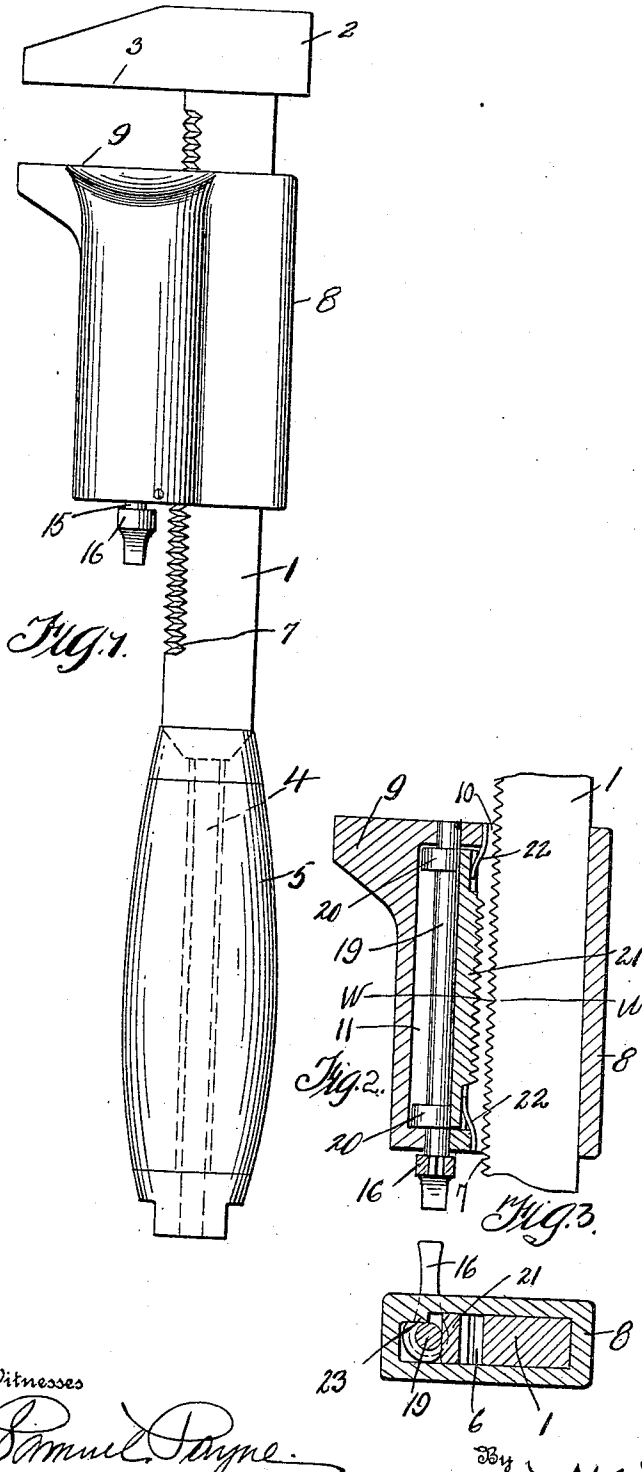


W. J. MARKS & J. LUECKERT.
WRENCH.

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Witnesses

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WRENCH.

946,383.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, WILLIAM J. MARKS and JOHN LUECKERT, citizens of the United States of America, residing at McKeesport, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to wrenches, and the invention has for its object to provide a wrench with novel means whereby the movable jaw thereof can be easily and quickly adjusted, and locked in positive engagement with the shank of the wrench, whereby the jaw cannot slip while the body is being rotated.

Our invention aims to provide a wrench of that type commonly styled "monkey wrench" and used for rotating objects having flat and cylindrical surfaces.

The wrench is designed particularly for mechanics and is constructed as simple as possible, when strength and durability are considered, also the cost of manufacture.

The invention will be hereinafter considered in detail, and then specifically claimed, and reference will now be had to the drawings, wherein there is illustrated the preferred embodiments of our invention, but it is to be understood that the structural details thereof can be varied or changed without departing from the spirit or scope of the invention.

In the drawings, Figure 1 is a side elevation of a wrench constructed in accordance with our invention, Fig. 2 is a vertical sectional view of a portion of the wrench, Fig. 3 is a horizontal sectional view taken on the line W—W of Fig. 2.

Referring to the drawings in detail, 1 designates a shank rectangular in cross-section and which has the upper end thereof provided with a fixed jaw 2 having a gripping surface 3. The lower end 4 of the shank 1 has suitably secured thereto a handle 5 and one edge of the shank is formed with teeth, the function of which will be hereinafter referred to.

Slidably mounted upon the shank 1 is an adjustable jaw 8 having the gripping surface 9 thereof adapted to oppose the surface 3 of the jaw 2. The jaw 8 is formed with an opening 10 through which the shank 1 ex-

tends and is also provided with a recess 11 which communicates with the opening 10. Rotatably mounted in the jaw 8 is a shaft 19 which extends through the recess 11 and is provided with a pair of cams 20 one arranged in proximity to each end of the shaft 19. The function of the cams 20 will be hereinafter described.

Mounted in the recess 11 is a toothed gripping member 21, each end of said member being cut away and each of the said cut-away portions is engaged by a bearing spring 22 secured to the jaw 8, extending within the recess 11 and maintaining the gripping member out of engagement with the teeth 7 of the shank 1. In this connection it will be stated that the toothed portion of the gripping member 21 opposes the teeth of the shank 1. The member 21 is interposed between the shaft 19 and the shank 1 and between the shank 1 and the cams 20 so that when the shaft 19 is rotated, the cams are adapted to engage the upper ends of the gripping member and force the said member 21 to engagement with the teeth of the shank 1 and further retain said member in said position so as to prevent the slipping of the jaw 8 after it has been moved to its adjusted position. The turning of the shaft 19 is had through the medium of a handle 16 and in this connection it will be stated that the shaft 19 projects from one end of the jaw 8 and to the said projecting portion of the shaft 19 is secured the handle 16. To limit the movement in one direction of the shaft 19, one of the walls of the recess 11 is provided with shoulders 23 (see Fig. 3), which are adapted to be engaged by the cams 20.

Having now described our invention, what we claim as new, is:—

A wrench comprising a toothed shank having a fixed jaw, an adjustable jaw slidably-mounted upon said shank and provided with a recess, a shank journaled in said adjustable jaw and extending through said recess, a cam arranged in proximity to each end of said shaft and within said recess, a toothed gripping member interposed between said shaft and the toothed portion of the shank, springs secured to the adjustable jaw and engaging said member for maintaining it out of engagement with the teeth of the shank, means for rotating said shaft whereby said cams will be brought into en-

gagement with said member for shifting the
latter to engagement with the teeth of the
shank thereby maintaining the adjustable
jaw in an adjusted position, and said ad-
5 justable jaw being provided with means to
limit the movement of the shaft in one di-
rection.

In testimony whereof we affix our signa-
tures in the presence of two witnesses.

WILLIAM J. MARKS.
JOHN LUECKERT.

Witnesses:

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