

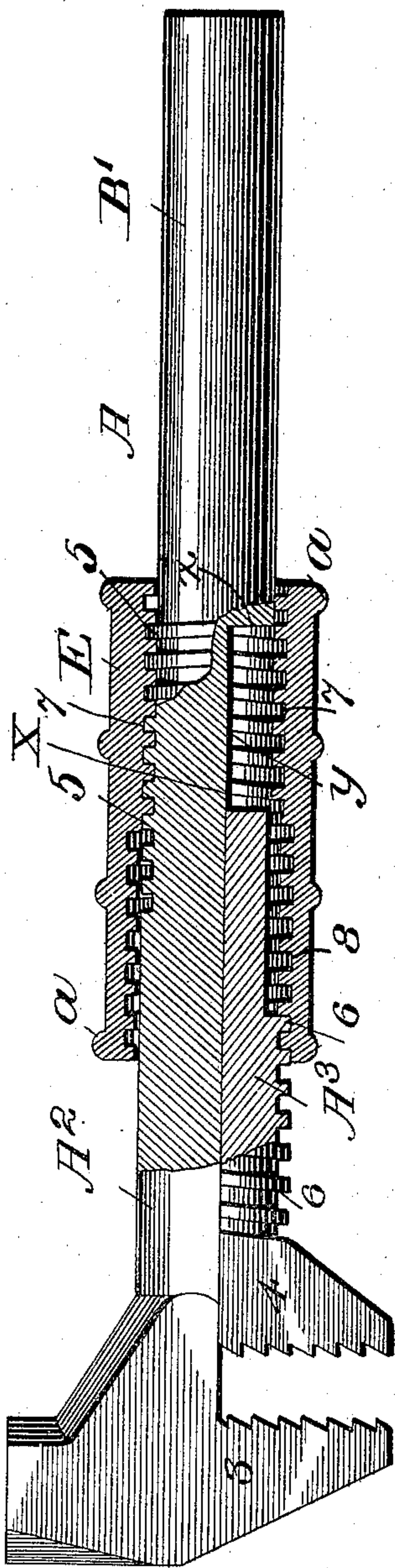
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D. C. JOHNSTON.
WRENCH.

(Application filed May 23, 1898.)

(No Model.)



Witnesses
Jos. C. Stack,
Mo. B. Gilbert.

Daniel C. Johnston
Inventor
By B. B. Houcks
his Attorney.

UNITED STATES PATENT OFFICE.

DAVID C. JOHNSTON, OF MARIETTA, OHIO.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 612,589, dated October 18, 1898.

Application filed May 23, 1898. Serial No. 681,484. (No model.)

To all whom it may concern:

Be it known that I, DAVID C. JOHNSTON, a citizen of the United States, residing at Marietta, in the county of Washington and State of Ohio, 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 ap-
10 pertains to make and use the same.

This invention relates to certain new and useful improvements in wrenches; and it consists, substantially, in such features of construction, arrangement, and combination
15 of parts as will hereinafter be more particularly described.

The invention has for its object to provide a wrench of exceedingly simple construction and one that is cheap to manufacture as well
20 as easy to manipulate and control.

A further object of the invention is to provide a wrench capable of being used either as an ordinary nut or monkey wrench or as a pipe-wrench and also to provide a wrench
25 of this character comprising but few parts or elements.

A still further object is the provision of a movable or sliding jaw capable of ready removal and replacement when the same has
30 become worn or broken and also to provide for the ready substitution of movable jaws of different forms or construction to suit different uses.

The above and additional objects I attain
35 by the means illustrated in the accompanying drawing, in which the figure represents a side view, partly in longitudinal section, of a wrench constructed in accordance with my invention.

My invention is capable of different embodiments in its general form and arrangement; but the form herein shown is preferred for several reasons, which for the sake of
40 conciseness will not be specified herein.

In the drawing, A represents the wrench as a whole, and, as will be observed, the same comprises but three separate elements or members, each one of which is formed to the
45 desired shape, while the three are properly adapted to each other. The wrench is constructed with a long shank A¹, formed or pro-

vided at one end with a stationary jaw 3, which may comprise a hammer G, and at a suitable distance from the other end the shank is rounded into a suitable handle or
55 grip portion. On its inner surface X the said shank is recessed or cut out at y for a suitable distance from the stationary jaw 3 and forming a stop or abutment x for the movable jaw 4 to limit the outward movement or ad-
60 justment of the latter. The said movable jaw is provided with a short shank A², which works in the recess y of the shank of the stationary jaw and is limited in its outward movement by the stop or abutment x. Any
65 suitable means can be provided for moving or adjusting the said movable jaw, and as an advantage of the construction shown is mentioned the ease and facility with which the movable jaw can be taken out and replaced
70 by another of different form when the first has become worn or broken. The shank A² of the stationary jaw is formed for a part of its length with a right-hand half screw-thread 5, and for a suitable distance from the movable jaw 4 the short shank A² thereof is similarly formed with a left-hand half screw-
75 thread 6. Surrounding both of the said shanks is an adjusting device or sleeve E, which is threaded interiorly at 7 and 8 in accordance with the said threaded portions of the shanks. As is obvious, the movable jaw is adjustable back and forth by turning the sleeve or adjusting device E in the proper di-
80 rection. I sometimes, though not necessarily, provide rings a upon the outer surface of the sleeve E to assist in grasping the same with the hand for turning.

The construction and operation of my improved wrench will be understood without
90 further description, and it is also understood that I am not limited to the precise details shown and described.

Having thus described my invention, what I claim is—
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A wrench comprising a long shank having at one end a stationary jaw and at the other an integral or grip portion, the said shank being recessed on its inner side to constitute a stop for a movable jaw, and having a right-
100 hand half screw-thread on its outer side, a movable jaw having a short shank moving in

said recess and abutting against the stop to limit the outward movement thereof, and provided with a left-hand half screw-thread, and an adjusting device or sleeve fitting around
5 both shanks and threaded internally in accordance with the threads on the shanks, substantially as described.

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

DAVID C. JOHNSTON.

Witnesses:

L. E. JOHNSTON,
M. M. DYE.