

No. 760,867.

PATENTED MAY 24, 1904.

S. HOLZINGER.
WRENCH.

APPLICATION FILED FEB. 26, 1904.

NO MODEL.

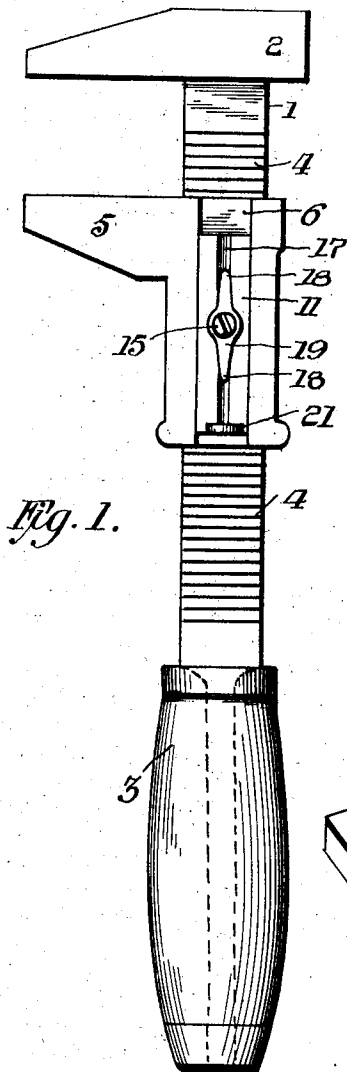


Fig. 1.

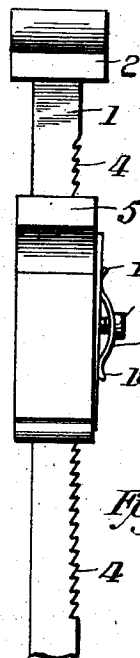


Fig. 2.

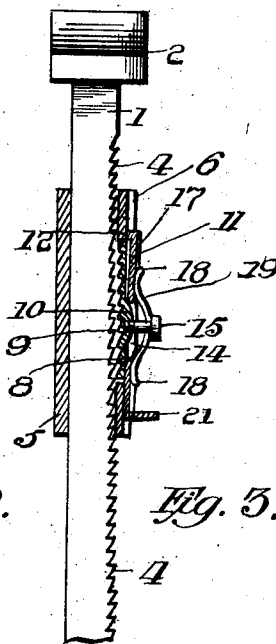


Fig. 3.

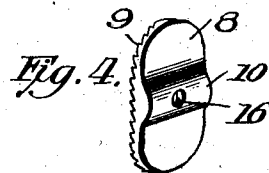
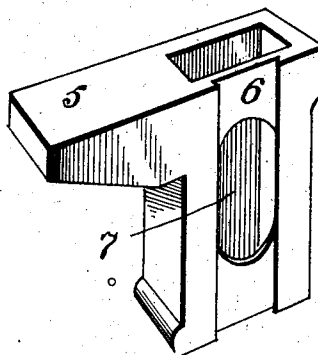


Fig. 4.

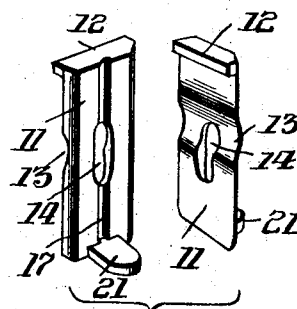


Fig. 5.

Fig. 6.

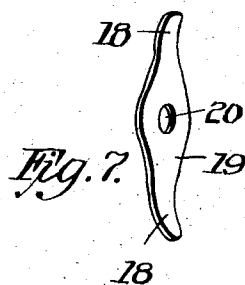


Fig. 7.

Witnesses:
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UNITED STATES PATENT OFFICE.

STEFAN HOLZINGER, OF HOMESTEAD, PENNSYLVANIA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 760,867, dated May 24, 1904.

Application filed February 26, 1904. Serial No. 195,433. (No model.)

To all whom it may concern:

Be it known that I, STEFAN HOLZINGER, a citizen of the United States of America, residing at Homestead, 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 drawings.

