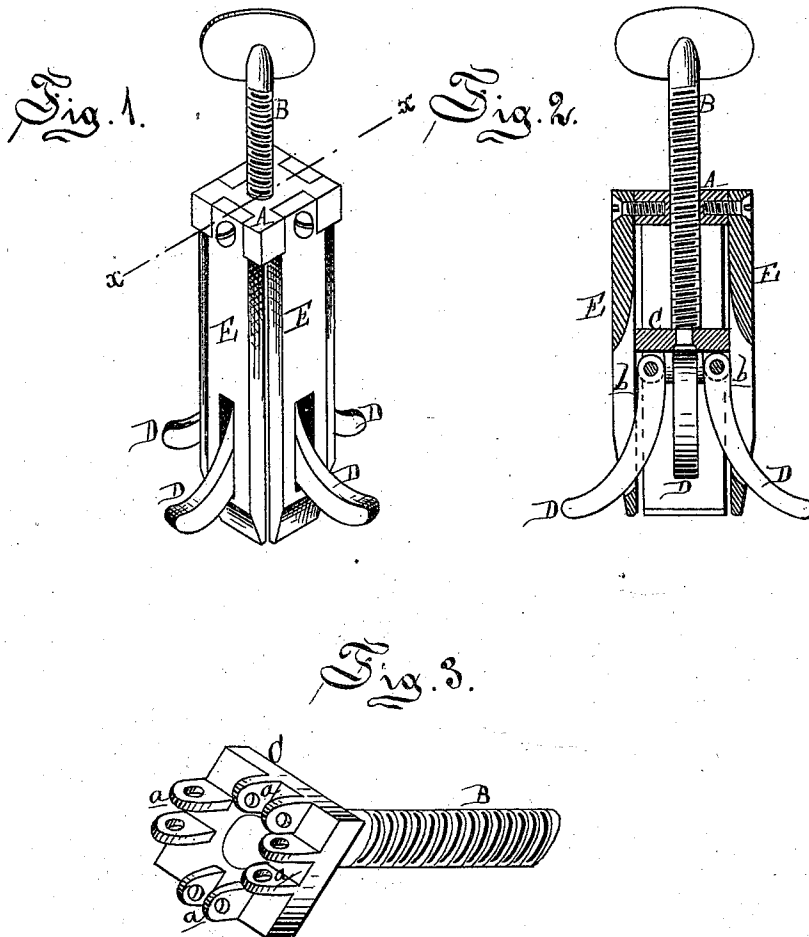


A. BAGLEY.
AXLE-NUT WRENCH.

No. 173,255.

Patented Feb. 8, 1876.



Attest:
Edward Parthel
phot. J. H. Hunt

Inventor:
A. Bagley
By *W. D. Sprague*

UNITED STATES PATENT OFFICE.

ALLEN BAGLEY, OF YPSILANTI, MICHIGAN.

IMPROVEMENT IN AXLE-NUT WRENCHES.

Specification forming part of Letters Patent No. 173,255, dated February 8, 1876; application filed January 7, 1876.

To all whom it may concern:

Be it known that I, ALLEN BAGLEY, of Ypsilanti, in the county of Washtenaw and State of Michigan, have invented an Improved Axle-Nut Wrench, of which the following is a specification:

My invention has for its object to provide a device for clamping together the hub-band and the axle-nut of a vehicle, whereby the nut may be screwed off or onto the axle-arm by turning the wheel in the proper direction, using it as a wrench or lever for that purpose.

When the nut is removed from the axle it remains clamped in the hub-band, so that a person oiling the axle need not touch it in removing or replacing it.

The invention consists in a four-jaw clamp, each jaw secured to the side of a nut, through which is tapped a thumb-screw with a follower on the inner end, to which are pivoted four curved arms, each protruding through a slot in one of the jaws, and which arms, by means of the screw, can be forcibly clamped against the inner wall of the hub-band, while the axle-nut will be clamped in the mouth of the jaws.

Figure 1 is a perspective view. Fig. 2 is a longitudinal section at *xx*. Fig. 3 is a detached perspective view of the follower and screw.

In the drawing, A represents a nut through which is tapped a long thumb-screw, B, carrying on its inner end a square follower, C,

having cast on its face four pairs of lugs, *a*, between each pair of which is pivoted one end of a curved or segment-shaped arm, D.

To each of the four sides of the nut A is secured a metal plate, E, which is gained into it and fastened by a screw, the outer ends of said plates forming a socket to slip over the axle-nut. Through each plate is cut a slot, *b*, through which an arm, D, protrudes. By screwing in the screw B, so as to move forward the follower and the attached arms, the outer ends of the latter will diverge until they clamp or abut against the hub-band on the inside thereof, and further pressure of the follower will compress the plate upon the axle-nut, which can then be unscrewed from the arm by turning the wheel in the proper direction.

In replacing the wheel, the nut is presented fairly to the thread upon the axle, so that it is not necessary to touch the nut, and soil the hands.

What I claim as my invention is—

The combination of the nut A, screw B, follower C, with the arms D pivoted thereto, and the slotted plates E secured to the sides of the nut A, substantially as and for the purpose set forth.

ALLEN BAGLEY.

Witnesses:

FREDERICK W. CLEVELAND,
JOHN G. CRANE.