

(Model.)

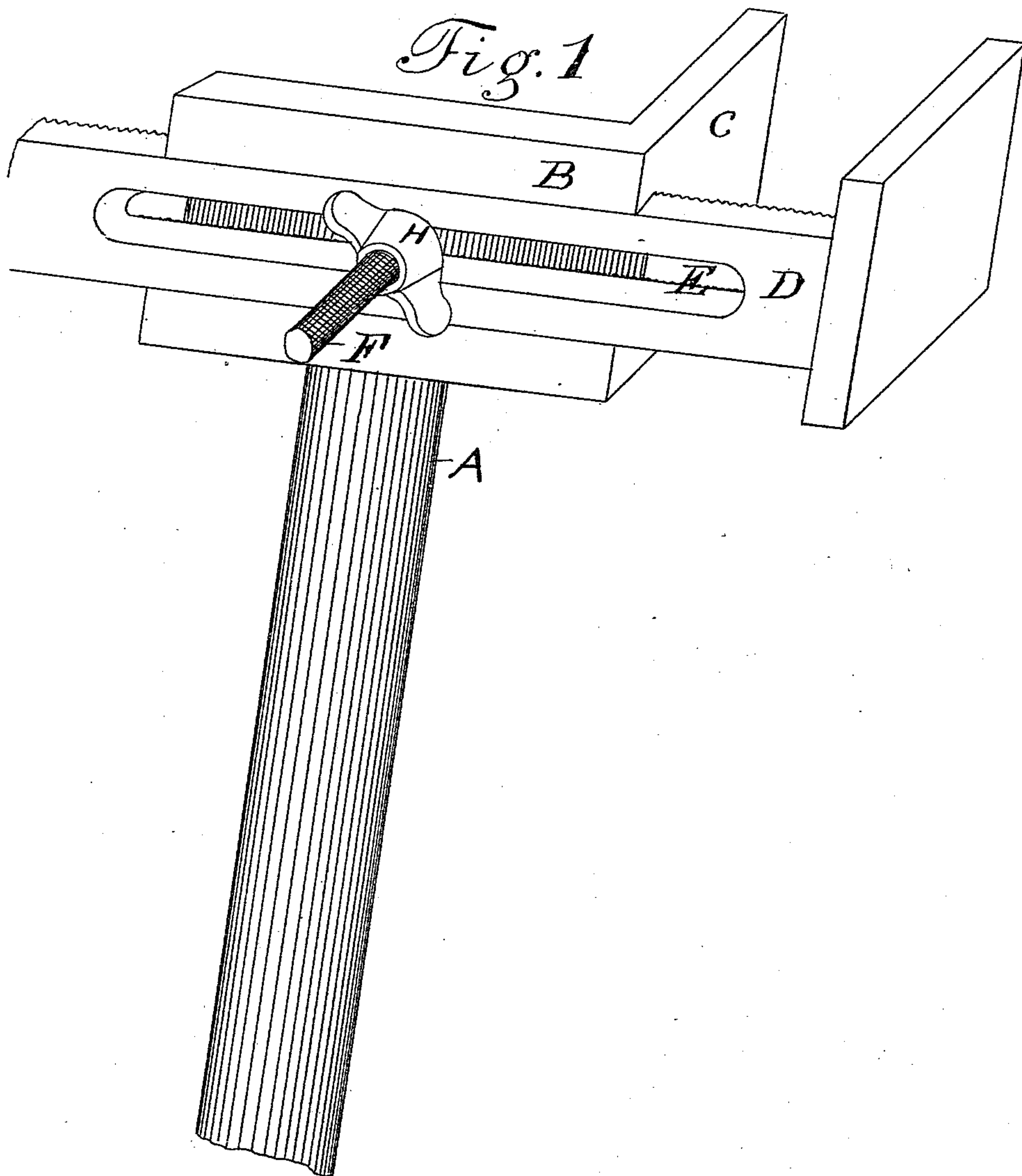
2 Sheets—Sheet 1.

EL DORS EBERHARDT.

WAGON WRENCH.

No. 424,471.

Patented Apr. 1, 1890.



