

**T. WILLIAMS.**  
**Combination Tools.**

No. 138,548.

Patented May 6, 1873.

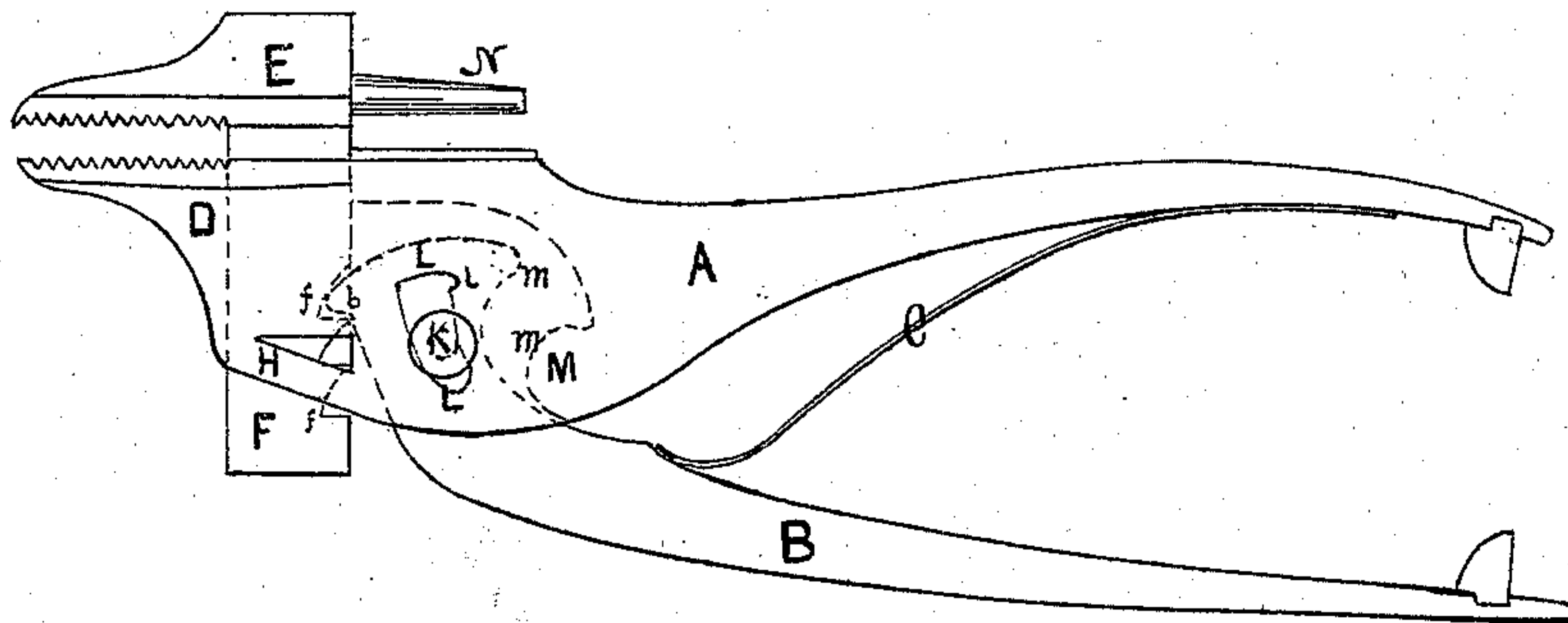


Fig. 1.

