

(No Model.)

A. HITT.
WRENCH.

No. 452,410.

Patented May 19, 1891.

Fig. 1.

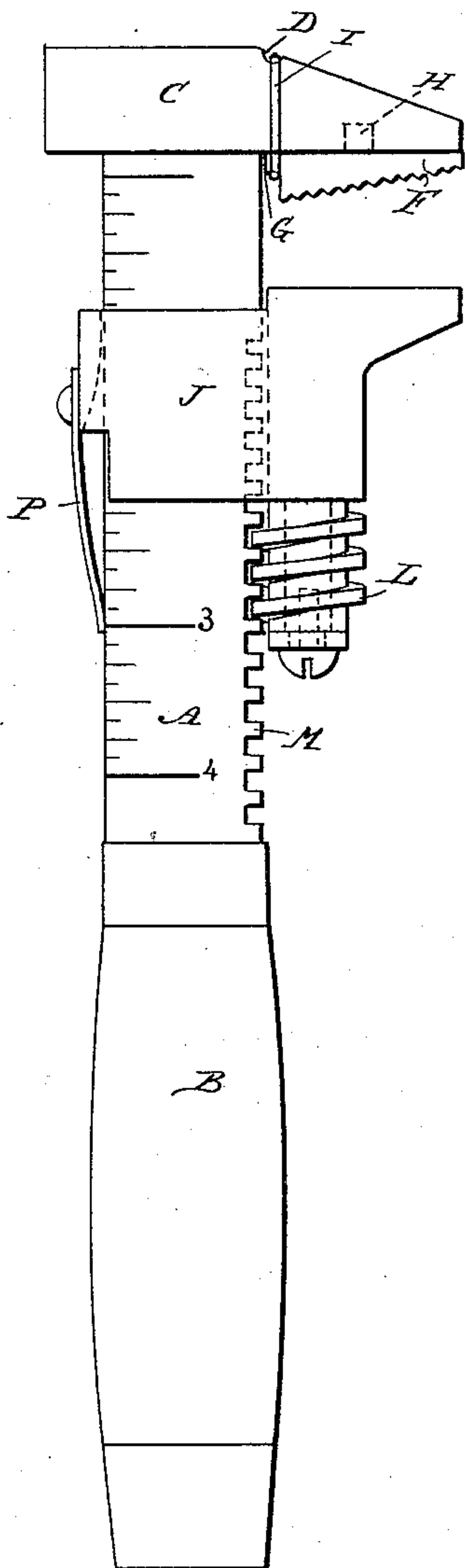


Fig. 2.

