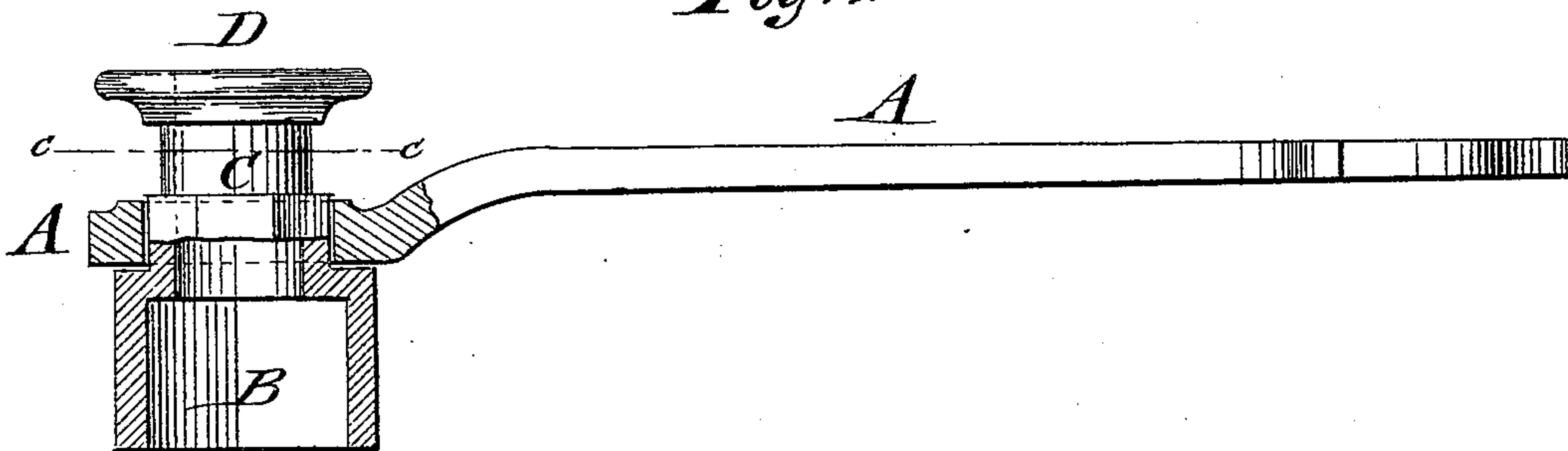


W. F. ROWE.  
Carriage-Wrenches.

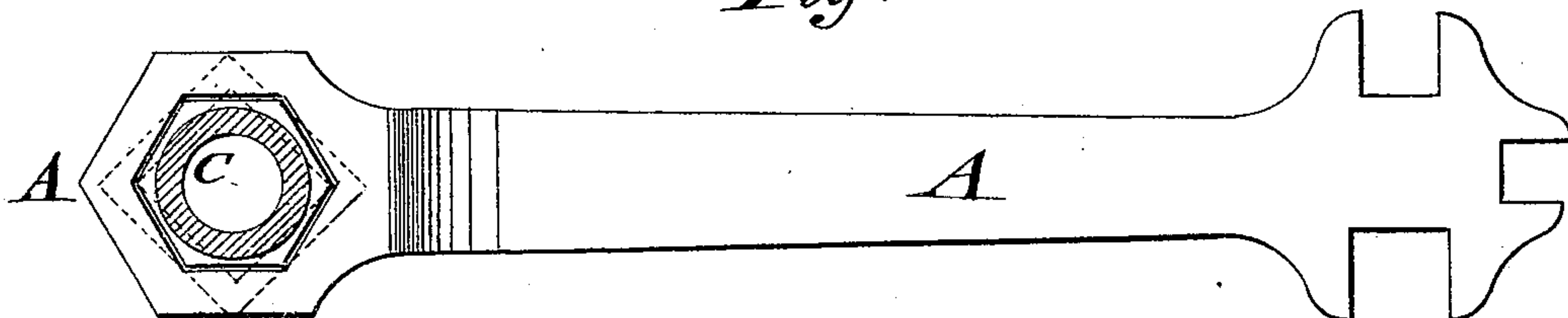
No. 151,315.

Patented May 26, 1874.

*Fig. 1.*



*Fig. 2.*



WITNESSES.

*Chas. Nida*  
*Chas. Nida*

INVENTOR.

*W. F. Rowe*

BY

*Munroe*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

WILBUR F. ROWE, OF MINNEAPOLIS, MINNESOTA.

## IMPROVEMENT IN CARRIAGE-WRENCHES.

Specification forming part of Letters Patent No. 151,315, dated May 26, 1874; application filed April 18, 1874.

*To all whom it may concern:*

Be it known that I, WILBUR F. ROWE, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented a new and Improved Carriage-Wrench, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a sectional side elevation of my improved carriage-wrench; and Fig. 2, a top view of the same, partly in section, on line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide, for the purpose of removing and replacing the axle-nut of carriages, an improved wrench, by which the same can be attended to in a neat and quick manner, without soiling the fingers or letting the nut come in contact with dirt, sand, or other impurities.

My invention consists of a carriage-wrench, which slides on the shank of an axle-nut socket, the shank being partly polygonal, partly round, and provided with a button or knob, by which nut and socket may be turned, while the starting or finishing turns of the nut are given by the lever part of the wrench.

In the drawing, A represents a carriage-wrench of the usual shape, which is supplied at one end with rectangular recesses of various sizes for different sizes of nuts. The other end of wrench A has a square hexagonal or polygonal recess, and slides therewith over the shank C of a socket, B, having the size of the axle-nuts, one part of the shank being of a shape to correspond exactly to the recessed end, while the other part of the shank C is round, its diameter being equal to, or somewhat smaller than, that of the inside tangential circle of the polygonal part. The shank is provided with a button or knob, D, by which the socket B may easily be turned in the end of the wrench, when the same is carried over the round part of the shank, the wrench taking

firmly hold of the socket when placed on the nut-shaped polygonal part of the same.

For removing the axle-nut, the socket is placed on the same and loosened by the lever action of the wrench thereon. The lever is then slipped off onto the round part of shank, and the nut taken off by turning the socket and nut at the head or knob with the fingers, the lever holding meantime the socket in position on the nut. The nut, together with the socket, is laid down, button downward, the wrench resting thereon, and preventing thereby the coming in contact of the nut with dirt. When the axle is cleaned and oiled the nut is carried back into position thereon, turned on by the fingers and socket, and then firmly tightened by the lever action of the wrench by placing the same on the polygonal part of the shank.

As the lever is not required to be turned with the nut, the taking off and putting on of the nut is attended to easily and rapidly, and a very convenient carriage and wagon wrench obtained thereby.

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

1. The improved carriage or wagon wrench consisting of lever part A, with polygonally-recessed end applied to the axle-nut socket B, having a shank, C, of partly polygonal, partly round, shape, and button or knob D, constructed and operated substantially as and for the purpose set forth.

2. An axle-nut socket provided with a lower recessed part, fitting the axle-nuts of a wagon or carriage, a shank part of partly polygonal, partly round, shape, and a top knob or button, substantially as and for the purpose described.

WILBUR F. ROWE.

Witnesses:

LEVI LONGFELLOW,  
DANIEL W. LONGFELLOW.