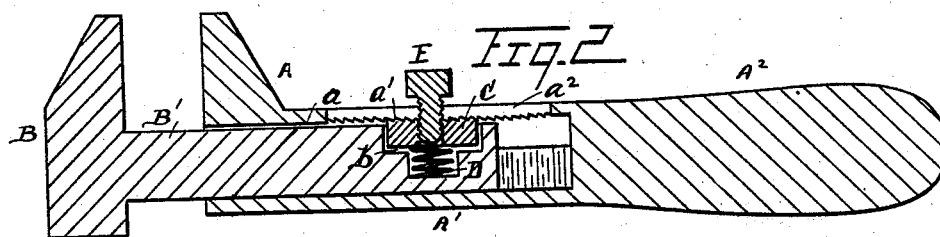
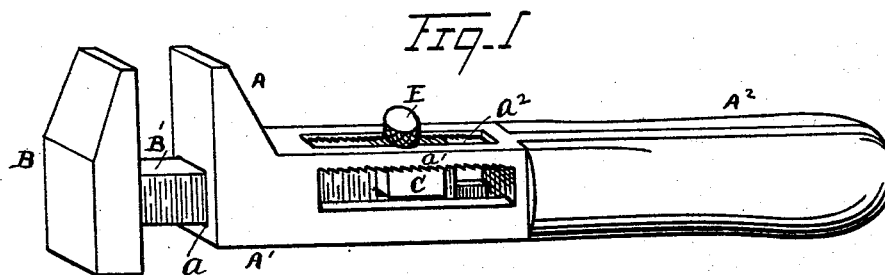


(No Model.)

F. F. SCHOFIELD.
WRENCH.

No. 455,821.

Patented July 14, 1891.



Witnesses
John Schuman.
John F. Miller

Inventor
Frederick F. Schofield
By his Attorney.
Newell S. Wright.

UNITED STATES PATENT OFFICE.

FREDERICK F. SCHOFIELD, OF OSCODA, MICHIGAN.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 455,821, dated July 14, 1891.

*Application filed November 28, 1890. Serial No. 372,925. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK F. SCHOFIELD, a citizen of the United States, residing at Oscoda, county of Iosco, State of Michigan, have invented a certain new and useful Improvement in Wrenches; and I 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, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object certain new and useful improvements in a monkey-wrench, having in view superior efficiency, durability, simplicity, and economy.

I carry out my invention as hereinafter specified and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective, and Fig. 2 is a longitudinal section.

The more especial feature of my invention is to provide means for facilitating the adjustment of the jaws, so that they can be quickly set as desired.

To this end A represents a fixed jaw provided with a shank A', engaged with a handle A². B denotes a movable jaw provided with a shank B'. The jaw A and its shank A' are recessed, as shown at *a*, to receive the shank B' of the jaw B and allow its reciprocation therein. The shank B' is recessed toward its rear end, as shown at *b*, to receive a spring bar or latch C, said bar having a serrated upper face to engage a similar serrated face on the under side of the upper wall of the recess *a*, as shown at *a'*. A spring D is located under the bar C to hold said bar in normal engagement with the shank A', in which engagement it is evident the jaw B is held in a fixed position. A thumb-screw E has a screw-threaded engagement with the bar C, said thumb-screw extending through an elongated orifice *a*³ in the upper wall of the shank A', allowing the free movement of the thumb-screw back and forth in said orifice. The thumb-screw preferably has a milled head, as shown.

The operation of the wrench will now be clearly understood. The operator, with his hand upon the handle and his thumb upon the head of the thumb-screw, presses downward, disengaging the spring-bar C from the serrated face of the shank A', the size of the recess *b* and of the bar allowing for a suitable depression of the bar to permit said disengagement, when, it will be seen, a forward or backward movement of the thumb upon the head of the thumb-screw will move the jaw B to any desired position. By releasing the thumb the spring-bar C will renew its engagement with the serrated face of the shank A' and hold the jaw B in the position to which it has been adjusted. If it is desired to more securely hold said jaw in a given position to which it may be adjusted, the thumb-screw may be turned down, drawing the bar C into firmer engagement with the serrated face of the shank A' and holding it there in a very secure manner and preventing any accidental yielding of the spring-bar in any strain that may come upon the wrench or in handling the same. The arrangement is such that the thumb-screw is in a most convenient position, so that the wrench can be operated in a most ready and expeditious manner.

What I claim as my invention is—

1. In a wrench, the combination, with a fixed jaw, of a movable jaw having a reciprocatory engagement in the fixed jaw and a spring bar or latch to hold the movable jaw in a given position, substantially as described.

2. In a wrench, the combination, with a fixed jaw and its shank provided with a recess, of a movable jaw and its shank having a reciprocatory movement in said recess of the fixed jaw and shank and a spring bar or latch to engage each of said shanks and hold the movable jaw in a given position, substantially as described.

3. In a wrench, the combination, with a fixed jaw and its shank provided with a recess, of a movable jaw and its shank having a reciprocatory movement in said recess of the fixed jaw and shank, a spring bar or latch to engage each of said shanks, and a thumb-screw

to tighten the said bar or latch upon the shank of the fixed jaw, substantially as described.

4. In a wrench, the combination, with a fixed jaw and its shank provided with a recess, an
5 orifice a^2 and serrated surface a' , of a movable jaw and its shank having a reciprocatory movement in said recess, a serrated spring bar or latch engaging the shank of the movable jaw and the serrated surface of the shank
10 of the fixed jaw, and a thumb-screw extend-

ing through said orifice a^2 and having a screw-threaded engagement with said spring bar or latch, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

FREDERICK F. SCHOFIELD.

Witnesses:

ORIN CUTCHEON,
G. H. E. HAWKINS.