

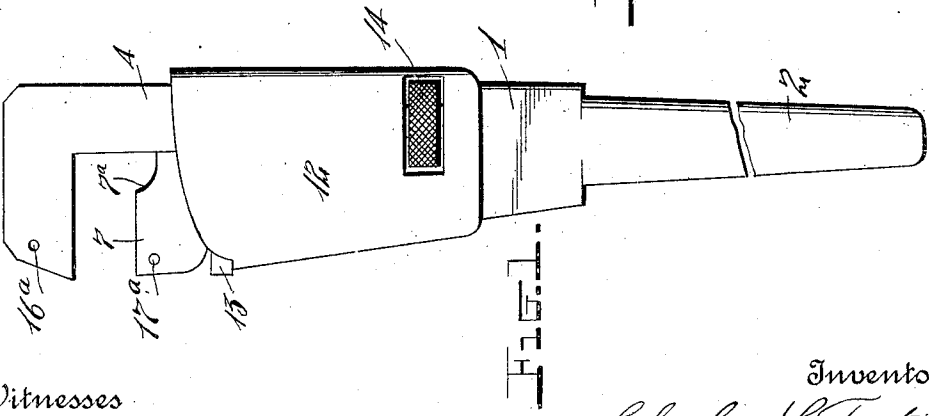
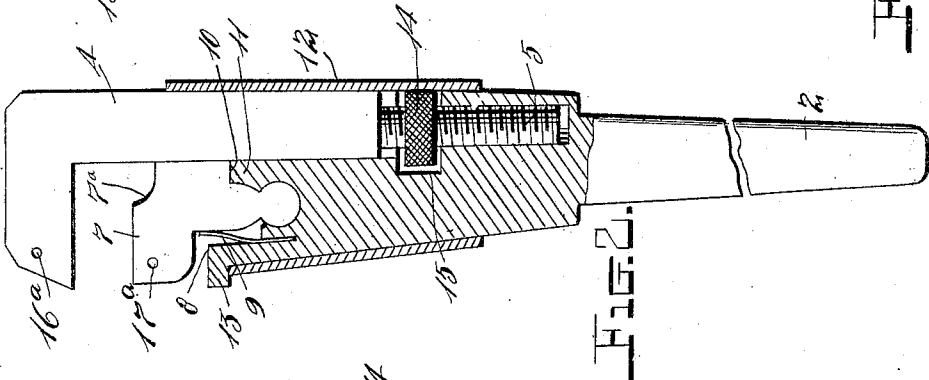
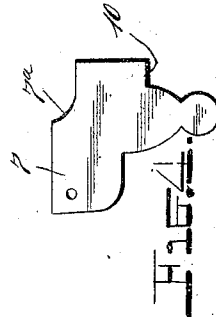
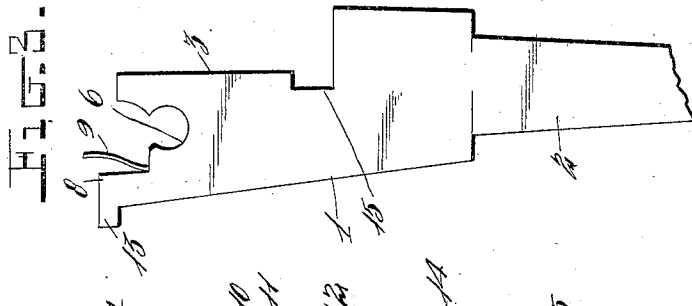
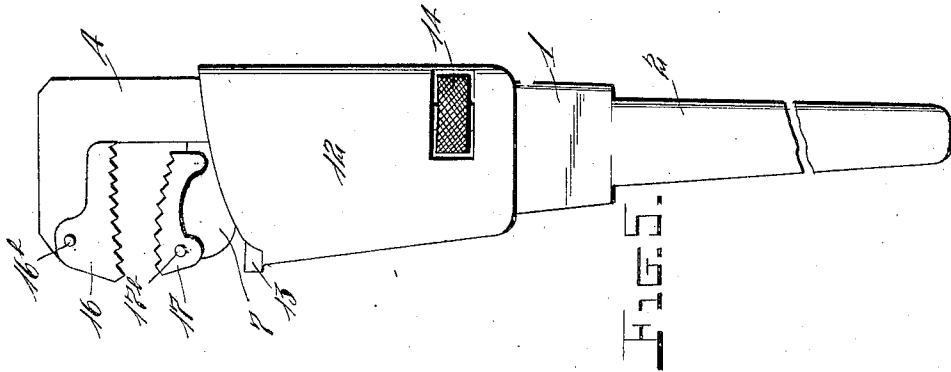
No. 836,571.

PATENTED NOV. 20, 1906.

C. L. FORTIN.

WRENCH.

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UNITED STATES PATENT OFFICE.

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WRENCH.

No. 836,571.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES L. FORTIN, a citizen of the United States, residing at Ballston Spa, in the county of Saratoga and State of New York, have invented certain new and useful Improvements in Wrenches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in wrenches.

