

(No Model.)

W. B. BARTRAM.
MONKEY WRENCH.

No. 576,996.

Patented Feb. 16, 1897.

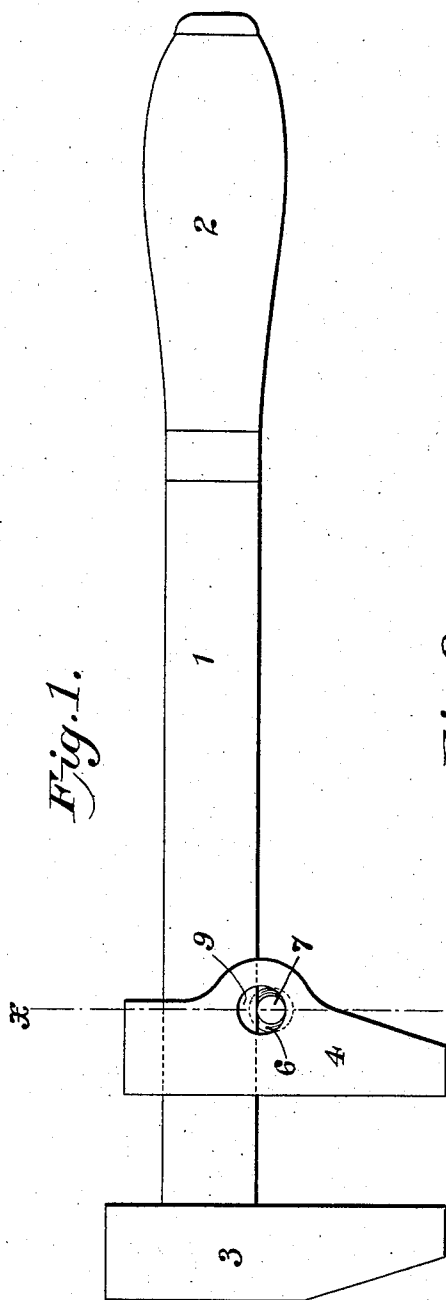


Fig. 3.

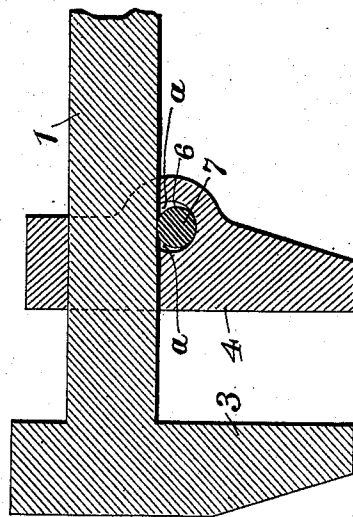


Fig. 2.

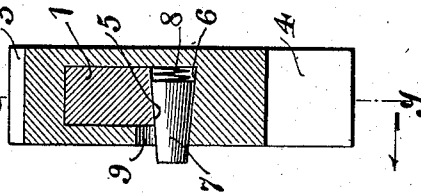
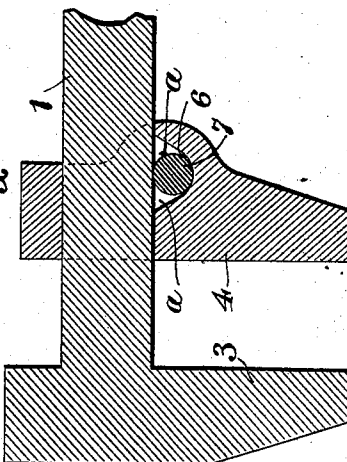


Fig. 4.



WITNESSES:

J. H. Finch.
M. T. Longden.

INVENTOR

W. B. Bartram

BY

J. M. Smith
ATTORNEY

UNITED STATES PATENT OFFICE.

WALKER B. BARTRAM, OF REDDING, CONNECTICUT, ASSIGNOR OF ONE-HALF TO EDGAR B. BARTRAM, OF BRIDGEPORT, CONNECTICUT.

MONKEY-WRENCH.

SPECIFICATION forming part of Letters Patent No. 576,996, dated February 16, 1897.

Application filed June 26, 1896. Serial No. 597,025. (No model.)

