O. B. McCLURKIN.

WRENCH.

APPLICATION FILED FEB. 9, 1920.

1,367,407. Patented Feb. 1, 1921.

Fig. 1.

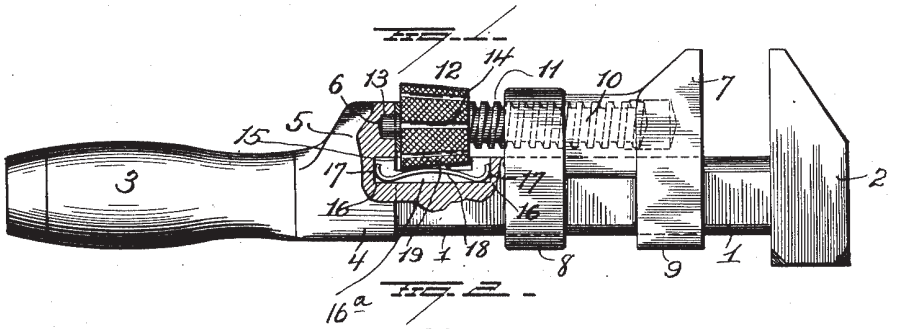


Fig. 2.

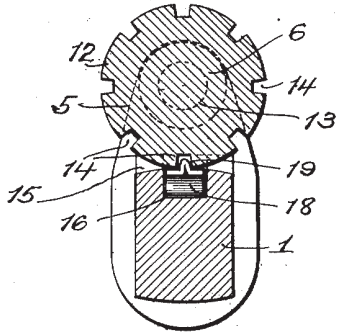


Fig. 3.

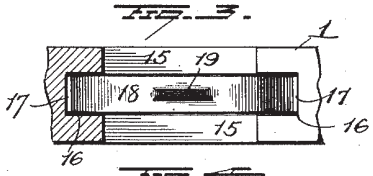
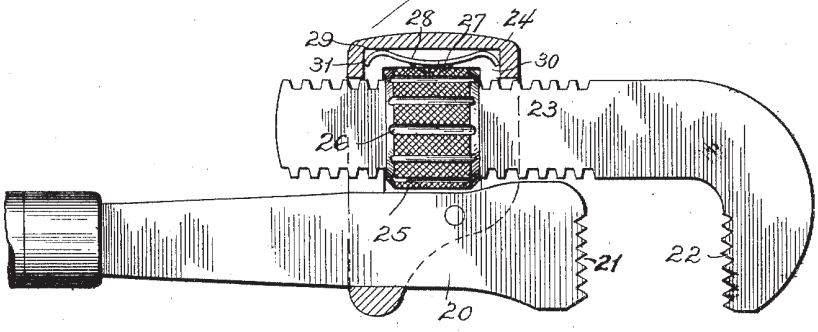


Fig. 4.



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UNITED STATES PATENT OFFICE.

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WRENCH.

1,367,407. Specification of Letters Patent. Patented Feb. 1, 1921.

Application filed February 9, 1920. Serial No. 357,278.

To all whom it may concern:

Be it known that I, OAK B. McCLURKIN, a citizen of the United States, and a resident of Morning Sun, in the county of Louisa and State of Iowa, have invented certain new and useful Improvements in Wrenches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in wrenches and more particularly to means for insuring retention of the movable jaw in the position to which it may be adjusted,—the object of the invention being to provide means, applicable to wrenches of well known types, which shall operate effectually to prevent accidental turning of the adjusting nut or head when the movable jaw shall have been adjusted relatively to the fixed jaw, and thus obviate the liability of the movable jaw being moved accidentally or unintentionally after it shall have been properly adjusted.

With this and other objects in view, the invention consists in certain novel features of construction and combinations of parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of a monkey wrench showing the application of my improvements thereto; Figs. 2 and 3 are detail views, and Fig. 4 is a view, partly in section, showing the application of my improvements to a pipe wrench.

1 represents the bar of a wrench, and is provided at one end with a fixed jaw 2 and to the other end portion of said bar, a handle 3 is secured. Adjacent to the handle 3, a sleeve 4 is secured to the bar 1 and is provided with a lateral arm or projection 5 having a socket 6 for a purpose hereinafter explained.