WITNESSES:

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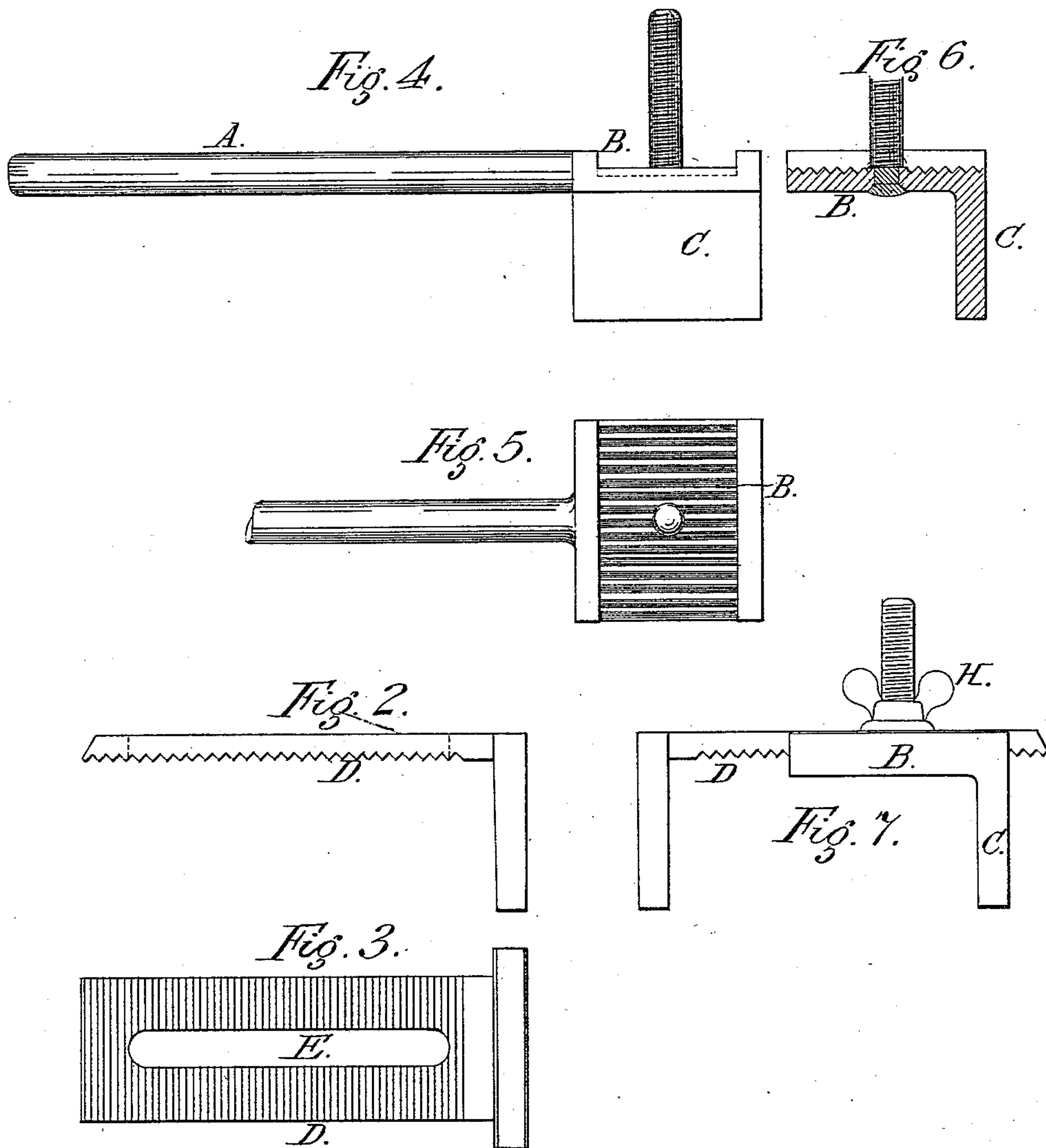
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2 Sheets—Sheet 2.

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No. 424,471.

Patented Apr. 1, 1890.



