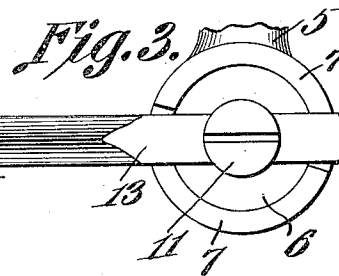
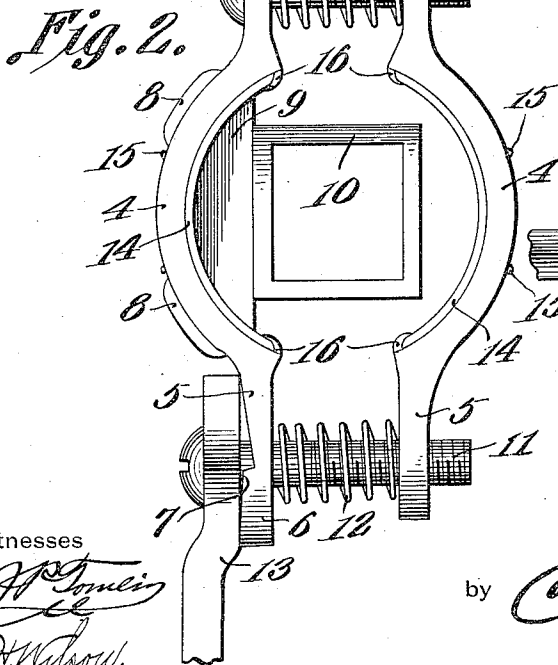
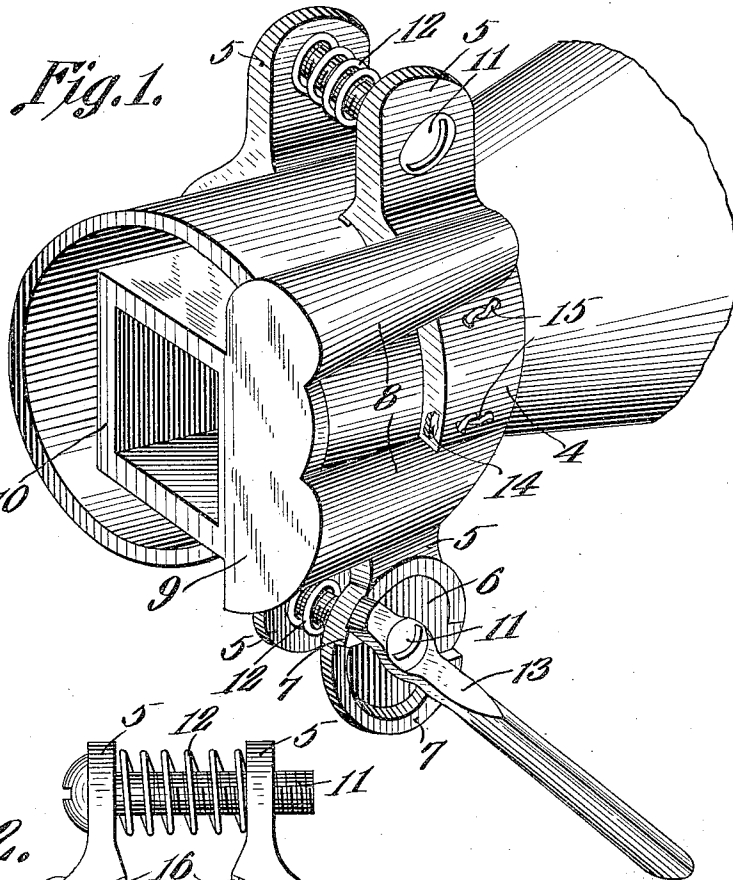


W. B. TRAYLOR.
HUB WRENCH.

APPLICATION FILED APR. 26, 1912.

1,045,914.

Patented Dec. 3, 1912.



Witnesses

J. P. Tomlin
L. K. Wilson

by

W. B. Traylor,
Inventor

C. A. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE.

WOODLIFF B. TRAYLOR, OF GOLDSBORO, NORTH CAROLINA.

HUB-WRENCH.

1,045,914.

Specification of Letters Patent.

Patented Dec. 3, 1912.

Application filed April 26, 1912. Serial No. 693,483.

To all whom it may concern:

Be it known that I, WOODLIFF B. TRAYLOR, a citizen of the United States, residing at Goldsboro, in the county of Wayne and State of North Carolina, have invented a new and useful Hub-Wrench, of which the following is a specification.

This invention relates to wrenches for vehicles, and particularly to those which are engageable with the hub of the vehicle wheel and with the nut screw-threaded on the spindle for retaining the wheel upon the spindle, so that by turning the wheel, the nut may be unscrewed from the spindle.

This invention aims to provide a device of this character embodying certain improvements, and which shall be of a simple, substantial, durable and inexpensive construction, as well as being convenient and efficient in use.

