(No Model.) 2 Sheets—Sheet 1.

F. F. DE VOE.

QUICK ACTION WRENCH.

No. 589,166. Patented Aug. 31, 1897.

Fig. 1.

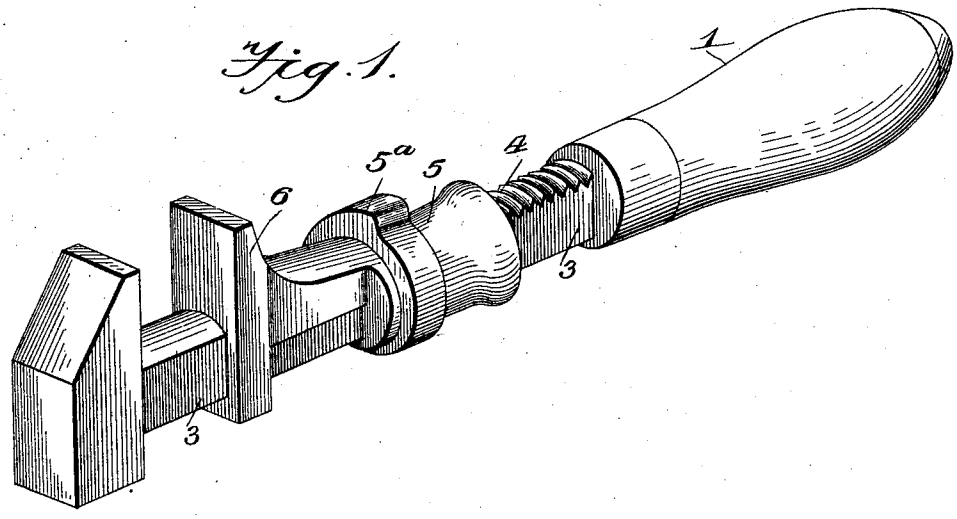
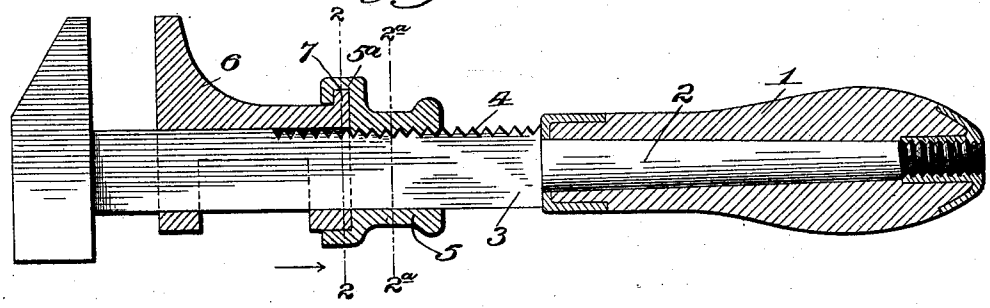


Fig. 2.



WITNESSES

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

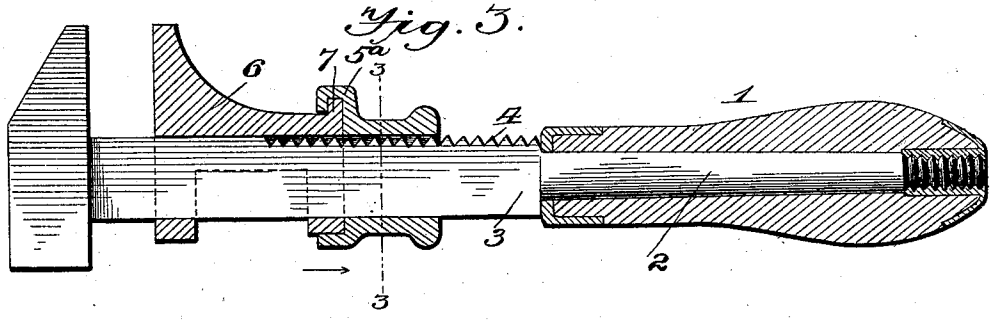


Fig. 4.

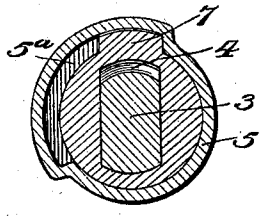


Fig. 5.

