No. 648,769. Patented May 1, 1900.

A. MEYER.

WRENCH.

(Application filed Nov. 24, 1899.)

(No Model.)

Fig. I.

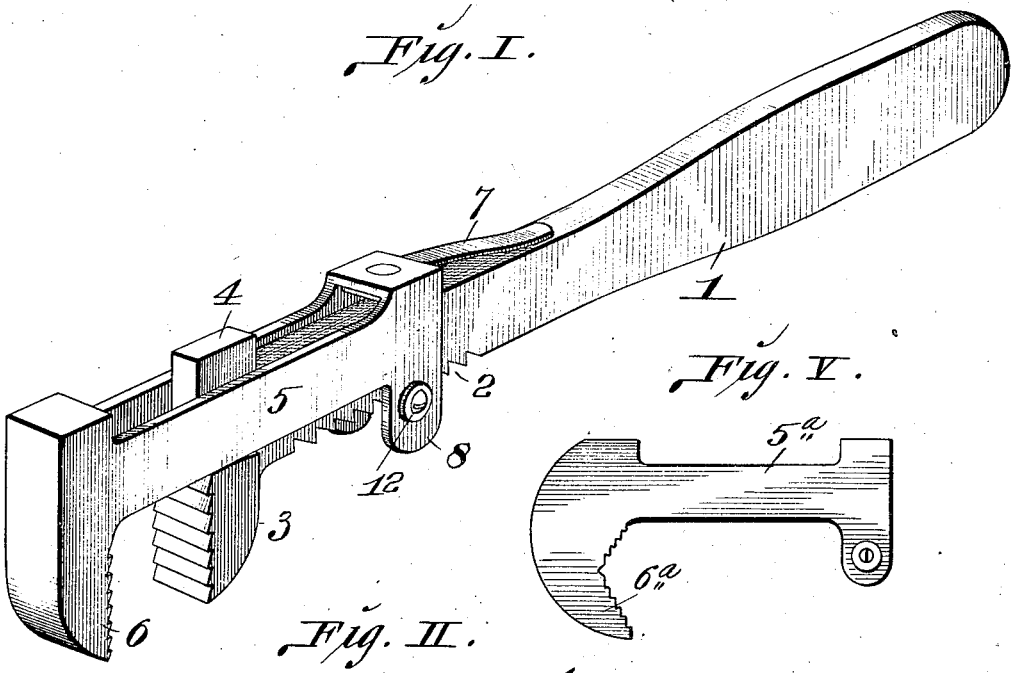


Fig. V.

Fig. II.

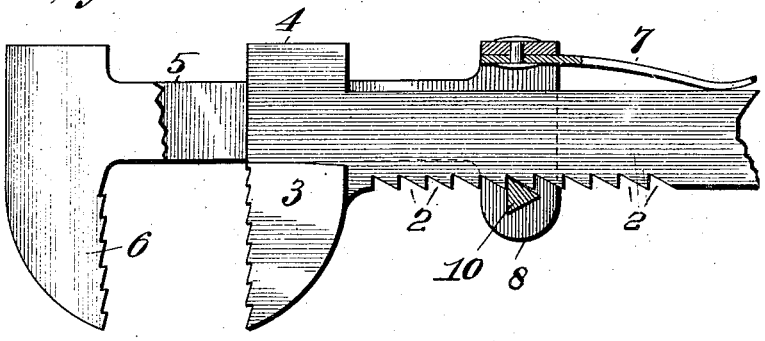
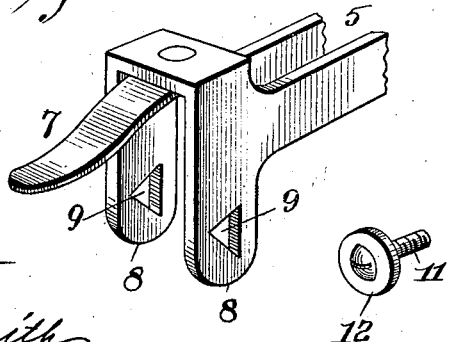


Fig. III.