With the foregoing objects in view, this invention is embodied in the novel construction and combination of parts hereinafter set forth and particularly pointed out in the appended claims, reference being had to the accompanying drawings, wherein the invention is illustrated, and wherein—

Figure 1 is a perspective of the hub wrench. Fig. 2 is a rear elevation of the hub wrench, parts being broken away. Fig. 3 is a fragmental detail.

Referring specifically to the drawings, the present hub wrench embodies a pair of arcuate hub engaging sections 4, which have the ears 5 projecting outwardly from the ends thereof. One of the lower ears 5 is formed into a circular cheek 6, and a bolt 11 is passed loosely through the cheek 6 and is screw-threaded into the other corresponding ear 5, a similar bolt 11 being passed loosely through one of the upper ears 5 and screw-threaded through the other corresponding ear. Coiled wire springs 12 are mounted on the bolts 11 between the upper and lower pairs of ears, and serve to spread the sections 4 apart. A lever 13 is pivoted on the outer end of the bolt 11 adjacent to its head and adjacent to the outer face of the cheek 6, and coöperates with the arcuate cams 7 projecting from the outer face of the cheek 6. A pair of arms 8 project outwardly from one of the sections 4, preferably that section bearing the cheek 6, and at their free outer ends have a segmental portion 9 attached.

A nut socket 10 is attached to the segmental portion 9 at the straight edge thereof. A strip of padding 14 is arranged against the inner face of each of the sections 4, the said sections 4 having lips 16 projecting inwardly from the ends thereof and engaging the ends of the strips of padding 14 so as to retain the ends of the padding strips in position. Securing wires 15 are also passed through the sections 4 and the strips of padding 14 to secure the intermediate portions of the padding strips to the sections 4. The two hub engaging sections are cast or forged of any suitable metal, one of the sections having the arms 8, the segmental portion 9, and the nut socket 10 integral therewith. In use, the sections are normally spread apart by the springs 12, and the nut socket 9 may be readily engaged to the nut on the spindle of the wagon axle, which will cause the sections 4 to engage over the hub. Then by swinging the lever 13 in the proper direction, the said lever in engaging the cams 7 will cause the lower ends of the sections to be forced together to thereby clamp the sections 4 against the hub. When this has been done, the wheel may be turned, which will cause the nut to be turned therewith and unscrewed from the spindle. In this manner, nuts may be readily disengaged from the wagon spindles, the wheels providing for considerable leverage to disengage the nuts, particularly nuts which are struck or bound on the spindle. By swinging the lever 13 in the opposite direction than that mentioned the sections 4 are permitted to be spread apart by the springs 12, in which event, the hub wrench may be removed from the wheel hub. It will be noted, that the sections 4 may clamp hubs of varying sizes, and by adjusting the bolts 11, the sections 4 may be permitted to open or separate more or less, as may be desired or essential. The padding strips 14 prevent the sections 4 from injuring or marring the hub and also serves to cause an effective contact between the sections and the hub to prevent the device from slipping.

This device is convenient and efficient in use, and presents a desirable implement of this character.

This device may be constructed in various sizes and proportions, and is otherwise susceptible of alterations or deviations in its

minor details within the scope of the appended claims without departing from the spirit of the invention.

Having described the invention what is claimed as new is:—

1. A hub wrench embodying arcuate hub-engaging sections operatively connected at one end and having complementary ears at their other ends, a headed member passing loosely through one ear and engaged to the other ear, a lever mounted on the said member between its head and the corresponding ear, the lever and ear being designed to co-act to force the ears together so as to clamp the sections on a hub when the lever is swung, and a nut socket carried by the sections.

2. A hub wrench embodying arcuate hub-engaging sections operatively connected at one end and having complementary ears at their other ends, a bolt passing loosely through one ear and screw-threaded through the other ear, a lever mounted on the said bolt between its head and the corresponding ear, the lever and ear being designed to co-act to force the ears together so as to clamp the sections on a hub when the lever is swung, and a nut socket carried by the sections.

3. A hub wrench embodying a pair of ar-

cuate hub engaging sections having ears at the ends thereof, one of the ears being formed into a cheek having cams projecting from its outer face, a bolt passing loosely through the said cheek and screw-threaded through the other corresponding ear, a bolt connecting the upper ears, coiled springs on the said bolts between the ears, a lever pivoted on the former bolt and co-acting with the said cams, and a nut socket carried by one of the sections.

4. A hub wrench embodying hub-engaging sections operatively connected at one end and having ears at their other ends, one of the ears being formed into a cheek having cams projecting from its outer face, a headed member passing loosely through the cheek and engaged to the other ear, a lever pivoted on the bolt between its head and the cheek and co-acting with the said cams, and a nut socket carried by the sections.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WOODLIFF B. TRAYLOR.

Witnesses:

H. P. UNDERWOOD,
L. E. GROSS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."