

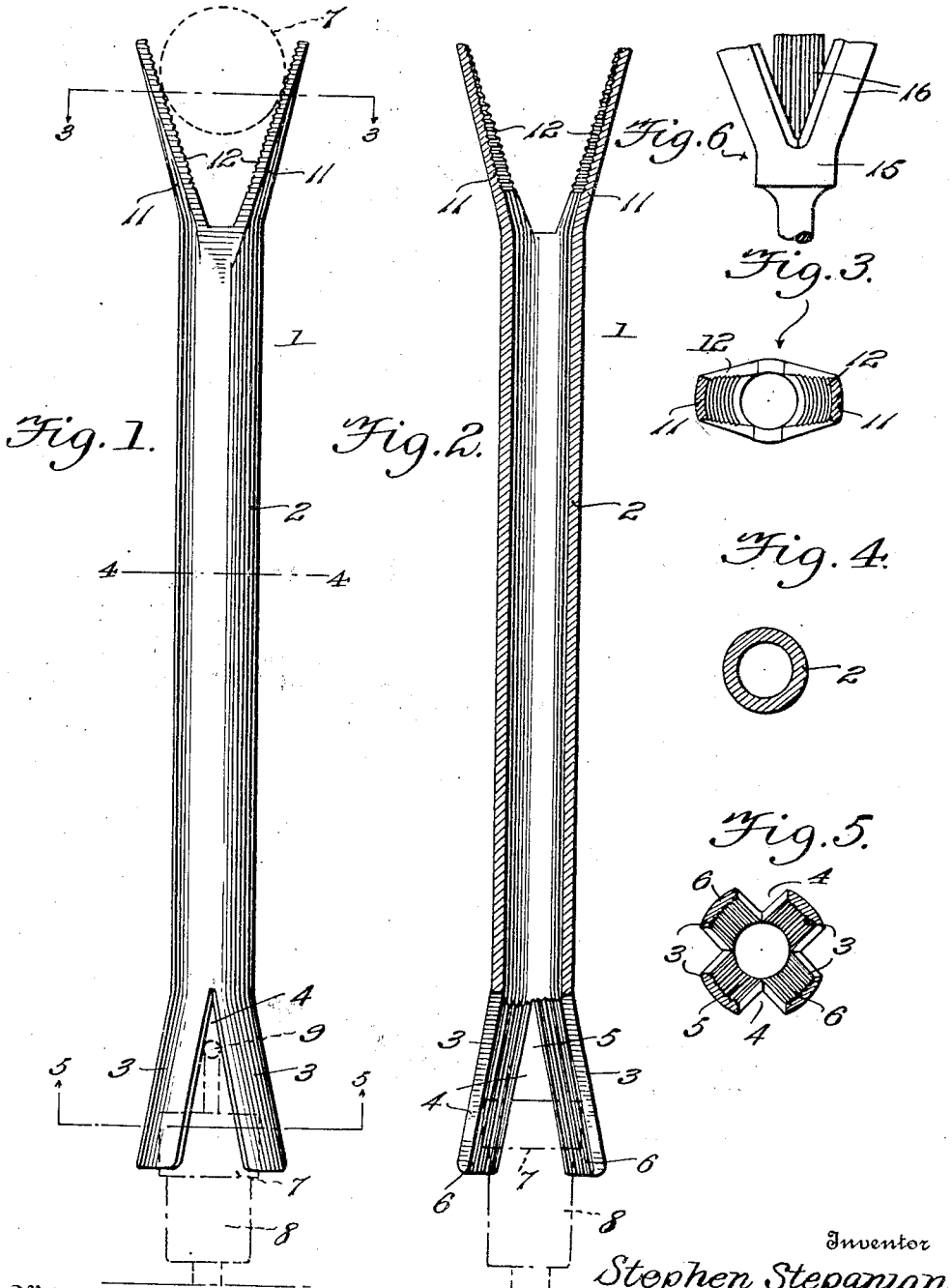
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WRENCH.

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1,336,794.

Patented Apr. 13, 1920.



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WRENCH.

1,336,794.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, STEPHEN STEPANIAN, a citizen of the United States, residing at Columbus, Ohio, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to wrenches and the primary object thereof is to provide a convenient and efficient tool for facilitating the adjustment of the caps or covers of grease cups and the like, so that the latter may be removed or adjusted with a minimum amount of labor and trouble.

While the invention has been so far set forth as being particularly applicable for use in conjunction with grease cups, it should not be gathered from this that the invention is limited in its source of application to this particular feature, as the same relates broadly to wrenches and may be used in the common capacity of a wrench. However, its use in connection with grease cups so admirably sets forth a particular use of the same, it has been therefore thought advisable to describe the tool as mainly employed in this connection.