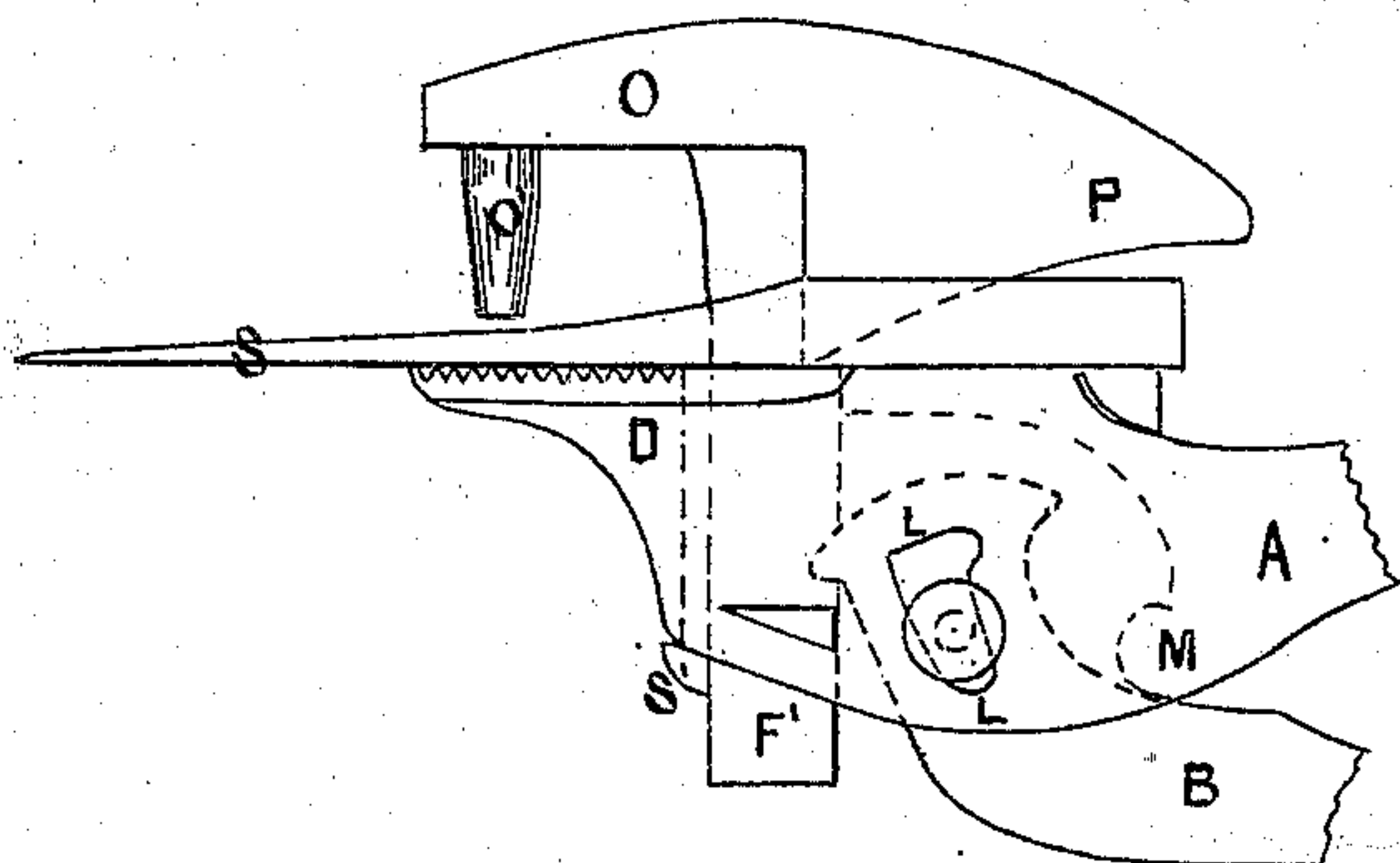


Fig. 2.