It has for its object to provide a wrench which is simple in construction, cheap in manufacture, and in which the jaws are so constructed that they will escape the corners of a nut therein when said wrench is turned in the reverse direction, whereby said nut may be turned on without removing the wrench therefrom.

The invention consists in the features of construction and combinations of parts hereinafter described, and more particularly pointed out in the claims concluding this specification.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a side view of the wrench with its parts assembled. Fig. 2 is a broken longitudinal sectional view taken from front to rear. Fig. 3 is a detailed side view of the fixed jaw member with the jaw-piece removed. Fig. 4 is a detailed side view of the jaw-piece of the fixed jaw member; and Fig. 5 is a side view of the wrench with serrated pieces attached to the jaws whereby the wrench is adapted to be used for gripping and turning articles having smooth surfaces, such as pipe, &c.

Referring more particularly to the drawings, 1 designates the fixed jaw member having the handle portion 2. A portion of the rear edge of said member is cut away, as at 3, and in the space left thereby is arranged the movable jaw 4, which has the edges of its shank threaded at 5. In the upper end of said fixed jaw member is formed a transverse slot or groove 6, which is curved in cross-section, said curve constituting the greater part of a circle. The jaw-piece 7 has its lower end shaped to fit said groove 6, into which it is inserted from the side. There is an upward projection at the front edge of the jaw member 1, as designated at 8, which forms a stop for the forward movement of said jaw-

piece. A spring 9 is arranged between said projection or stop and said jaw-piece, whereby the latter is normally held back with its rear shoulder 10 engaging the rear stop 11 on the jaw member.

The parts of the wrench are retained assembled by the cover or shell 12, which fits over the fixed jaw member and the shank of the movable jaw. Said cover abuts against a shoulder or stop 13 on the upper end of the fixed jaw member and is prevented from slipping downward by the regulating-nut 14, arranged in slots in the sides of said cover and also in a recess 15 in the rear face of the fixed jaw member.

The rear corner of the jaw-piece 7 is cut away at 7^a, so that when said piece is rocked forward against the spring as the wrench is turned in the reverse direction it will escape the corner of a nut and permit a new grip to be had on said nut without removing the wrench therefrom. When the wrench is turned in the positive direction, said jaw-piece will return to its normal position and engage the nut. In this way it will be seen that a nut can be completely turned on without removing the wrench therefrom. When grasped by the operator, the regulating-nut will be between his thumb and finger, so that the wrench is readily regulated.

Each of the jaws is provided with a socket 16^a and 17^a, respectively, whereby serrated jaw-pieces 16 and 17 may be secured thereto by pins or bolts 16^b and 17^b in order that the wrench may be used for turning smooth-surfaced articles.

I claim—

1. A wrench comprising a fixed jaw member, a movable jaw member, a spring-pressed rocking jaw-piece on the fixed jaw member, and a cover for retaining the parts assembled.

2. A wrench comprising a fixed jaw member, a movable jaw member, a rocking jaw-piece on the fixed jaw member, said jaw-piece having its rear corner cut away for the purpose specified, and a cover for retaining the parts assembled.

3. A wrench comprising a fixed jaw member, a movable jaw member, a jaw-piece mounted on said fixed jaw member and having a rocking movement with relation thereto, a spring arranged between the front edge of said jaw-piece and the fixed jaw member, and a cover for retaining the parts assembled.

4. A wrench comprising a fixed jaw member and a movable jaw member arranged

edge to edge, a jaw-piece mounted on said fixed jaw member and having a rocking movement with relation thereto, a spring arranged between the front edge of said jaw-piece and the fixed jaw member, and a cover embracing said fixed and movable jaw members for the purpose specified.

5. A wrench comprising a fixed jaw member, a movable jaw member, a jaw-piece mounted on said fixed jaw member and having a rocking movement with relation thereto, a spring arranged between the front edge of said jaw-piece and the fixed jaw member, said jaw-piece having its rear corner cut away for the purpose specified, and a cover for retaining the parts assembled.

6. A wrench comprising a fixed jaw member, a movable jaw member, said fixed jaw member having a transverse groove in its upper end which is curved in cross-section and constitutes the greater part of a circle, a jaw-piece having a correspondingly-shaped lower end fitted in said groove and having a rocking movement with relation to the fixed jaw member, a stop to limit the forward movement of said jaw-piece, a spring arranged be-

tween said stop and said jaw-piece, and a cover to retain the parts assembled.

7. A wrench comprising a fixed jaw member, a screw-threaded movable jaw member arranged parallel thereto, a rocking jaw-piece on the fixed jaw member, a cover embracing both jaw members and having slots in its sides, a stop for said cover on the fixed jaw, and a regulating-nut arranged in the slots in the sides of said cover, around the screw-threaded movable jaw and extending into a recess in the rear edge of the fixed jaw member, whereby said cover and the other parts are retained in place.

8. A wrench comprising a fixed jaw member, a movable jaw member, a spring-pressed rocking jaw-piece on the fixed jaw member, a cover for retaining the parts assembled, and detachable serrated pieces secured to the jaws.

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

C. L. FORTIN.

Witnesses:

ALBERT DE CORA,
JOSEPH W. KING.