

No. 735,504.

PATENTED AUG. 4, 1903.

R. P. HART.
WRENCH.

APPLICATION FILED JUNE 2, 1903.

NO MODEL.

Fig 1

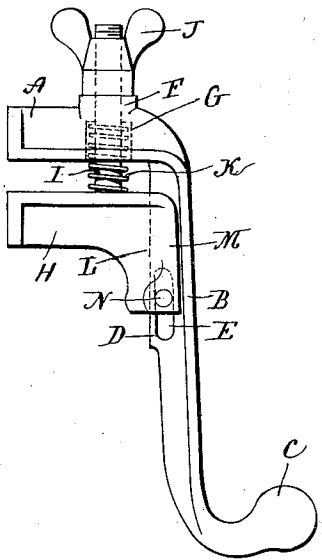


Fig 2

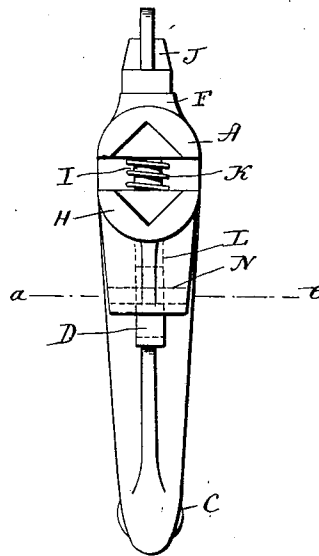
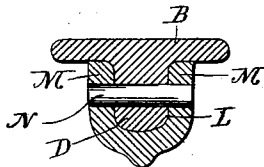


Fig 3



Witnesses.
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UNITED STATES PATENT OFFICE.

RICHARD P. HART, OF BRANFORD, CONNECTICUT.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 735,504, dated August 4, 1903.

Application filed June 2, 1903. Serial No. 159,783. (No model.)

To all whom it may concern:

Be it known that I, RICHARD P. HART, of Branford, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Wrenches; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of a wrench constructed in accordance with my invention; Fig. 2, a front view thereof; Fig. 3, a sectional view on the line *a b* of Fig. 2.

This invention relates to an improvement in wrenches, and particularly wrenches designed primarily for carriage-axle nuts, and is an improvement on the invention shown in United States Patent No. 204,089, granted May 21, 1878, the object of the invention being to simplify the arrangement of the parts, whereby greater rigidity is secured; and the invention consists in the construction, as hereinafter described, and particularly recited in the claim.

As in the patent above referred to, the wrench consists of a stationary jaw A, shank B, formed integral therewith, the end of the shank preferably turned outward, providing a grip C. Upon the shank is a rib D, formed with a longitudinal slot E. Upon the jaw A is a boss F, and the inner face of the jaw is provided with a recess G in line with said boss. The sliding jaw H is provided with an upwardly-extending stem I, which passes through an opening formed for it in the boss F, the stem being screw-threaded at its outer end to receive a thumb-nut J, by which the movable jaw may be turned toward the stationary jaw. Surrounding the stem and located within the recess G is a spiral spring

K, the tendency of which is to separate the jaws. The sliding jaw H is formed with a groove L, corresponding to the rib D, over which it sets, and the sides M of the groove are perforated to receive a pin N, which passes through the slot E and so as to interlock the sliding jaw with the shank. As in the previous patent, the jaws are separated by turning the nut in one direction, allowing the spring to force the jaws apart, and drawn toward each other by turning the screw in the opposite direction, which compresses the spring, the sliding jaw being guided upon the rib D of the shank by the pin N, extending through the sides of the groove and through the slot. By coupling the sliding jaw and shank with the pin-and-slot connection the sliding jaw is held more rigidly in position and less difficulty is experienced in casting than when the rib is undercut and the jaw provided with inwardly-extending edges to coact therewith.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a wrench, the combination with a stationary jaw having a shank, said shank provided with a rib and a longitudinal slot therein, of a sliding jaw formed with a groove adapting the jaw to set over the said rib, and a pin extending through the sides of the groove in the movable jaw and through said slot, said movable jaw having an upwardly-extending pin adapted to pass through an opening formed for it in the stationary jaw, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

RICHARD P. HART.

Witnesses:

WILLIAM R. FOOTE,
ELLEN M. PALMER.