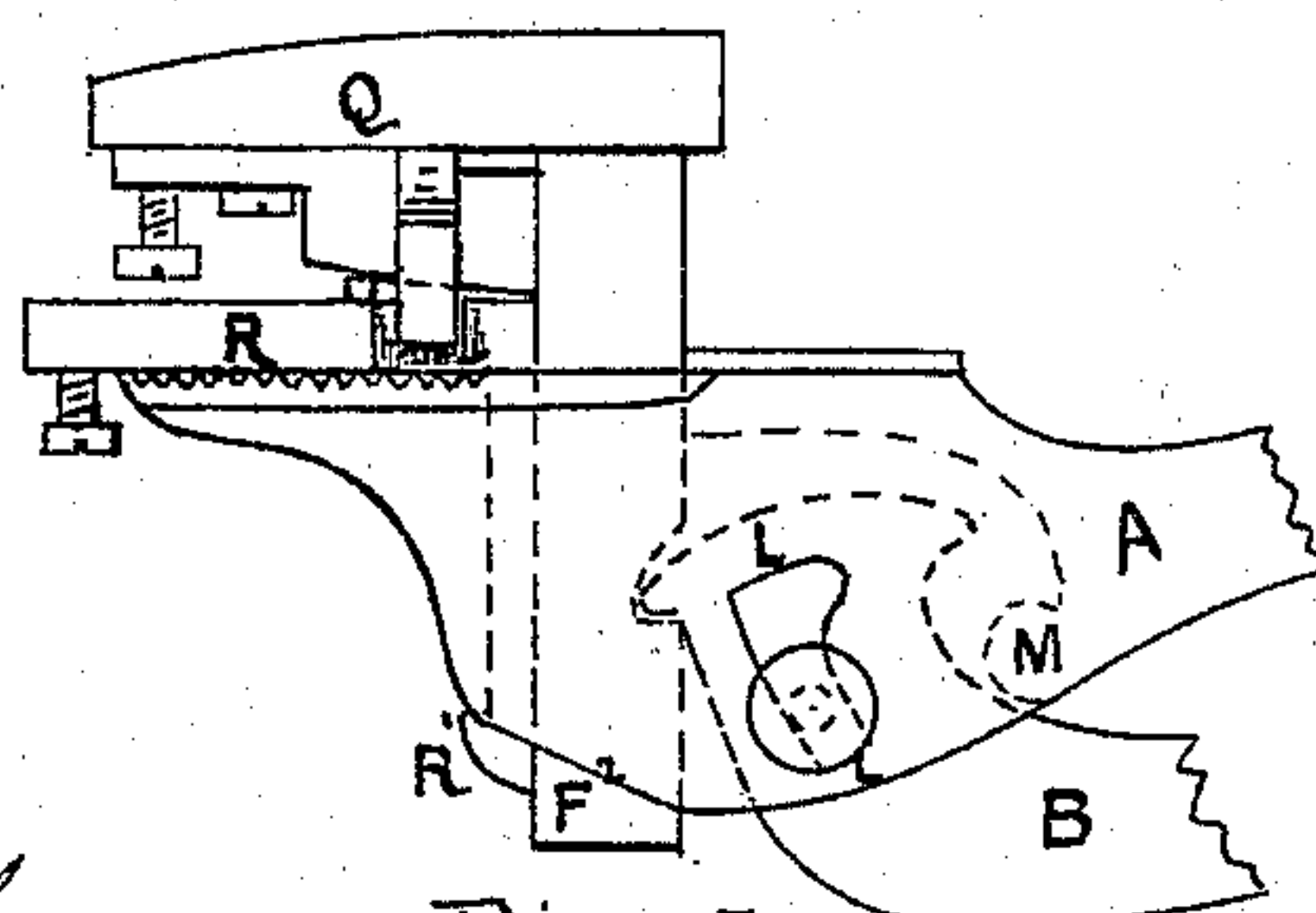


Fig. 3.

WITNESSES

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# UNITED STATES PATENT OFFICE.

TURNER WILLIAMS, OF PROVIDENCE, RHODE ISLAND.

## IMPROVEMENT IN COMBINATION TOOLS.

Specification forming part of Letters Patent No. **138,548**, dated May 6, 1873; application filed August 26, 1872.

*To all whom it may concern:*

Be it known that I, TURNER WILLIAMS, of Providence, in the county of Providence and State of Rhode Island, have invented a certain new and useful Combination Tool, of which the following is a specification:

### *The Nature of the Invention.*

The nature of my invention consists in the peculiar construction of a compound tool, the exact nature of which will be best understood by reference to the accompanying description and drawing.

### *Description of the Drawing.*

Figure 1 is an elevation of my invention when used as a wrench or pliers and wire-cutter. Fig 2 is the same when used as a belt-punch, a belt-awl and cutting-shears. Fig. 3 is the same when used as a saw-set.

### *General Description.*

Let A represent the principal jaw and lever of the instrument. Within this jaw and lever the second lever B is hung. The fulcrum in A, over which the lever B operates, is a rolling one, the concave part *m m* of the lever B resting upon the convex part *m* of the lever A. K is a rivet or screw, passing through an opening in the lever A, and secured to the lever B, as shown. This screw K does not act as a fulcrum, but simply as a pin to assist in keeping the two levers together. The opening L L in A is made with an enlargement, *l*, as shown, so that when the levers are distended the lever B may be drawn back so as to disengage its point *b* from the notches *f* in

the shank F of the jaw E, and the substitution of another in its place. The shank F of the jaw E is provided with a number of notches, *f f*, so that the jaw may be extended sufficiently for using the instrument as a wrench. When the notch *b* is in the notch *f*, as shown in Fig. 1, then the instrument may be used as pliers, the forward part for ordinary uses and the rear part N for bending wire, &c. H is a triangular opening in the part A, and is so arranged, in connection with the notches *f f* in the shank F, that they together form a cutting-nipper.

To change my instrument so as to use it as a belt-punch, &c., as indicated in Fig. 2, I remove the jaw E and substitute for it the jaw O P, the shank F' being of the same form as the shank F, but somewhat narrower, so as to admit of the inserting of the shank S' of the belt-awl S, as shown. O' is a belt-punch. P serves as a shear-blade for cutting leather, &c.

To use my instrument as a saw-set, as indicated in Fig. 3, I insert the base piece R and the upper jaw of the set Q, in the same manner as described for the part P and S of the belt-punch. The parts of the saw-set R and Q may be made, as indicated in the drawing, or in any desired style of saw-set.

I claim as my invention—

The combination of the jaw A and lever B, constructed as described, with the interchangeable devices, constructed and operated as herein described, for the purposes set forth.

TURNER WILLIAMS.

Witnesses:

WILLIAM EDSON,  
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