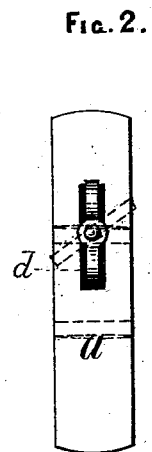
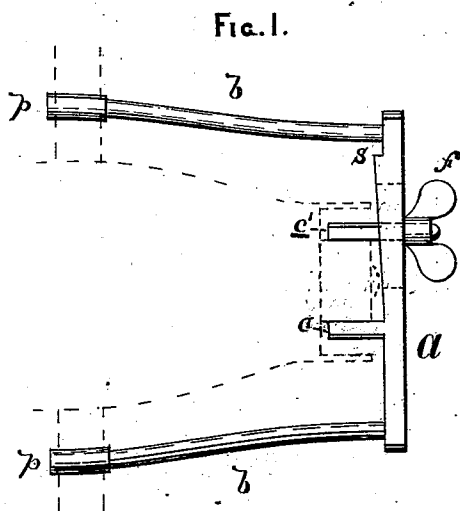


J. T. GILBERT.
CARRIAGE-WRENCH.

No. 184,707.

Patented Nov. 28, 1876.



WITNESSES

H. Ford.

L. J. Casavant.

INVENTOR

John T. Gilbert

by F. S. Davenport, atty.

UNITED STATES PATENT OFFICE.

JOHN T. GILBERT, OF JACKSONVILLE, ILLINOIS.

IMPROVEMENT IN CARRIAGE-WRENCHES.

Specification forming part of Letters Patent No. 184,707, dated November 28, 1876; application filed September 30, 1876.

To all whom it may concern:

Be it known that I, JOHN T. GILBERT, of Jacksonville, in the county of Morgan and State of Illinois, have invented a new and Improved Carriage-Wrench; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The invention herein described is an improvement in carriage-wrenches of that class adapted to engage with the spokes of the wheel in such manner that by turning the latter the nut on the end of axle may be turned on or off; and consists in certain details of construction, hereinafter described, whereby the wrench may be readily adapted to fit any sized nut by a contrivance believed to be more simple and substantial than any heretofore devised for the same purpose.

In the drawing, Figure 1 represents a side elevation of the wrench, a part of the hub of the wheel being shown in dotted lines. Fig. 2 is a plan view of the same.

A, Fig. 1, represents a plate, provided at each end with an arm, *b*, adapted to project between the spokes of the wheel, and covered with rubbers *p p*, to prevent abrasion of the latter. *c c'* are two jaws designed to embrace the nut, *c'* being movable in a slot, *d*, and secured in position by a thumb-nut, *f*.

The wrench is operated by placing the arms

b b between the spokes of the wheel, and the two jaws within the end of the hub, the jaw *c'* being moved along the slot *d*, and secured in position by the thumb-nut *f*, so as to just span the nut, which is then actuated by a twirl of the wheel in the proper direction.

It will be observed by reference to the drawing, Fig. 1, that the part of the plate A which includes the slot *d* is thicker toward the end S. The object of this is to prevent the possibility of the movable jaw slipping backward from the position in which it is secured.

What I claim as my invention, and desire to secure by Letters Patent, is—

In combination with the arms *b b*, the taper plate A, provided with a fixed jaw, *c*, longitudinal slot *d*, and adjustable jaw *c'*, the plate A having its inner and outer faces made divergent from each other from the fixed jaw *c* to the point S, so as to act as a wedge between the base of the sliding jaw *c'* and the nut by which it is secured in position, the combination of these parts and their adaptation to each other being as and for the purpose herein set forth.

This specification signed and witnessed this 21st day of September, 1876.

JOHN T. GILBERT.

Witnesses:

JOHN A. BELLATTI,
A. RUSSEL, Jr.