

(No Model.)

S. L. WILLMER.
COMBINED WRENCH AND PINCHERS.

No. 270,356.

Patented Jan. 9, 1883.

Fig. 1.

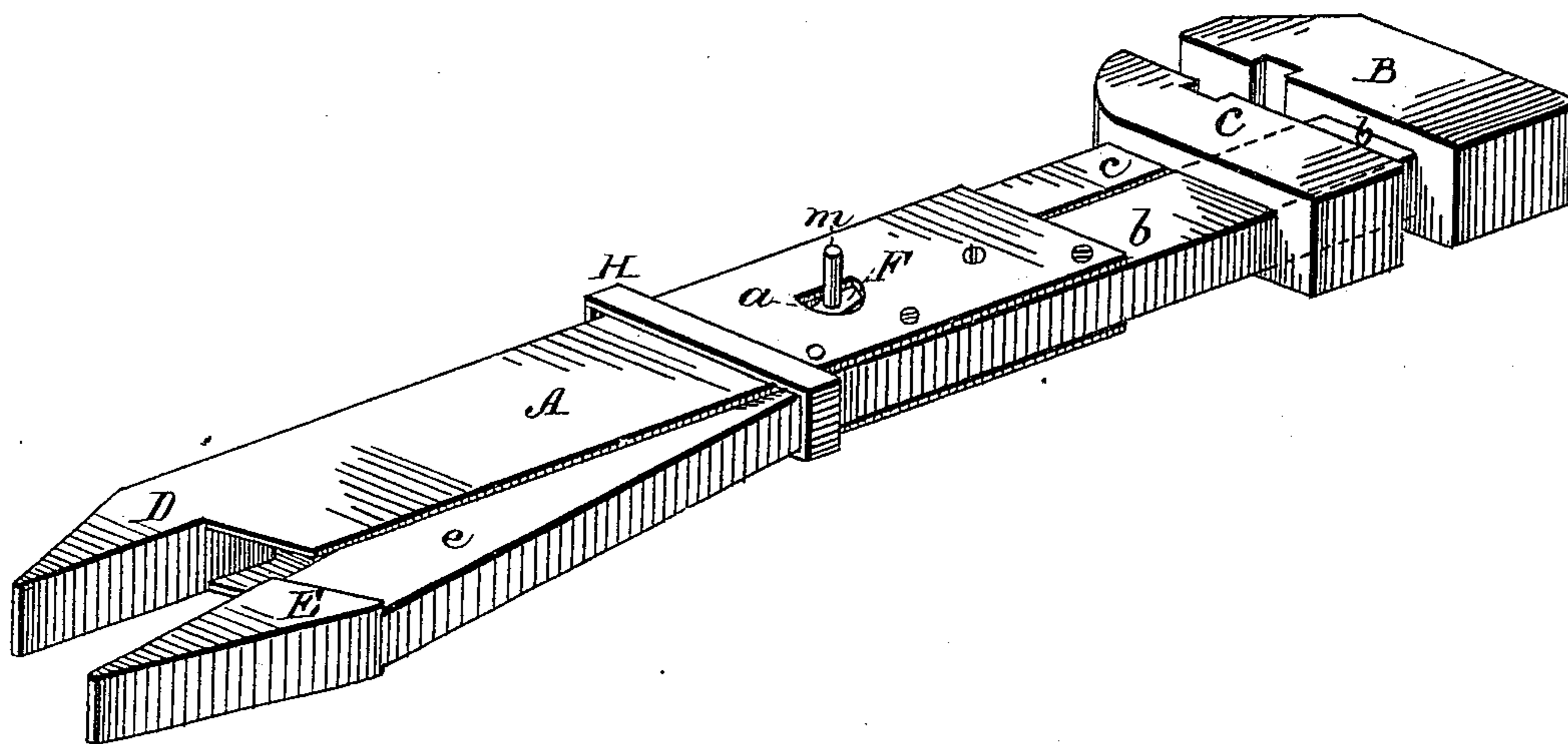


Fig. 2.

