

W. Hart,

Vis. P.

N^o 15,073.

Patented June 10, 1856.

Fig. 1.

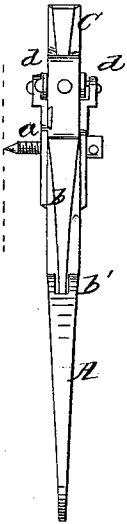
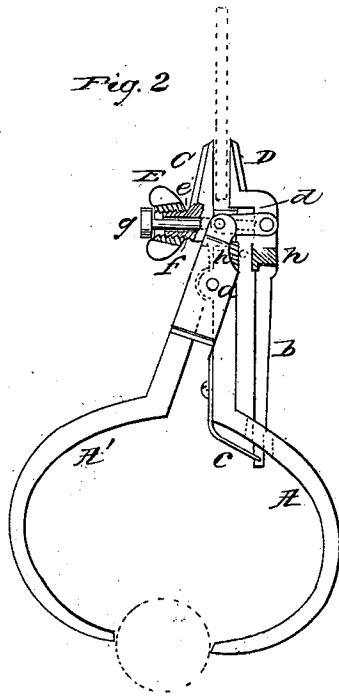


Fig. 2.



UNITED STATES PATENT OFFICE.

WILLIAM HART, OF MAYVILLE, WISCONSIN.

TOOL FOR WATCHMAKERS.

Specification of Letters Patent No. 15,073, dated June 10, 1856.

To all whom it may concern:

Be it known that I, WILLIAM HART, of Mayville, in the county of Dodge and State of Wisconsin, have invented a new and Improved Tool for Watchmakers, Jewelers, and other Artisans, said Tool being a Pair of Pliers, Hand-Vise, and Calipers Combined; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is an edge view of my improvement. Fig. 2, is a side view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

My invention consists in the peculiar construction of the tool and the arrangement of the several parts, as will be hereinafter fully shown and described, whereby the tool may be used as a pair of calipers, pliers or a hand vise.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A, A', represent the two curved or bowed legs of a pair of calipers, which are connected by a pivot, (a), a short distance below their upper ends.

To the upper ends of the leg A, there is attached a jaw, C, formed precisely like the jaws of ordinary pliers; and D, is a jaw which has a shank, (b), attached to its lower end; the lower end of said shank passing through a slot, (b'), in the leg, A; a spring, (c), which is attached to the leg A, bearing against the lower end of the shank as plainly shown in Fig. 2. The jaw, D, is connected by links, (d), (d), to the upper end of the leg A'. To the outer side of the jaw, C, and at its lower part there is attached a screw (e), which projects horizontally outward, or at right angles with the jaw, C. This screw has a nut, E, upon it. The screw, (e), is hollow and a rod, (f), passes through it and through the lower part

of the jaw C; one end of said rod being attached to the jaw, D, and the opposite end having a head, (g), upon it.

By the above construction it will be seen that by compressing the two legs, A, A', together, the two jaws, C, D, will move toward each other in parallel positions, the spring (c), forcing the legs and jaws apart, when the legs are relieved from the pressure of the hand. By turning the nut E, outward, the nut, in consequence of bearing against the head, (g), will draw the jaws together and also the legs A, A'. By turning or screwing the nut E, inward or toward the jaw, C, so that sufficient play is allowed, the implement may be used as a pair of pliers. Thus it will be seen that pliers, calipers and a hand or thumb vise, are obtained or combined in one tool.

Nipper blades, (h), (h), may, if desired, be attached, one to the upper part of the leg A, and the other to the shank, (b), see Fig. 2, so that wire may be cut when necessary. The pivot (a), may project sufficiently far through the legs so that a point may be formed on one end, and the pivot used as a center punch.

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

Having the jaw, C, attached to the upper part of the leg, A, of the calipers, and the jaw D, connected to the upper part of the leg A', by links (d), (d); the jaw, D, having a shank, (b) attached to it, the shank passing through a slot, in the leg, A, and bearing against a spring, (c); and the shank (b), having a rod (f), attached to it, which rod passes through a hollow screw, (e), which is attached to the jaw, C, the screw, (e), having a nut, E, upon it substantially as shown for the purpose specified.

WILLIAM HART.

Witnesses:

HANNAH P. BOWEN,
E. B. BOWEN.