10 My invention has relation to monkey-wrenches, and has for its object the provision of novel means for securing the sliding jaw of the wrench in any position to which it may be adjusted.

15 My invention consists in the novel construction, combination, and arrangement of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a wrench constructed according to my invention. Fig. 2 is a rear elevation, the handle being removed. Fig. 3 is a similar view with the sliding jaw in section. Fig. 4 is a perspective view of a racked plate carried by the sliding jaw. Fig. 5 is a perspective view of the sliding jaw with the movable parts thereof detached. Figs. 6 and 7 are perspective views of the removable parts of the sliding jaw.

The shank 1 of the wrench is provided with the usual stationary jaw 2 and handle 3, these parts being of the ordinary construction. A rack 4 is formed on one side of the shank, and upon the shank is arranged a sliding jaw 5. The jaw 5 has a dovetailed groove 6 in one of its sides, and the wall of the sliding jaw within the groove is cut away, as shown at 7, an oval opening being formed, in which is fitted a plate 8, having teeth 9 on its inner side and the rib 10 on its outer side. A plate 11 is formed with a flange 12 on its upper end and fits and slides in the dovetailed groove 6 of the sliding jaw, the edges of the plate being beveled to correspond to the dovetailed groove in the jaw, and the said plate 11 is formed with a laterally-disposed concavity 13, which is partly intersected by a longitudinal slot 14, through which is passed a screw 15, that screws into a hole 16 in the plate 8. The plate 11 is also formed with a longitudinal groove 17, which serves as a guide for the upturned ends 18 of

a spring 19, that is sustained in position against the outer side of plate 11 by the screw 15, which passes through a hole 20 in the said spring. A thumb-piece 21 is fixed at the lower end of the plate 8 and serves to aid in pushing the plate up and down on the sliding jaw.

The parts being constructed and arranged as described are fitted together as shown in Fig. 3—that is, with the plate 8 resting in the orifice 7 and the plate 11 in the dovetailed groove 6 in such position relatively to the plate 8 that the rib 10 on the back of the plate 8 rests in the concavity 13 of the plate 11, the resiliency of the spring 19 serving to draw the plate 8 outward, so that its teeth will be disengaged from the teeth of the rack on the shank. In this position of parts the sliding jaw may be moved up and down the shank, and when it is desired to fasten the jaw at any position to which it may be adjusted the plate 11 is moved upwardly by pressing against the lug 21, the slot 14 permitting of such movement, and when the plate is moved in this manner the flat surface of the plate riding upon the rib 10 of plate 8 overcomes the resistance of spring 19 and causes the plate 8 to be pressed inwardly, thus bringing its teeth into engagement with the teeth on the shank. When it is desired to disengage the teeth on the plate 8 from the teeth on the shank, it is only necessary to push the plate downwardly, whereupon the concavity 13 will register with the rib 10 and the spring 19 will draw the plate 8 outwardly and disengage its teeth from the teeth of the rack.

Having described my invention, I claim—

1. In a wrench, the combination with a shank, having teeth on one side, of a sliding jaw embracing the shank and formed with a dovetailed groove in one side and an opening at the bottom of said dovetailed groove, a plate fitted in said opening and formed with teeth on its inner face and a rib on its back, a sliding plate fitting in said dovetailed groove and having a concavity adapted to receive the rib on said toothed plate when the latter is disengaged from the rack on the shank.

2. In a wrench, the combination with a shank having a fixed jaw and a rack on its side, of a sliding jaw having a dovetailed groove in

its side, and an opening adjacent to the rack
of the shank, a toothed plate fitting said open-
ing and having a rib on its back, a slidable
plate arranged in said dovetailed groove and
5 having a concavity on its inner face, a slot
partially intersecting said concavity, an in-
turned flange and a lug on its opposite ends,
a spring bearing on said slidable plate and a
screw passing through the slot in the slidable

plate and screwing into the toothed plate, sub- 10
stantially as described.

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

STEFAN HOLZINGER.

Witnesses:

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JOHN GROETZINGER.