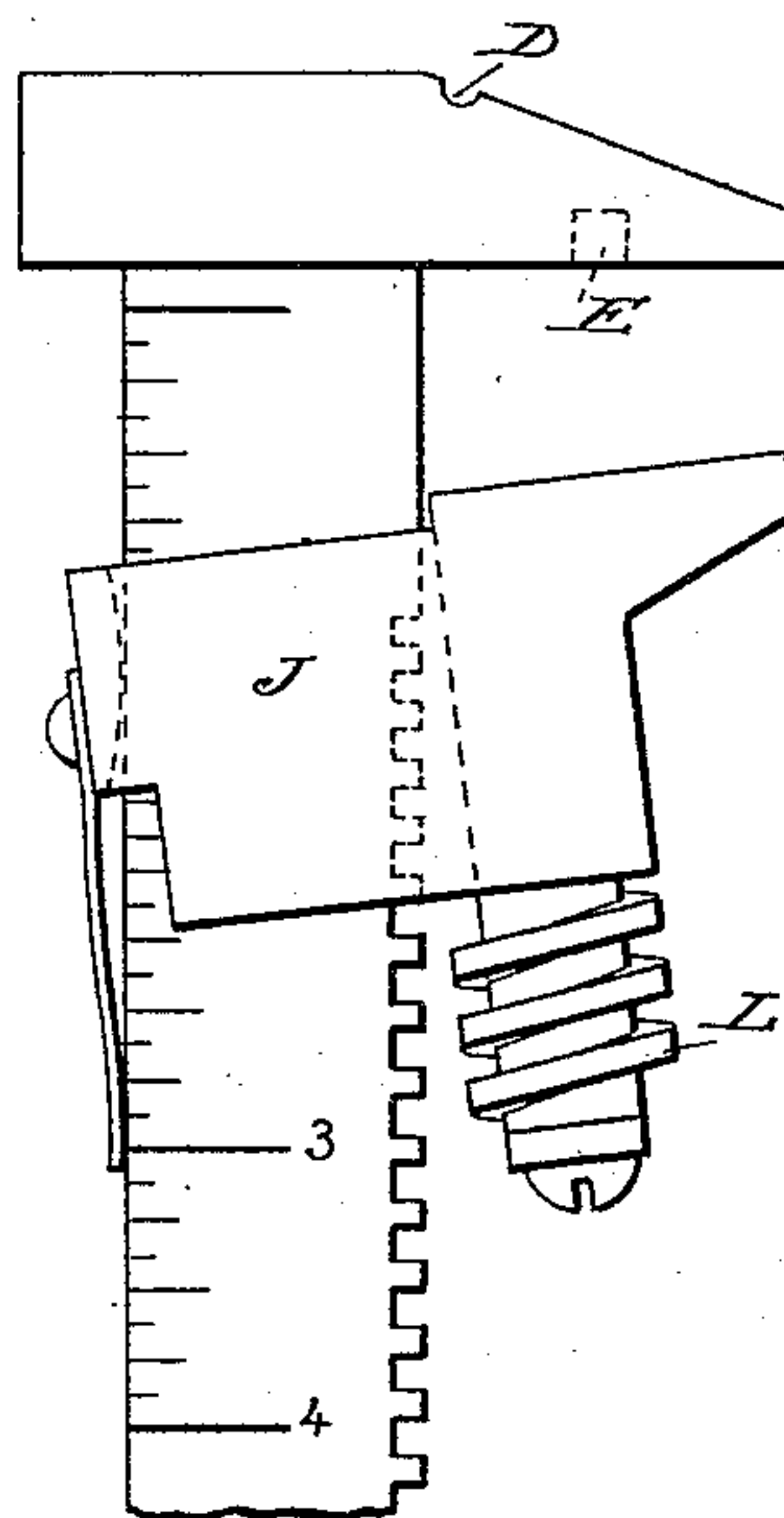
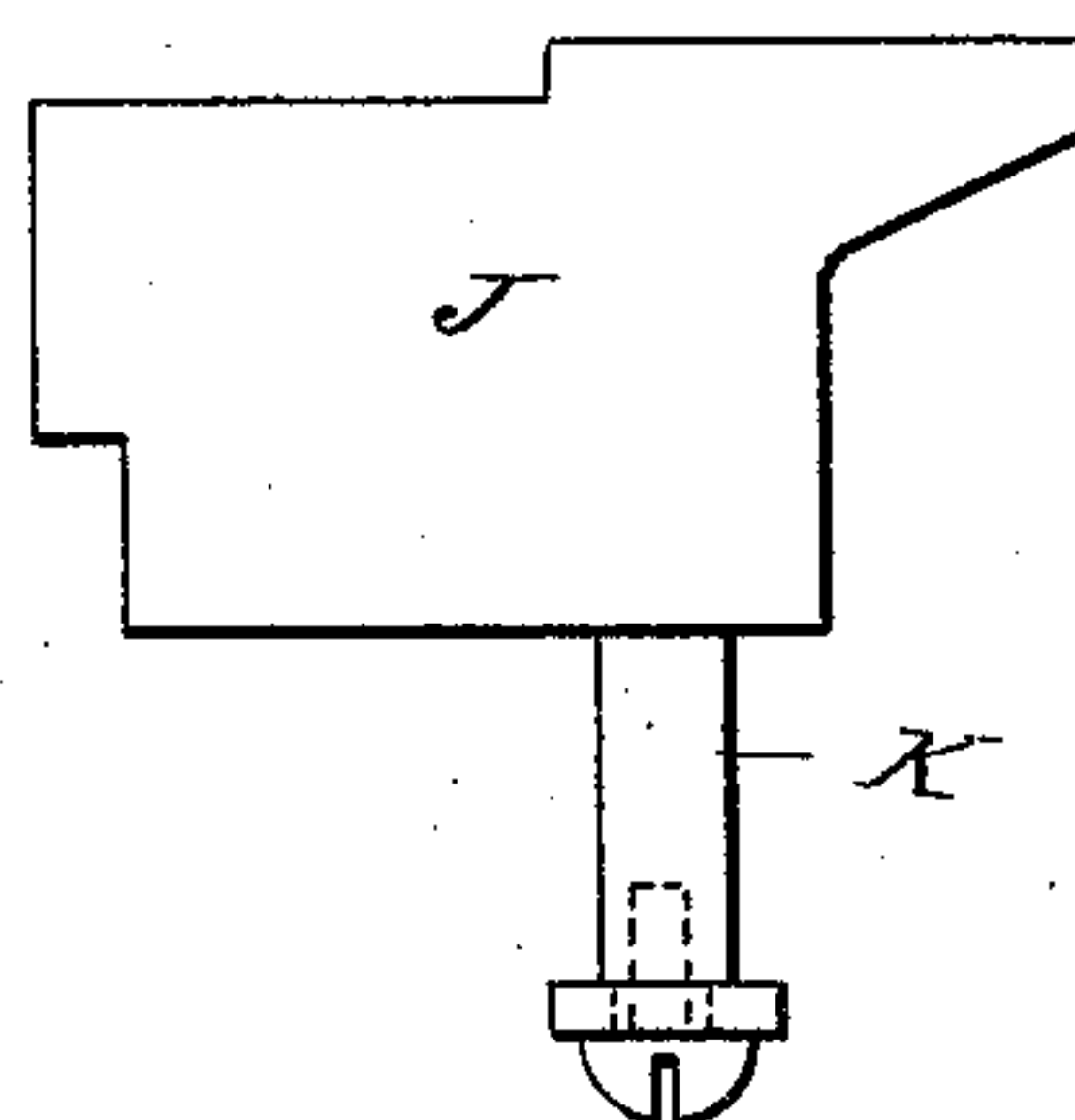