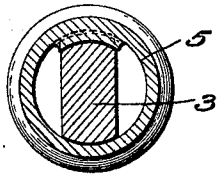
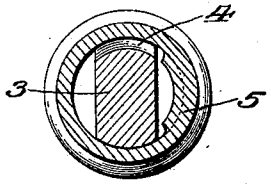


Fig. 6



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UNITED STATES PATENT OFFICE.

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QUICK-ACTION WRENCH.

SPECIFICATION forming part of Letters Patent No. 589,166, dated August 31, 1897.

Application filed January 23, 1897. Serial No. 620,315. (No model.)

To all whom it may concern:

Be it known that I, FRIEND F. DE VOE, a citizen of the United States, residing at Lima, in the county of Allen and State of Ohio, have invented certain new and useful Improvements in Quick-Action 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 improvements in monkey-wrenches, and particularly to that class of wrenches where the ordinary screw and nut for adjusting the jaws are dispensed with and in their stead devices are employed whereby the movable jaw is made susceptible of rapid adjustment to the varying sizes of nuts and after adjustment may be quickly locked.

My invention consists in certain novel features of construction and in the arrangement of the various parts whereby the above results are attained and whereby certain other advantages are gained in a simple, durable, and inexpensive manner, all as will be hereinafter fully described, and pointed out in the appended claim.

In the accompanying drawings, Figure 1 represents a perspective view of a wrench embodying my invention, the parts being shown as moved to lock the movable jaw. Fig. 2 is a central vertical longitudinal section of the same. Fig. 3 is a similar view, but showing the parts in their unlocked position. Figs. 4 and 5 are cross-sections taken on the lines 2 2 and 2^a 2^a, respectively, of Fig. 2; and Fig. 6 is a cross-section taken on the line 3 3 of Fig. 3.

Similar reference-numerals indicate corresponding parts in all the figures.

Referring now to the drawings, 1 indicates the handle, which may be of any form or material desired, the same being provided with a central bore for the accommodation of and through which the reduced end 2 of the wrench-stock 3 is passed. The extreme end of the part 2 is threaded along a portion of its length and the other end of the handle is provided with a socket tapped to receive the threaded end of the part 2 above referred to, by which means the handle is securely fastened to the stock 3. This stock 3 of the wrench is made substantially rectangular in cross-section and a series of teeth 4 is provided upon one of its smaller sides, and these teeth are adapted to engage corresponding teeth formed upon the inner face of a rotatable collar 5, by means of which the movable jaw 6 is held or released, as I will now proceed to describe.

The movable jaw 6 is adapted to slide upon the stock 3 in the usual manner and in construction resembles somewhat closely the movable jaw of the ordinary monkey-wrench, except that at one end a lip or projection 7 is provided which works within an annular segmental recess 5^a, formed in the collar 5. As before mentioned, this collar 5 has arranged upon its inner face a series of the teeth, and, as clearly shown in the drawings, these teeth extend nearly the whole length of and about one-quarter its entire circumference, the remaining portion being of smooth bore. Thus as the collar is rotated to bring its teeth into engagement with the teeth of the stock 3 the movable jaw, through the connection of its lip 7 with the annular recess of the collar 5, is securely held against movement in one direction or the other. An opposite movement of the collar is only necessary to bring its teeth out of engagement with the teeth of the stock 3, when the movable jaw 6, thus released, is free to be moved and quickly adjusted to varying-sized nuts.

The collar 5 is limited in its rotative movement in either direction by reason of the lip 7 of the movable jaw 6 contacting with abrupt radial or transverse shoulders forming the ends of the recess in which the lip works, and this movement is intended to be just sufficient to bring the teeth of the collar into or out of engagement with the teeth of the stock 3, as will be readily understood.

It must be understood that my invention is susceptible of slight changes, and I reserve the right to make such as may fairly fall within its spirit and scope. Therefore I do not limit myself to the precise details of construction herein shown and described.

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

A monkey-wrench comprising a stock toothed upon one side, a fixed jaw on said stock, a movable jaw slidingly mounted there-

on, a stop projection on the inner end of said sliding jaw, and a partially-rotatable collar mounted on said stock and provided with a tooth which is movable laterally into and out of engagement with the teeth on the stock, said collar also embodying an enlarged portion formed with an internal segmental groove or recess terminating in abrupt radial or transverse shoulders which coöperate with the stop projection on the sliding jaw to limit the rotative movement of the collar, substantially as described.

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

FRIEND F. DE VOE.

Witnesses:
JAS. W. HALFHILL,
SUSIE SHAFFER.