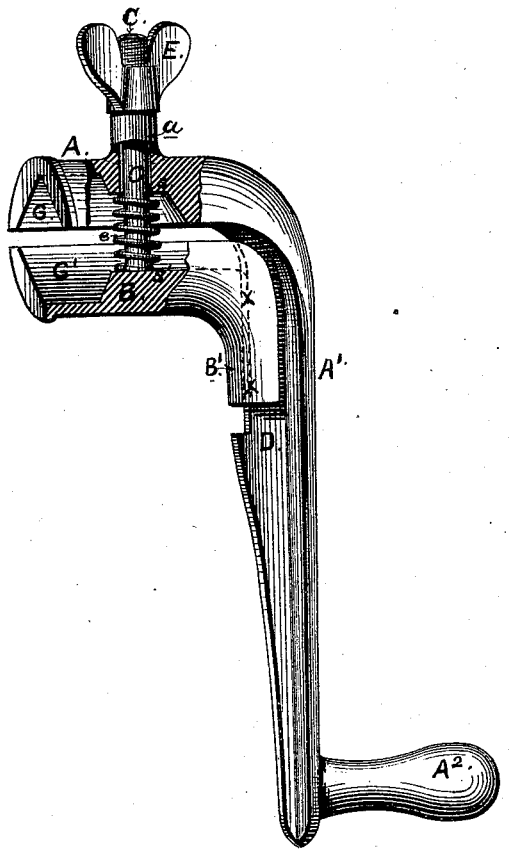
G. W. REMINGTON.
Carriage-Wrench.

No. 204,089. Patented May 21, 1878.



WITNESSES.

Geo. H. Remington

Remington Sherman

INVENTOR.

George W. Remington

UNITED STATES PATENT OFFICE.

GEORGE W. REMINGTON, OF EXETER, ASSIGNOR OF ONE-HALF HIS RIGHT TO GEORGE H. REMINGTON, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN CARRIAGE-WRENCHES.

Specification forming part of Letters Patent No. **204,089**, dated May 21, 1878; application filed March 30, 1878.

To all whom it may concern:

Be it known that I, GEO. W. REMINGTON, of Exeter, Washington county, and State of Rhode Island, have invented a new and useful Adjustable Carriage-Wrench, which is fully described in the following specification and represented in the accompanying drawing.

My object is to furnish a cheap and adjustable wrench for removing nuts from axles with more facility than has heretofore been done, said wrench consisting of a stationary jaw, with an arm and handle formed thereon, together with an adjustable jaw actuated by suitable means, and the two parts coacting to form an adjustable socket-wrench.

A represents the stationary jaw, having a handle portion, A′, bent at an angle with the jaw. Upon this handle portion is formed a rib, D. The outer end of jaw A is represented in section to show the angular recess G and hollow-projecting boss *a*, which is also formed upon said jaw A.

The adjustable jaw is represented at B, and is also formed with an angular recess, G′, corresponding with that formed in the fellow stationary jaw. A portion, B′, of the jaw B is also made at an angle with the griping-face, and is formed with a concave or grooved seat to fit the rib D, along which it is intended to slide when the movable jaw is to be adjusted in position, with reference to the stationary jaw, for the purpose of taking a gripe upon a nut.

The office of the rib on the handle portion of the stationary jaw and the concave or grooved seat of the movable jaw is to enable the movable jaw to be combined with the handle portion, and to resist any strain which in using the tool it would be subject.

The means for adjusting the movable jaw consists of a stem, C, secured to said jaw, and passing loosely through the stationary jaw. The outer end of stem C has a screw-thread formed thereon for the adjusting-nut E.

The operation of this wrench is readily understood. The jaws A and B, being sufficiently separated, are placed over the axle-nut and secured thereto by the action of the thumb-nut E, after which the nut can be screwed to or from its axle. The wrench is readily released by loosening the nut E, when the action of the spring *e* separates the jaws. With this wrench a nut may be removed from the axle or from any other place, and then replaced without coming in contact with the fingers or losing its hold upon the nut.

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

An improved wrench consisting of a stationary jaw, A, having a rib-piece, D, in combination with a sliding jaw, B, having a concave or grooved seat fitted to the rib D, and an adjusting device, C E, all arranged relatively to each other, substantially as set forth.

GEORGE W. REMINGTON.

Witnesses:
GEO. H. REMINGTON,
WALTER F. BROWN.