H. DAVIS.

WRENCH.

No. 190,959. Patented May 22, 1877.

Fig. 1.

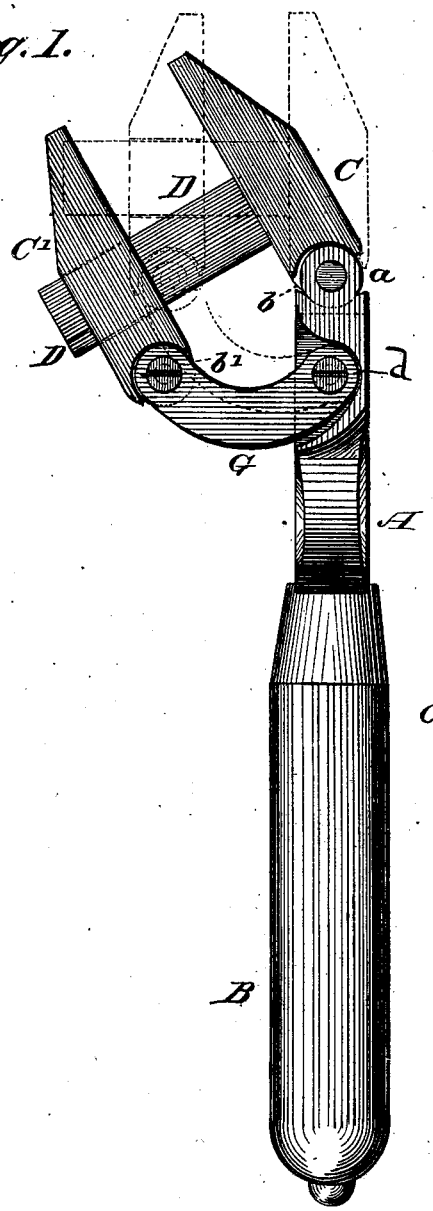
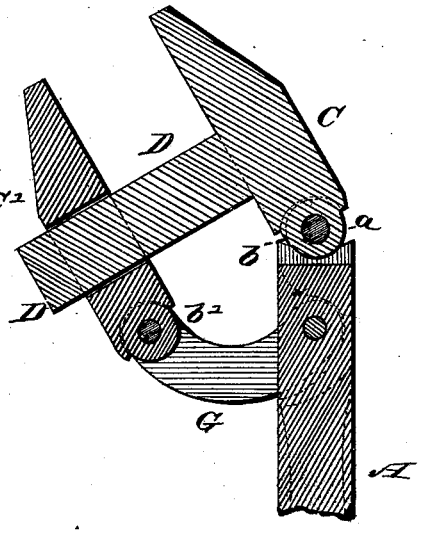


Fig. 2.



Witnesses:

F. C. Dieterich

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Inventor:

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UNITED STATES PATENT OFFICE.

HORACE DAVIS, OF BERLIN, WISCONSIN, ASSIGNOR OF ONE-HALF HIS RIGHT TO HENRY MORMAN, OF SAME PLACE.

IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. **190,959**, dated May 22, 1877; application filed April 12, 1877.

To all whom it may concern:

Be it known that I, HORACE DAVIS, of Berlin, in the county of Green Lake and State of Wisconsin, have invented certain new and useful Improvements in Wrenches; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a wrench that will adjust itself to any sized burr, as will be hereinafter more fully set forth.

In the annexed drawing, Figure 1 is a side elevation of my improved wrench. Fig. 2 is a section through the working parts thereof.

A represents the stem of the wrench, formed at one end with a socket for the insertion of the handle B. The other end of the stem A is rounded and slotted or forked, forming two ears, *a a*, between which the jaw C is pivoted by means of an ear, *b*, projecting from the inner end of the jaw, and placed between the ears *a a*, with a pin or rivet passing through them to form the joint.

From the inner side of the jaw C projects a bar, D, at right angles therewith, which bar passes through a slot or mortise in the other jaw, C′. This jaw is also, at its inner end, provided with a projecting ear, *b′*, which is pivoted between the ends of two curved links, G G, the other ends of which are pivoted in recesses made in the sides of the stem A at *d*, which completes my wrench.

By placing the jaw C under and the jaw C′ on top of a burr, and bearing down upon the handle, it will be seen that the jaws gripe the burr with a powerful grasp, while, by raising the handle, the grasp is loosened, and thus the operator can continue to turn the burr without removing the wrench from it, the same as with a ratchet-wrench. When bearing down on the handle the tendency is to draw the jaw C′ toward the jaw C on the bar D, and as the jaw C′ comes in contact with the nut, it binds firmly on said bar, the more so as the jaw C is also hinged, and the action of the two jaws is toward each other. When the handle is reversed—that is, raised—the action is reversed, and the jaws separate freely to loosen the grasp.

This wrench may be used as a pipe-wrench by making the inner surfaces of the jaws more or less concave and toothed or corrugated, so as not to slip on the pipe.

In my wrench there are no springs, and no screws to turn for adjusting it. It is entirely self-adjusting.

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

The shank having the jaw C, pivoted at its outer end at *a*, and the curved links G, pivoted at *d* between the end of the shank and the handle, and the jaw C being provided with the bar D, arranged to stand at an angle to the handle, in combination with the pivoted slotted jaw C′, constructed and arranged as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HORACE DAVIS.

Witnesses:
WM. P. UPPERMAN,
C. H. WATSON.