For a further disclosure of the invention, reference is to be had to the accompanying drawing, forming a part of this specification, and in which similar characters of reference denote corresponding parts throughout the several views thereof. In the drawing, wherein has been shown the preferred forms of the invention:

Figure 1 is a side elevation of the wrench construction in accordance with the features of the invention.

Fig. 2 is a vertical, longitudinal, sectional view thereof.

Fig. 3 is a transverse sectional view taken along the line 3—3 of Fig. 1.

Fig. 4 is a similar view taken along the line 4—4 of Fig. 1.

Fig. 5 is a transverse sectional view taken along the line 5—5 of Fig. 1, and,

Fig. 6 is a detailed elevation of a slightly modified form of the wrench.

Referring more particularly to the drawing, the invention consists of a wrench 1, formed essentially from a section of metal tubing and providing a handle 2. One or more extremities of the wrench is preferably provided, in order to form the wrench, with a plurality of openings, extending longitudinally of the wrench and usually four in

number. The openings form a plurality of jaw members 3, which are integral with the wrench and in practice are flared outwardly as shown in the drawing. By flaring the jaw members, a plurality of wedge shaped openings 4 are provided between said members, said openings being produced by the flaring of the jaw members and in reality are nothing more than an enlargement of the initial slots formed in the wrench to provide the jaw members. It will be seen that by flaring said jaw members, that the same will define an internal cap or nut receiving socket 5, of substantially conical configuration, which tapers upwardly. The inner surfaces of said jaw members are normally provided with serrations or longitudinally extending teeth 6 which enable the wrench to obtain a better frictional grip when effecting the adjustment of cap members carried by the usual form of grease cups, the latter being shown in the drawing by broken lines and are indicated by the numerals 7 and 8 respectively. In operation, when it is desired to remove the cap of a vertically disposed grease cup, the wrench is positioned so that the jaw members 3 thereof will surround the cap 7 of the grease cup. Said jaw members are then wedged into engagement with the cap by simply forcing the tool downwardly so that the socket 5 thereof will receive said cap, as will be clearly understood. The jaw members 3 are substantially resilient, hence it will be seen that the same will tightly grip the cap 7 so that the latter may be rotated, removed or adjusted without slipping or turning within the socket 5. If the cap should be provided with a T shaped handle 9, as caps of this character often are, said handle is positioned into V-shaped openings 4, so that by rotating the wrench, the handle will be moved in unison therewith and the adjustment of its associated cap effected. The tubular portion of said wrench provides the extended handle 2, which latter may be of any desired length, so that it will not be necessary for a motorist to assume awkward or disadvantageous positions in effecting the adjustment of the cap member 7.

If the cap of a grease cup should be located in such a position that it would be impossible to vertically situate the wrench, the latter is so constructed as to be able to rotate a cap when disposed in a horizontal position. To this end the opposite extremity

of the handle 2, that is opposite to the cap members 3, is provided with a plurality of outwardly flaring prongs 11, which are arranged in a V-shaped manner shown in Fig. 1 and resembling somewhat an ordinary form of alligator wrench. The prongs are curved transversely, so as to be capable of being securely wedged into engagement with the cap 7, shown in Fig. 1, and to this end is also provided with serrations 12, so that the frictional relation existing between the cap 7 and the prongs 11 will be materially enhanced.

From the foregoing it will be seen that there is provided a tool of an extremely practical and efficient nature and one which will facilitate the removal or adjustment of a grease cup irrespective of the location of the latter. The tool may be economically manufactured as the same is usually formed from a relatively short section of metal tubing and is so designed as to be conveniently and cheaply produced. If desired, it is not necessary that the handle portion 2 of the wrench be formed in the manner shown in the preferred adaptation of the invention, as said handle may, as shown in Fig. 6, be of solid construction and provided with an enlarged integral or separate jaw head 15, which head is provided with flared jaw members 16, substantially similar in construction and operation as the jaw members 3.

Thus it will be apparent that there is provided a tool whereby the objects of the present invention have been achieved and that all of the advantageous features of adjustment and construction above mentioned are, among others, present. The device may be readily and conveniently manipulated and may be readily stored when not in use in the tool receptacle of a motor vehicle. By use of the wrench a motorist may conveniently keep the grease cups of his machine in their proper condition with a minimum amount of labor and attention. As before stated, the invention is not limited in its scope to use in connection with grease cups but may be employed for adjusting or removing threaded bodies generally.

Having described the invention, what is claimed as new and patentable is:

A wrench for removing or adjusting caps for grease cups and the like, comprising essentially a metal tube forming a handle, an extremity of said tube being longitudinally split and the split ends inclined outwardly to produce outwardly flaring jaw members, which members define a substantially conical cap receiving socket, and gripping teeth formed upon the inner socket surfaces of said members, substantially as set forth.

In testimony whereof I affix my signature.

STEPHEN STEPANIAN.