To all whom it may concern:

Be it known that I, WALKER B. BARTRAM, a citizen of the United States, residing at Redding, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Monkey-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.

My invention relates to certain new and useful improvements in monkey-wrenches, and has for its object to provide a device of this description in which the adjustable jaw shall be exceedingly quick and efficient in its action and may be adjusted with great facility.

In the accompanying drawings, which form a part of this application, Figure 1 is an elevation of my improved wrench; Fig. 2, a section at the line xx of Fig. 1; Fig. 3, a section at the line yy of Fig. 2; and Fig. 4, a view similar to Fig. 3, but showing a modification of my improvement.

Similar numbers and letters of reference denote like parts in the several figures of the drawings.

1 is the ordinary wrench-shank, provided with the usual handle 2 and having at its outer end the stationary jaw 3.

4 is the adjustable jaw, which at its heel end embraces the shank 1, so as to be capable of a free sliding movement along the same. The front edge of the shank 1 is slightly beveled, as shown at 5, and within the adjustable jaw 4 is a recess 6, whose wall is beveled to correspond with the bevel of the shank 1, said recess being circular at all points in cross-section.

7 is a conical-shaped lock-roller which is contained within said recess and whose bevel conforms snugly to the bevel of the edge of the shank and of said recess, the greatest diameter of said lock-roller being less than the distance between the edge of said shank and the opposite wall of the bottom of said recess, while such diameter of this roller is less than the distance between the shank and the opposite wall of the top part of said recess. It will therefore be clear that when said lock-

roller is projected as far as possible from the bottom of the recess there will be a space in the latter beneath the bottom of the roller, within which space a coil-spring 8 is placed which bears against the bottom of the roller and the bottom wall of the recess, the function of said spring being to normally project said roller.

The radius of the circular recess 6 throughout its depth is greater than the radius of the conical roller throughout corresponding portions of its length, so that it will be clear that while said roller is in close contact with the edge of the shank 1 and the diametrically opposite wall of the recess 6 there will be angular spaces $a a$ on opposite sides of said roller, which spaces are bounded by the edge of the shank 1 and by the walls of said recess.

The outer extremity of the roller 7 projects through an opening 9 in the adjustable jaw, which opening is sufficiently large to permit of the removal of the roller when the various parts are disconnected.

By depressing the lock-roller against the resiliency of the spring 8 said roller will be thrown out of binding contact with the jaw 4 and shank 1, so that said jaw will be free to slide along the shank, but when the roller is released it will be thrown into locking position by means of said spring, and any strain or force having a tendency to slide said jaw will cause the roller to bind firmly within the contracted spaces $a a$, thus rendering said jaw immovable until the depression of the roller, as above set forth.

While I have shown and described the recess 6 as bounded by a circular wall it will be manifest that as that portion of said wall opposite to the shank never changes its position with relation to such shank the portions of this wall which bound the spaces $a a$ may be straight, as shown at Fig. 4, and I therefore do not wish to be limited in this respect, the gist of my invention in this connection resting in the broad idea of providing the contracted spaces wherein the conical roller may bind.

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

1. In a monkey-wrench, the combination of

the shank having its forward edge beveled and provided at its end with a stationary jaw, the adjustable jaw snugly embracing said shank and capable of free sliding movements
5 thereon and provided with a recess whose wall opposite said shank is beveled to correspond to the bevel of said shank, and the spring-projected conical lock-roller within
10 said recess and having a diameter less than that of the latter and in locked position conforming closely to the diametrically opposite bevels of said shank and recess, substantially as set forth.

2. The combination of the shank having
15 its forward edge beveled and provided at its extremity with a fixed jaw, the adjustable jaw snugly embracing said shank and capa-

ble of free sliding movements along the same and provided with a recess whose outer wall is beveled to correspond with the bevel of 20 said shank and whose side walls in connection with said shank form contracted spaces, the conical lock-roller contained within said recess and adapted when projected outwardly to snugly conform to the diametrically oppo- 25 site bevels of said shank and recess, and the spring at the bottom of said recess beneath said roller, substantially as set forth.

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

WALKER B. BARTRAM.

Witnesses:

CHARLES K. SHELTON,
JOHN N. NICKERSON.