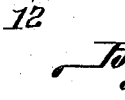
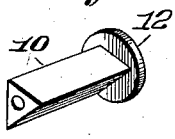


Fig. IV.



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UNITED STATES PATENT OFFICE.

ANTON MEYER, OF ST. LOUIS, MISSOURI.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 648,769, dated May 1, 1900.

Application filed November 24, 1899. Serial No. 738,124. (No model.)

To all whom it may concern:

Be it known that I, ANTON MEYER, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Wrenches, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to that class of wrenches supplied with a sliding jaw movable on the shank of the wrench, and has for its object the construction of a wrench of this character which may be readily adjusted in any desired position and also readily disassembled for the purpose of renewing parts of the wrench or repairing.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a perspective view of my improved wrench. Fig. II is a side view of the head part of the wrench, showing the sliding jaw member partly broken away and partly in section. Fig. III is an enlarged detail perspective view of the spring-carrying end of the sliding jaw member. Fig. IV is a detail perspective view of the removable catch carried by the sliding jaw member. Fig. V shows a modification of the sliding jaw member.

1 designates the shank or handle of the wrench provided at one of its edges with ratchet-teeth 2 and having a fixed jaw 3, provided with a heel 4.

5 designates the sliding jaw member, this member being bifurcated throughout its main portion to fit the shank 1 and embrace the heel 4 of the jaw 3. The jaw member 5 is provided with a jaw 6, that opposes the jaw 3. Fixed to the inner end of the jaw member 5 is a spring 7, that bears against the edge of the shank 1, opposite the ratchet-teeth 2. The jaw member 5 is formed with arms 8, that project beyond the ratchet-teeth 2, and are provided with apertures 9, (see Fig. III,) triangular in shape, that receive a catch 10. The catch 10 is triangular in cross-section and is formed with sharp edges, of which the one facing the ratchet-teeth is designed to engage said teeth for the purpose of holding the jaw member 5 fixed in any position to which it may be moved. The catch 10 is inserted in the apertures 9 and is removably secured therein to the arms 8 by screws 11, bearing washers 12.

In the practical use of the wrench the jaw member 5 may be moved outwardly on the depression of the spring 7, which causes the catch 10 to be moved out of engagement with the ratchet-teeth 2, and when the pressure is relieved from the spring the catch is returned inwardly under the action of the spring to engage one of the teeth 2 at the desired position. When the jaw member is to be moved inwardly, it is only necessary to exert pressure against the jaw 6, which will cause the catch 10 to ride over the teeth 2. By utilizing a catch of triangular shape in cross-section I am enabled to provide a number of edges, either one of which may be presented to the ratchet-teeth on the withdrawal and reinsertion of the catch to bring the desired edge thereof innermost. The catch being of the shape described, it is also possible to sharpen its edges when they become dulled, which may be readily accomplished with the catch removed. The removal of the catch also permits the removal of the jaw member, so that in the event of a breakage of said member it may be repaired or replaced by a similar part.

In Fig. V, I have shown a modification of the sliding jaw member in which the jaw 6^a is of curved shape to render it applicable for use in connection with pipes or circular objects.

I claim as my invention—

1. In a wrench, a movable jaw bifurcated throughout its main portion, a yoke connecting the bifurcated portion at the rear end, a spring extending rearwardly from said yoke, depending arms integral with the rear ends of said portion, triangular openings in said arms, a triangular catch removably secured in said openings.

2. In a wrench, the combination of a handle or shank provided with ratchet-teeth and a jaw, a jaw member provided with a jaw, and arms projecting from its inner end, a removable catch of triangular shape in cross-section seated in said arms adapted to engage said ratchet-teeth, and a spring carried by said jaw member adapted to bear against the edge of said shank opposite said ratchet-teeth, substantially as described.

3. In a wrench, the combination of a shank or handle provided with ratchet-teeth and having a jaw, a heel projecting rearwardly from said jaw, a sliding jaw member bifurcated to fit said shank and said heel, a removable catch carried by said jaw member adapted to engage said ratchet-teeth, and a spring carried by said jaw member adapted to bear against said shank to hold said catch in engagement with the ratchet-teeth, substantially as described.

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In presence of—
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