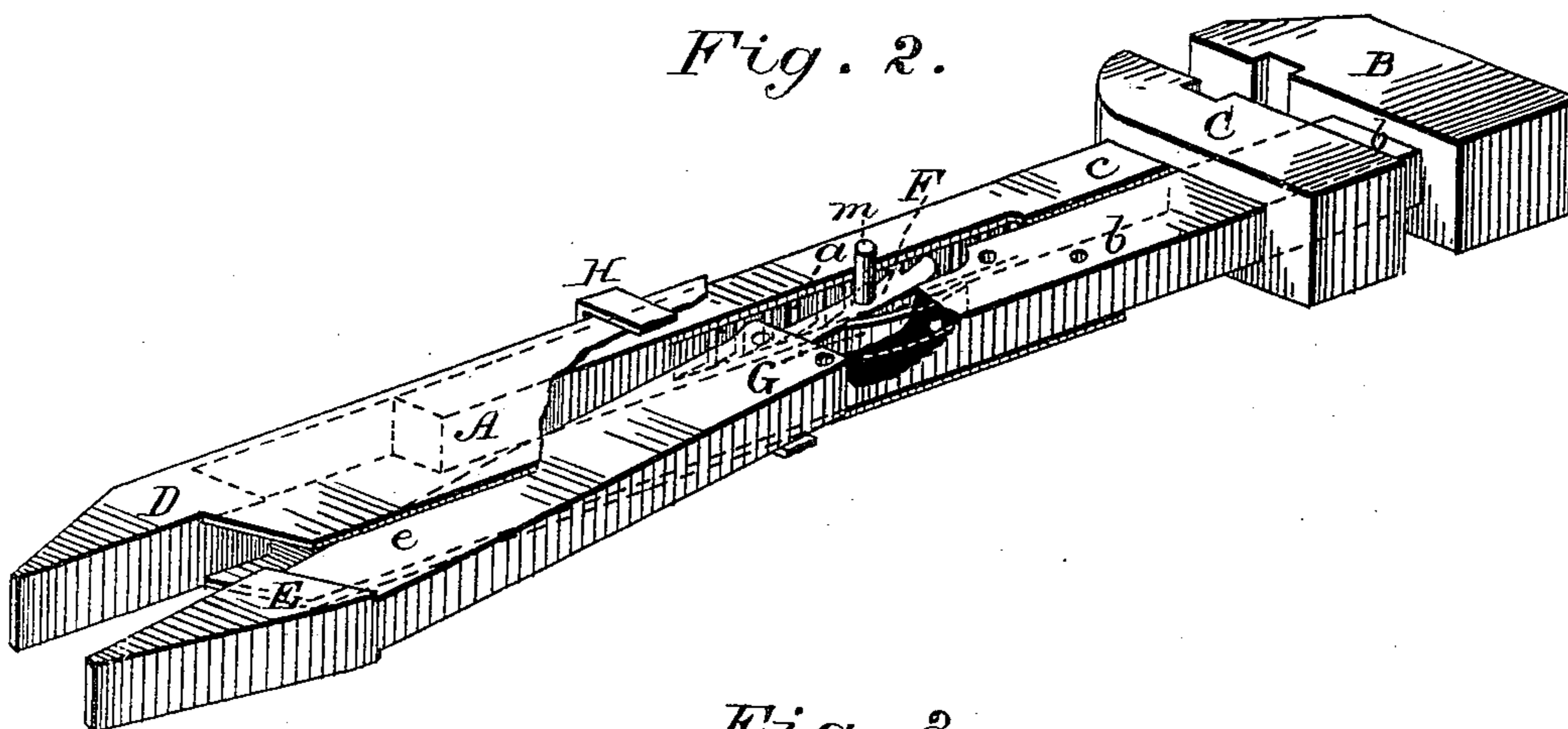
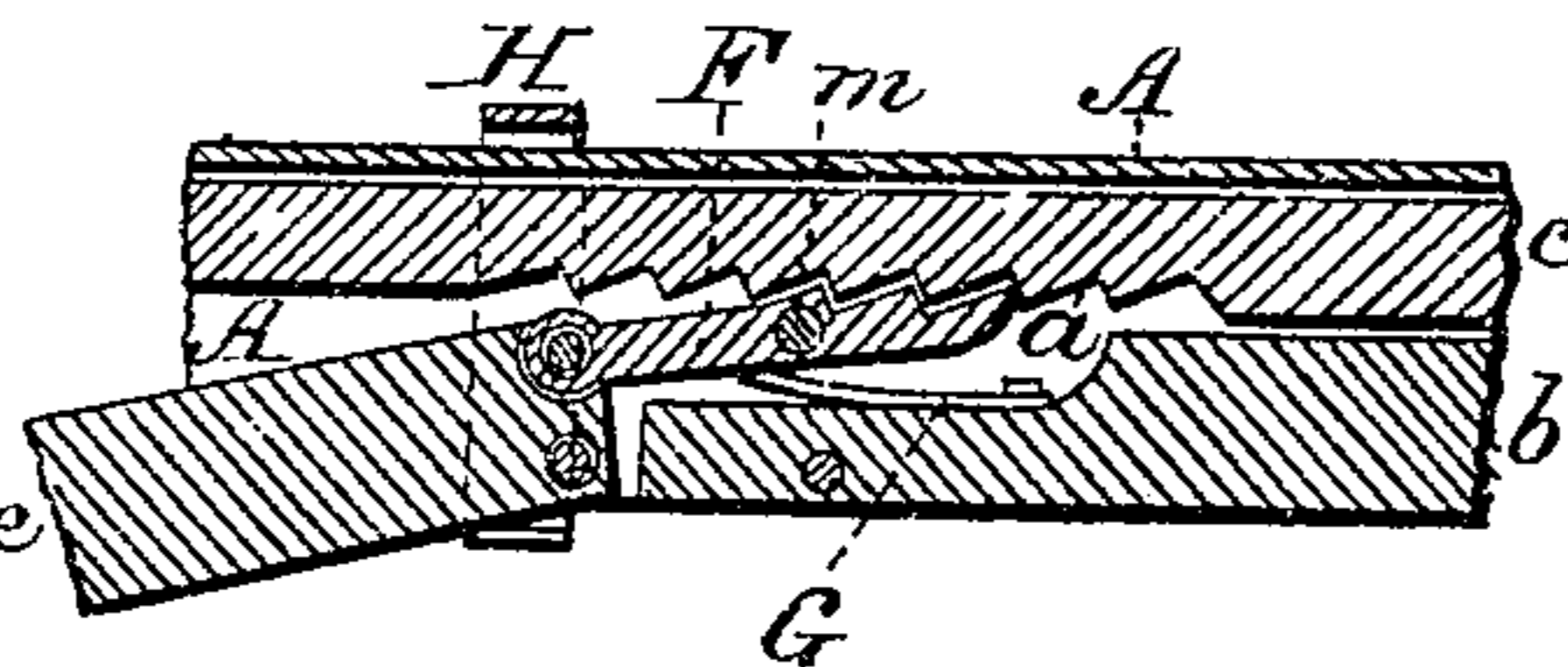


