudinal recesses 19 arranged upon each side thereof and adapted to be used as finger holds whereby the shank may be readily grasped to manipulate the same.

The operation of my improved wrench will be readily understood from the above description when taken in connection with the drawings. In adjusting the jaw 17 with respect to the jaw 3, the outer end of the shank 14 is grasped by the hand pulling the same away from the shank 1 so as to disengage the serrations 15 from the teeth 16 whereby the shank 14 may be moved in either direction. It will be readily seen that the jaw 17 may be moved toward the jaw 3 by simply pushing upon the shank 14, but in moving the jaw 17 away from the jaw 3 the shank 14 must be moved away from the shank 1 so that the serrations 15 will become disengaged from the teeth 16, it being understood that the spring 18 holds the shank 14 in various adjusted positions.

While I have shown and described the preferred form of my invention, it will be obvious that various changes in the details of construction and in the proportions may be resorted to for successfully carrying my invention into practice without sacrificing any of the novel features or departing from the scope thereof.

What I claim is:—

A wrench including a shank having a handle formed at one end and its other end cut away to form a central reduced portion,

a jaw having a shank formed integral therewith and extending at right angles thereto, said second shank being bifurcated to form spaced arms which are disposed upon opposite sides of the reduced portion and pivotally secured thereto, said second shank having a recess formed therein at the inner end of the bifurcation, a stud formed integral with the outer end of the reduced portion and adapted to be movably disposed within said recess to permit a slight oscillation of said jaw, a housing secured to the first shank at its intermediate portion, a movable shank slidably mounted in said housing, a jaw formed integral with the movable shank at one end thereof, and a handle at the other end, teeth formed upon the first shank and disposed

within said housing, said movable shank being provided with a plurality of serrations adapted to engage said teeth, a spring member having one end rigidly secured to the housing and its other end bearing against the outer face of the movable shank to hold the same in various adjusted positions and said movable shank being provided upon each side thereof with longitudinal recesses forming finger holds whereby the handle of the movable shank may be readily grasped to manipulate the same.

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

THOMAS C. GRAY.

Witnesses:

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