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UNITED STATES PATENT OFFICE.

EL DORS EBERHARDT, OF DENVER, COLORADO.

WAGON-WRENCH.

SPECIFICATION forming part of Letters Patent No. 424,471, dated April 1, 1890.

Application filed February 27, 1889. Serial No. 301,123. (Model.)

To all whom it may concern:

Be it known that I, EL DORS EBERHARDT, a citizen of the United States, residing at Denver, in the county of Arapahoe and State of Colorado, have invented a new and useful adjustable Wagon-Wrench, of which the following is a specification, reference being had therein to the accompanying drawings, in which similar letters refer to corresponding parts.

Figure 1 is a perspective view of the device, showing the sliding jaw in the reversed position. Figs. 2 and 3 are a side elevation and a plan view, respectively, of the corrugated or notched adjustable jaw. Figs. 4 and 5 are an elevation and a plan view, respectively, showing the stationary head corrugated or notched. Figs. 6 and 7 are a vertical section and elevation, respectively, of the device, the adjustable-jaw and stationary-head being both corrugated or notched, said parts being in relative position for use.

The primary object of my improvement is to provide an adjustable device which may be used to secure the doubletree to the tongue of a wagon, and also for removing and replacing the nuts or burrs which keep the wheels in place upon the axles, though it may be also used whenever a wrench is needed on nuts or burrs of any size, as hereinafter set forth.

A is the pin which holds the doubletree in place upon the tongue of the vehicle, and also forms the lever of the wrench.

B is a stationary head upon pin A, provided with a jaw C upon its front side and fashioned at the back, as shown in Fig. 4, to receive the adjustable sliding jaw D. Jaw D is provided with a slot E.

F is a bolt, which passes through an opening in head B and through slot E, being provided at the back with a thumb-nut H, by means of which jaw D is made secure upon head B, as shown in Fig. 7. The back of head B may be corrugated or notched to correspond with suitable notches in jaw D at right angles to the direction said jaw slides during adjustment, as shown in Figs. 5, 6, 7. The opening in head B, through which

bolt F passes, may be threaded to correspond with threads on the bolt, or the bolt may be secured there in any other suitable manner. The head of bolt F should be countersunk, and this bolt should be long enough to permit the sliding jaw to be raised from the recess within the head and turned at will around to the position shown in Fig. 1, and thence from said position back to the position shown in Fig. 7. When in the desired position, the jaw may be secured there by the thumb-nut H.

In the use of my improved device thumb-nut H is loosened and jaw D properly adjusted. Nut H is then turned tightly down upon the back of jaw D, as shown in Fig. 7. Jaw D may occupy either of two different positions. These positions are illustrated in Figs. 1 and 7. Each position has its advantages. That shown in Fig. 7 allows the jaws greater width with the same length of slot E; but they can be brought no nearer together than the length of head B, while in the position shown in Fig. 1 the jaws can be made to fit the smallest nut or burr and brought into actual contact, if desired, as will be readily observed. Jaw D may be shifted from one of these positions to the other by loosening nut H sufficiently to allow the jaw to be raised from its socket, when it can be turned at will on bolt F.

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

1. In a wrench, the combination, with the head B, provided with the jaw C, and the threaded bolt F, of the reversible sliding jaw D and nut H, jaw D being provided with a slot E, through which bolt F passes, said last-named jaw being reversibly secured to the head of the wrench by nut H, screwed upon bolt F, jaw C having two working-faces for use in connection with the sliding jaw D, according as said jaw D occupies the one or the other of its two positions, substantially as described.

2. In a wrench, the combination, with the head B, having a corrugated or notched recess in its back and provided with the jaw C, and

the threaded bolt F, of the reversible slotted jaw D, corrugated and seated within the recess of head B, and the thumb-nut H, jaw D being reversibly secured to head B by the
5 thumb-nut screwed upon bolt F, jaw C having two working-faces, said faces being used alternately with jaw D, according as jaw D

occupies the one or the other of its two positions, substantially as described.

EL DORS EBERHARDT.

In presence of—

ISHAM R. HOWZE,
J. B. WILLSEA.