A jaw 7 is slidingly mounted on the bar 1, said jaw having collars or yokes 8—9 embracing said bar, and these collars or yokes are connected by an interiorly threaded member 10 to receive an adjusting screw 11. The screw 11 has fixed thereto, near its rear end, a knurled head 12 and in rear of said nut, a pintle 13 is provided and mounted in the socket 6 of the arm or projection 5. The knurled head 12 is preferably made conical as shown in Fig. 1 and is provided with an annular series of longitudinal grooves 14 suitably spaced apart. The head 12 of the screw enters and is rotatable in a recess 15 in the bar 1 so that when the screw is operated, the jaw 7 will be moved relatively to the fixed jaw.

At respective ends of the recess 15, the bar 1 is provided with notches 16, 16 which form extensions of a cavity 16^a. A bent spring 18 is located in the cavity 16^a and its ends 17 are disposed in the notches or extensions 16. The spring 18 may be made of flat sheet steel and extends past the recess 15,—said spring being provided or formed between its side edges with an enlargement or projection 19 to engage in any one of the grooves 14 of the screw head 12, and thus the screw and its head will be held by the spring in a manner to prevent accidental or unintentional turning of the same and to obviate the liability of the adjustment of the movable jaw being disturbed.

In Fig. 4, the application of my invention to a pipe wrench is shown. In the type of wrench illustrated in this figure of the drawings, the bar 20 is made at one end with a serrated jaw 21, with which a serrated movable jaw 22 coöperates. The movable jaw is formed at one end of a threaded shank 23 and the latter passes through a housing 24 secured to the bar 20 of the wrench. A nut 25 is mounted to turn within the housing 24 and through this nut, the threaded shank 23 of the movable jaw passes. The nut 25 is provided in its periphery with an annular series of longitudinal grooves 26 with which a projection 27 in the center of a bowed spring 28 coöperates to hold the nut from accidental turning when the movable jaw shall have been adjusted. The spring 28 is located within a recessed portion 29 of the housing 24 and the latter is formed, at respective ends of said recessed portion with notches 30 in which the inwardly bent ends 31 of the spring are located.

Various changes might be made in the details of my invention without departing from the spirit thereof or limiting its scope and hence I do not wish to restrict myself to the precise details herein set forth.

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

1. In a wrench, the combination of a fixed jaw, a movable jaw, threaded means for adjusting the movable jaw, said threaded means including a rotatable member having

an annular series of grooves, and a bowed spring having bearings at both ends and provided between its ends with a projection to engage in any one of said grooves and hold said rotatable member and movable jaw in adjusted position.

2. In a wrench, the combination of a bar carrying a fixed jaw, said bar provided with a recessed part, a movable jaw, threaded adjusting means carried by said bar for adjusting the movable jaw, said adjusting means including a rotatable part having an annular series of grooves, and a bowed spring freely mounted in said recessed part and having a part intermediate of its ends to engage in any one of the grooves in said rotatable member.

3. In a wrench, the combination with a bar carrying a fixed jaw and provided with a part having a recess and a cavity having parts extending beyond respective ends of said recess, a movable jaw, threaded adjusting means for the movable jaw carried by said bar and including a rotatable member to enter said recess and having an annular series of grooves, and a bowed spring mounted in said cavity and having its ends disposed in the extensions thereof, said spring having a part intermediate of its ends to engage any one of the grooves in said rotatable member.

4. In a wrench, the combination of a bar provided at one end with a fixed jaw, said bar having a recess and a cavity, the latter extending beyond the ends of said recess, a movable jaw mounted on said bar and having an internally threaded part, a screw entering said internally threaded part and mounted to turn in a part on the bar, a head fixed on said screw and having an annular series of grooves, said head adapted to turn in the recess in the bar, and a bowed spring disposed in said cavity and having its ends entering the end portions thereof, said spring having a projection intermediate of its ends to engage in any of the grooves of said head.

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

OAK B. McCLURKIN.

Witnesses:
W. S. Brown,
F. M. Brown.