Fig. 3.



WITNESS:

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SPECIFICATION forming part of Letters Patent No. 452,410, dated May 19, 1891.

Application filed May 8, 1890. Serial No. 351,035. (No model.)

To all whom it may concern:

Be it known that I, ADRIAN HITT, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Wrenches, of which the following is a specification.

My invention relates to wrenches employed for applying and removing nuts, and also for use as a pipe-wrench, and has for its object the provision of a device simple and cheap to construct and wherein means are provided for quick and accurate adjustment.

To attain the desired end my invention consists, essentially, in a wrench having a main bar or body bearing a handle at one extremity and the usual fixed jaw at the other, a rack being formed in a face of the body, a movable jaw bearing a manipulating-screw which engages with the aforementioned rack through the medium of a spring secured to the movable jaw-body and bearing against the side of the bar; and my invention also involves certain other novel and useful combinations or arrangements of parts and peculiarities of construction and operation, all of which will be hereinafter first fully described, and then pointed out in the claim.

In the drawings, Figure 1 is a view in elevation of my improved wrench. Fig. 2 is a like view of the upper portion of the wrench with the screw thrown out of engagement with the rack. Fig. 3 is a view of the movable jaw.

Like letters of reference, wherever they occur, indicate corresponding parts in all the figures.

A is a bar forming the main body of the wrench. This body is divided and scale-marks made thereon for convenience in setting the wrench to the desired size.

B is the handle secured to the bar A, and C is the fixed hammer-shaped jaw at the outer extremity.

D is a notch made in the metal of jaw C, and in the inner face of said jaw is a perforation E. (Shown by the dotted line in Fig. 2.)

F is a serrated movable jaw or face provided with a depression G and a lug H, said lug fitting into the perforation E when applied to the wrench.

I is a rubber band for holding the removable jaw in place when in use.

J is a movable jaw mounted upon the bar A and having an extension K, whereon is mounted a screw L, which normally engages with a rack L' upon the bar A, being held in such engagement by a spring P. The movable jaw J is cut back where it encircles the bar A, leaving the face of the jaw, which is arranged to engage with a nut, higher than the encircling ring. By this construction, even when the face of said jaw becomes somewhat worn, it can be brought close to the fixed jaw, which would not be the case if the face and the encircling ring constitute a continuous line. The back of the encircling ring is entirely cut away for a portion of its depth and the interior of the portion across the back is curved, as indicated by the dotted lines, this construction greatly facilitating the throwing of the screw outward from engagement with the notched bar and increasing the clearance. By this arrangement the movable jaw may be tilted, as illustrated in Fig. 2, and slipped along the bar A to about the desired position, and when it is released will at once return to its normal position through the medium of the spring P, and any small adjustment obtained by rotating the screw in the usual manner.

The jaw F may be applied or removed in a moment, and will be found very useful when it is desired to employ the wrench as a pipe-wrench.

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

As a new article of manufacture, a wrench in which is comprised a fixed jaw mounted upon the extremity of a bar notched in one of its edges and a movable jaw having at one side a worm which engages with the notches in the bar and at the other side a flat spring fixed near the upper edge of the jaw, the free end of the spring pressing against the bar at a point opposite to the worm and the back of the jaw being cut entirely away below the fixed end of the spring, and the face of the jaw elevated above the ring encircling the handle-bar, substantially as shown and described.

ADRIAN HITT.

Witnesses:

A. M. PIERCE,
GERTRUDE WARD.