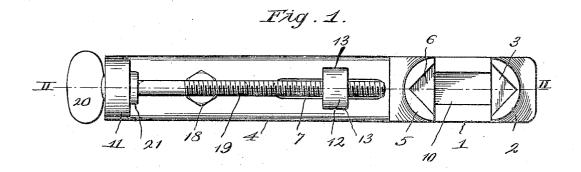
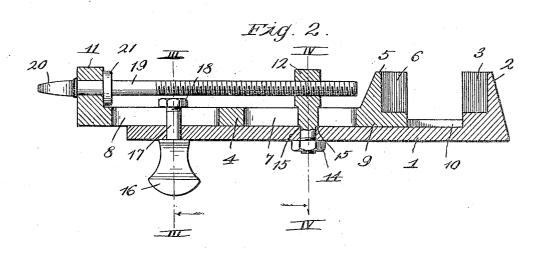
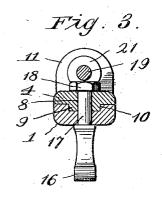
C. P. JOHNSON. ADJUSTABLE WRENCH. APPLICATION FILED DEC. 14, 1909.

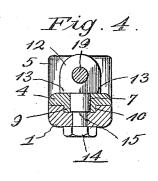
957,214.

Patented May 10, 1910.









Witnesses: N. Kamilton M. Cox:

Inventor, Charles P. Johnson, By J. G. Fiseher, atty.

UNITED STATES PATENT OFFICE.

CHARLES P. JOHNSON, OF EUREKA, KANSAS.

ADJUSTABLE WRENCH.

957,214.

Specification of Letters Patent. Patented May 10, 1910.

Application filed December 14, 1909. Serial No. 533,104.

To all whom it may concern:

Be it known that I, Charles P. Johnson, a citizen of the United States, residing at Eureka, in the county of Greenwood and 5 State of Kansas, have invented certain new and useful Improvements in Adjustable Wrenches, of which the following is a specification.

My invention relates to improvements in adjustable wrenches, and my object is to provide a simple, strong and compact wrench having a wide range of adjustment so that it may be set to fit the smallest buggy-axle nut or the largest wagon-axle nut.

A further object is to provide a wrench which will firmly grip the nut so that the latter need not be handled with the fingers while removing it from the axle, or after it is removed from the axle.

Referring now to the accompanying drawing, which illustrates the invention: Figure 1 shows a plan view of the wrench. Fig. 2 is a longitudinal section on line II—II of Fig. 1. Figs. 3 and 4 are transverse sections on lines III—III and IV—IV, re-

spectively of Fig. 2.

In carrying out the invention, I employ a member 1, forming a portion of the handle of the wrench, and provided at one end with 30 a jaw 2 having a notch 3 to receive one side of the nut. 4 designates a second member forming the remainder of the wrench handle, and provided with a jaw 5, adjacent jaw 2 and like the same, provided with a notch 6, 35 member 4 is provided with two longitudinal slots 7 and 8, and a longitudinal rib 9 which latter fits in a longitudinal groove 10 in member 1. 11 designates an upturned bearing integral with the opposite end of mem-40 ber 4.

12 designates a nut extending upward from section 1 through slot 7 in member 4, and having shoulders 13 overlapping said member to retain it in position upon section 45 1. Nut 12 is secured to member 1 by a nut 14, and has shoulders 15 engaging the opposite side of said member from nut 14 to prevent the latter from drawing the nut downward and thereby causing its shoulders 13 to bind upon the upper surface of the member 4. Nut 12 is assisted in holding mem-

bers 1 and 4 together by a knob 16 swiveled to the wrench so that the latter may be readily rotated when applying or removing a nut from the axle. Knob 16 has a reduced shank 17 extending through member 1 and slot 8, and provided at its upper end with a nut 18 to hold the knob in place.

19 designates a screw journaled in bearing 11 and engaging nut 12. Said screw is provided at one end with a handle 20 engaging one side of bearing 11, and a shoulder 21 engaging the opposite side of said bearing to prevent longitudinal movement of the screw independently of member 4. By turning the 65 screw in one direction jaw 5 will be adjusted toward jaw 2, and by turning said screw in a reverse direction, jaw 5 will be drawn away from jaw 2, as will be readily understood.

The nut 12 and shank 17 are relieved of 70 shearing stress by the longitudinal rib 9 fit-

ting within the groove 10.

From the above description it is apparent that I have produced a wrench which is simple in construction, and well adapted for 75 the purpose intended.

· Having thus described my invention, what

I claim is:

1. A wrench consisting of a member, a jaw at one end of said member, a second 80 member slidably-mounted upon the first member and forming in connection therewith a handle for the wrench, a jaw on one end of the second member adjacent the jaw on the first member, a bearing at the opposite 85 end of said second member, a nut fixed to the first member and extending through a longitudinal slot in the second member, said nut having shoulders overlapping the second member to retain it in position upon the 90 first member, a knob swiveled to the handle for revolving the wrench, said knob having a shank extending through the members to assist the nut in holding said members together, a screw journaled in the bearing and 95 engaging the nut, and means for turning said screw.

2. A wrench consisting of a member having a longitudinal groove, a jaw at one end of said member, a second member slidably 100 engaging the first member and provided with a rib fitting into the longitudinal slot there-

of, a jaw on one end of the second member adjacent the jaw on the first member, a bearing at the opposite end of the second member, a nut projecting from the first member through the second member, a screw journaled in the bearing and engaging said nut, and means for turning said screw.

In testimony whereof I affix my signature, in the presence of two witnesses.

CHARLES P. JOHNSON.

Witnesses:

MINNIE E. STILWELL, WALTER JOHNSON.