Fig. 3.



Witnesses,

Geo. H. Strong
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UNITED STATES PATENT OFFICE.

SAMUEL L. WILLMER, OF ANDERSON, CALIFORNIA, ASSIGNOR OF ONE-HALF
TO SAMUEL WOLF, OF SAME PLACE.

COMBINED WRENCH AND PINCHERS.

SPECIFICATION forming part of Letters Patent No. 270,356, dated January 9, 1883.

Application filed September 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL L. WILLMER, of Anderson, county of Shasta, State of California, have invented an Improved Combined Wrench and Pinchers; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to a new and useful combined wrench and pinchers; and it consists in certain details of construction, as hereinafter fully described, and specifically pointed out in the claim.

Referring to the accompanying drawings, Figure 1 is a perspective view of device. Fig. 2 is a perspective view, showing its construction. Fig. 3 is a sectional view, showing pawl, ratchet, and spring.

Let A represent the stock or body of the tool. It consists of a hollow casing open upon one side. At one end it may be formed with or have secured to it the shank *b* of the stationary jaw B of an ordinary wrench. At its other end it has a jaw, D, of the pinchers, (here shown as the regular jaw of a pair of pliers.)

C is the movable jaw of the wrench, adapted to slide upon the shank *b* of the stationary jaw. The movable jaw G has a shank, *c*, which extends within the stock against its side wall, and is provided with ratchet-teeth *a* upon its inner side next the shank *b*. E is the other jaw of the pinchers. Its shank *e* extends within the stock at its open side to the base of shank *b*, and is there pivoted by a pin through the edge of the stock and its own corner, thus adapting the jaw E to swing away from the other jaw, D, or to lie against it, as in ordinary pinchers. To the inner top corner of the shank *e* is pivoted a pawl, F, extending up between the shanks *b* and *c*, and adapted to engage with the ratchet-teeth *a* of the latter under the influence of a spring, G, attached to shank *b*, and impinging against the back of the pawl. A small pin or lug, *m*, fitted in the pawl F, extends through an enlarged opening in the stock. By moving the pin to one side the pawl may be disengaged from the ratchet. Around the stock is a ring or band, H, adapted to slide

back or forward to limit the extent to which the swinging jaw E and shank *e* of the pinchers may move.

The use of this tool is as follows: To use the wrench the pin *m* is pressed to one side. This disengages the pawl F from the shank *c*, and the movable jaw C may be set at any point. The pin *m* being released, the spring returns the pawl to its engagement with the ratchet *a*, and thus secures the jaw C at the point set. This adjustment of the wrench is easily and quickly accomplished, and it may be as securely set as any other form of wrench. To use the other end of the tool the swinging jaw E is opened away from the other, D, and its limit defined by the position of the ring H.

In this tool I have combined two useful tools, both of which are frequently needed in the same work.

In places where the wrench end cannot be used on a bolt the pinchers end can be employed, as where the tool must be turned on its longitudinal axis. It is easily constructed, and may be repaired without trouble when necessary.

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

The stock or body A, having the stationary jaw B of a monkey-wrench at one end, and the stationary jaw D of a pair of pinchers at the other end, in combination with the movable jaw C of the wrench, having a shank, *c*, extending within the stock, and a ratchet, *a*, and the swinging jaw E of the pinchers, pivoted in the stock A, and having a pawl, F, pivoted at its base, and engaging with the ratchet *a* under the influence of a spring, G, said pawl having a pin or lug, *m*, extending through the stock A, and the ring or band H, all arranged and forming a combined wrench and pinchers, substantially as herein described.

In witness whereof I hereunto set my hand.
SAMUEL L. WILLMER.

Witnesses:

J. W. MALONE,
A. C. FERGUSON.