F. W. RIESENBERG.

WRENCH.

APPLICATION FILED MAY 20, 1914.

1,174,764. Patented Mar. 7, 1916.

Fig. 1.

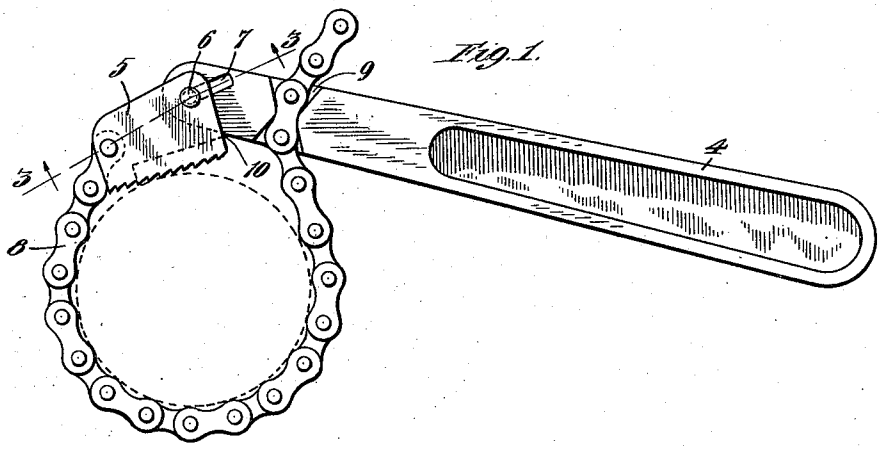


Fig. 2.

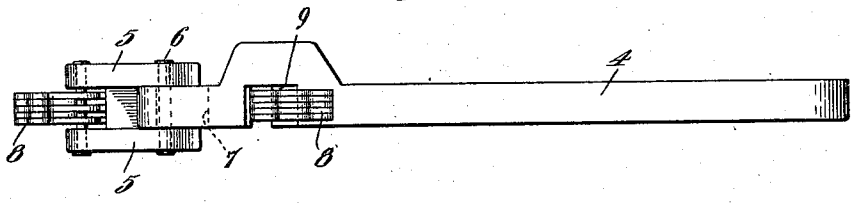


Fig. 3.

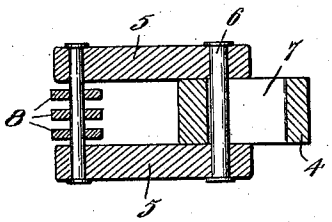
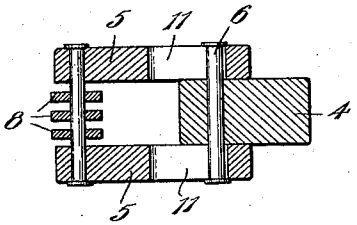


Fig. 4.



Witnesses:

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WRENCH.

1,174,764. Specification of Letters Patent. Patented Mar. 7, 1916.

Application filed May 20, 1914. Serial No. 839,704.

To all whom it may concern:

Be it known that I, FRANK W. RIESENBERG, a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

My invention relates to improvements in wrenches, the present invention being an improvement of the construction illustrated in my prior Patent No. 1,081,700, granted December 16, 1913, the object of the present improvement being to render the wrench construction illustrated in said patent more flexible and capable of more readily engaging a wider variety of objects.

With these objects in view my invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawing forming a part of this specification, and in which—

Figure 1 is a side view of a wrench embodying my invention and shown in position of use, Fig. 2 is a plan view corresponding to Fig. 1, Fig. 3 is an enlarged section taken on line 3—3 of Fig. 1, and Fig. 4 is a view similar to Fig. 3 but showing a slightly modified form of construction.

The preferred form of construction as illustrated in the drawing comprises a wrench handle 4 having a wrench jaw 5 mounted thereon for bodily movement relative thereto. The jaw member 5 is made substantially U-shaped in cross section with one end embracing an end of handle 4 and secured thereto by means of a pin 6 passing through an inclined slot 7 in said jaw. A chain 8 is pivotally mounted in the other end of jaw member 5 and a double V-shaped recess 9 is provided in the side of handle 4 to receive snugly the links of the chains just as in my prior application.

The construction is employed primarily for the engagement of smooth cylindrical objects and used in the same manner as all wrenches of this character. It will be observed that when the parts are in operative positions as indicated in Fig. 1 the corresponding end of handle 4 rests upon the edge 10 of jaw member 5, so that operative movement of handle 4 causes said handle to rock on the edge 10 in tightening the chain, and that the extent of this rocking will serve to adapt the wrench for use on objects of slightly different sizes, the greater difference in sizes being adequately provided for by the different links of the chain. This operative movement of handle 4 is an upward movement from the position indicated in Fig. 1. By this arrangement also the pivot pin 6 is relieved of strain and said strain will be borne by the edge 10 and surrounding parts, thus tending to render the construction stronger and more durable. This is due to the fact that during operation of the device the slot 7 moves freely on pin 6 so that it is impossible for the handle 4 to transmit any strain to said pin.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. A wrench comprising a handle member; a jaw member secured to said handle member to have bodily movement relatively thereto, said handle being also given a fulcrum on said jaw independent of the means securing said jaw; and a chain pivotally connected with said jaw, there being a recess in the side of said handle member arranged to receive the links of said chain, substantially as described.

2. A wrench comprising a handle having an inclined slot at one end; a jaw member substantially U-shaped in cross section and having one end embracing the slotted end of said handle; a pin passing through said slot and the sides of said jaw; and a chain pivoted in the other end of said jaw, there being a recess in the side of said handle adapted to receive and snugly fit the links in said chain, substantially as described.

3. A wrench comprising a jaw member substantially U-shaped in cross section; a handle resting between the limbs of said

jaw member and having a slot and pin connection therewith; and a chain pivoted to said jaw member, there being a recess in the side of said handle adapted to receive and snugly fit the links in said chain, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK W. RIESENBERG.

Witnesses:
JOSHUA R. H. POTTS,
B. G. RICHARDS.

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