No. 873,859. PATENTED DEC. 17, 1907.

F. HACHMANN.

WRENCH.

APPLICATION FILED FEB. 20, 1905. RENEWED SEPT. 30, 1907.

Fig. 1.

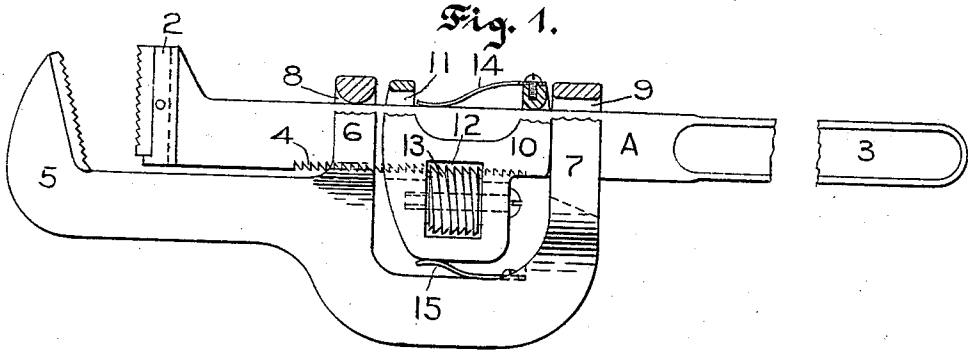
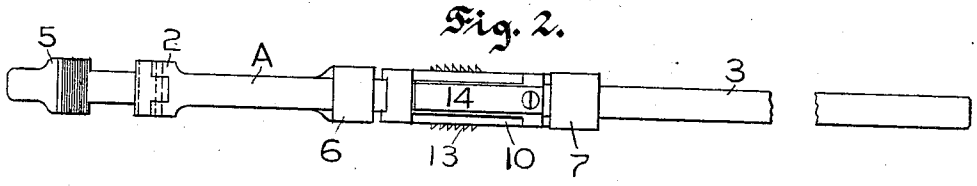


Fig. 2.



Witnesses,
W. H. Palmer.
Emily F. Otis

Inventor,
Frederick Hachmann.
by Lothrop & Johnson
his Attorneys.

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FREDERICK HACHMANN, OF ST. PAUL, MINNESOTA, ASSIGNOR TO ADOLPH T. ROSEN, OF ST. PAUL, MINNESOTA.

WRENCH.

No. 873,859. Specification of Letters Patent. Patented Dec. 17, 1907.

Application filed February 20, 1905, Serial No. 246,376. Renewed September 30, 1907. Serial No. 395,183.

To all whom it may concern:

Be it known that I, FREDERICK HACHMANN, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

My invention relates to improvements in wrenches, its object being particularly to provide a wrench in which the movable jaw may be more quickly and easily adjusted than in the ordinary construction.

To this end my invention consists in the features of construction and combination hereinafter particularly described and claimed.

In the accompanying drawings forming part of this specification, Figure 1 is a side elevation of my wrench partly broken away, and Fig. 2 is a plan view of the same.

In the drawings, which represent my invention embodied in a pipe-wrench, A represents the main bar of the wrench formed upon one end with a laterally projecting jaw 2, and upon the other with a handle 3, the bar being formed upon its inner side with teeth 4.

5 represents a jaw slidably supported upon the bar by means of arms 6 and 7, having openings 8 and 9, through which the bar passes. The openings, as shown, are larger than the bar so as to allow the bar to be swung with reference to the slidable jaw. Slidably supported upon the bar between the arms 6 and 7 is a block 10 which constitutes part of the slidable jaw. The opening 11 in the block 10 through which the bar passes is considerably larger at its forward end than the bar for the purpose hereinafter pointed out. Rotatably mounted in an opening 12 in the block is an adjusting screw 13 which normally engages with the teeth 4. The block is held in normal position by a spring 14 carried by the rear end of the block and engaging with the side of the bar. The slidable jaw is adapted to be normally held parallel with the bar by a spring 15 carried by the slidable jaw and engaging with the block as shown in Fig. 1.

In using my pipe wrench the forward end of the block is adapted to be depressed by the user against the tension of the spring 14, carrying the adjusting screw out of engagement with the teeth 4 and allowing the block and slidable jaw to be moved to the desired position upon the wrench bar. The block then being released will be carried by the spring 14 back to normal position. Where it is desired to change the relative positions of the coöperating jaws the openings 8 and 9 will allow swinging of the bar with relation to the slidable jaw, the spring 15 thereafter carrying the wrench members back to normal parallel position.

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

1. A wrench of the class described consisting of a bar carrying a fixed jaw and provided with teeth upon one side, a jaw slidably supported upon said bar, a block cooperating with said jaw and slidable upon said bar, said block being turnable at one end away from said bar, a spring normally holding said block in alinement with said bar, and an adjusting screw carried by said block in position to engage the teeth of said bar when the same is in normal position.

2. A wrench of the class described consisting of a bar carrying a fixed jaw and provided with teeth upon one side, a jaw slidably supported upon said bar and turnable at one end away from said bar, a block arranged within said slidable jaw and slidable upon said bar, said block being turnable at one end away from said bar, a spring normally holding said block in alinement with said bar, an adjusting screw carried by said block in position to engage with the teeth of said bar when said block is in normal position, and a spring normally holding said jaw in alinement with said bar.

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

FREDERICK HACHMANN.

Witnesses:

H. S. JOHNSON,

EMILY F. OTIS.