

Theodore Terrell. Imp^d Saw Filer's Vise.

117483

PATENTED JUL 25 1871

Fig. 1

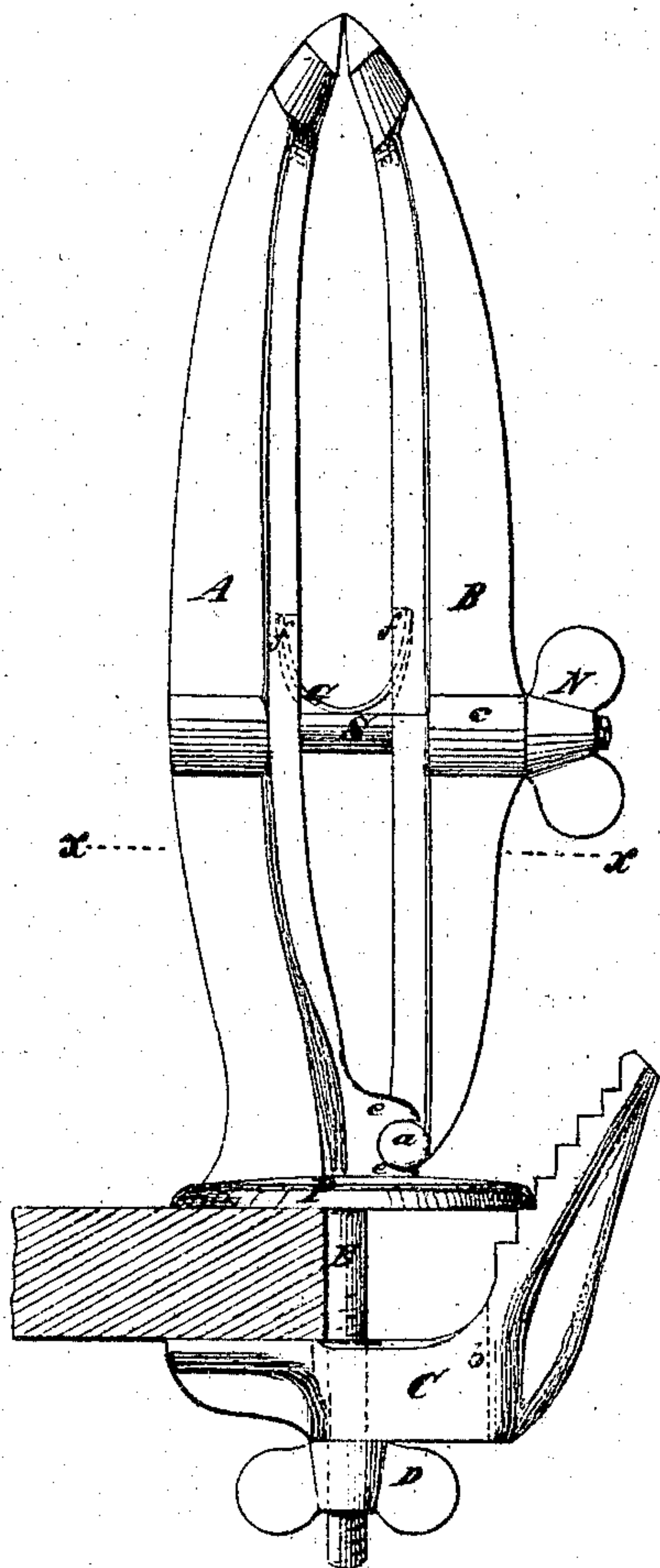


Fig. 3

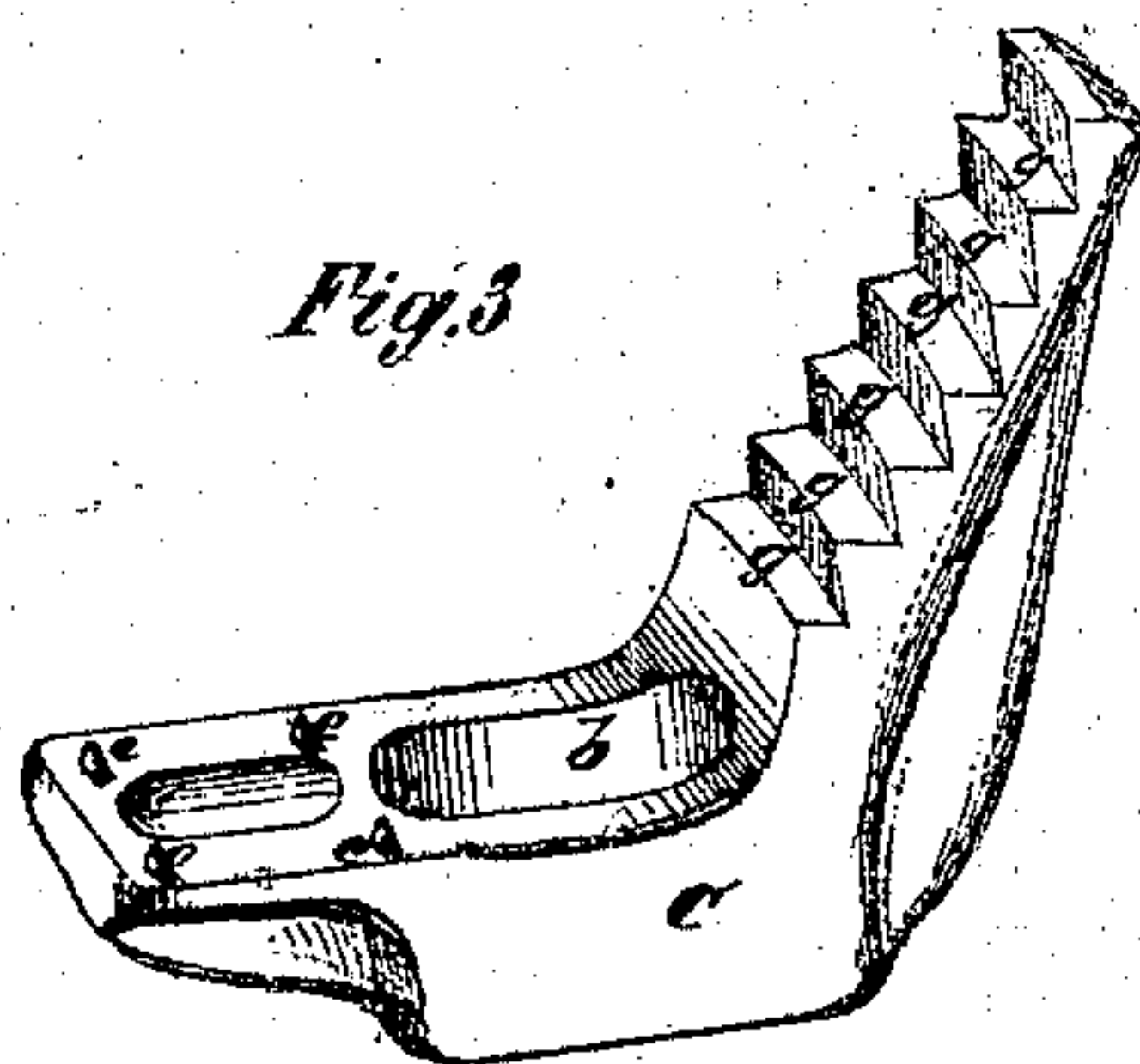
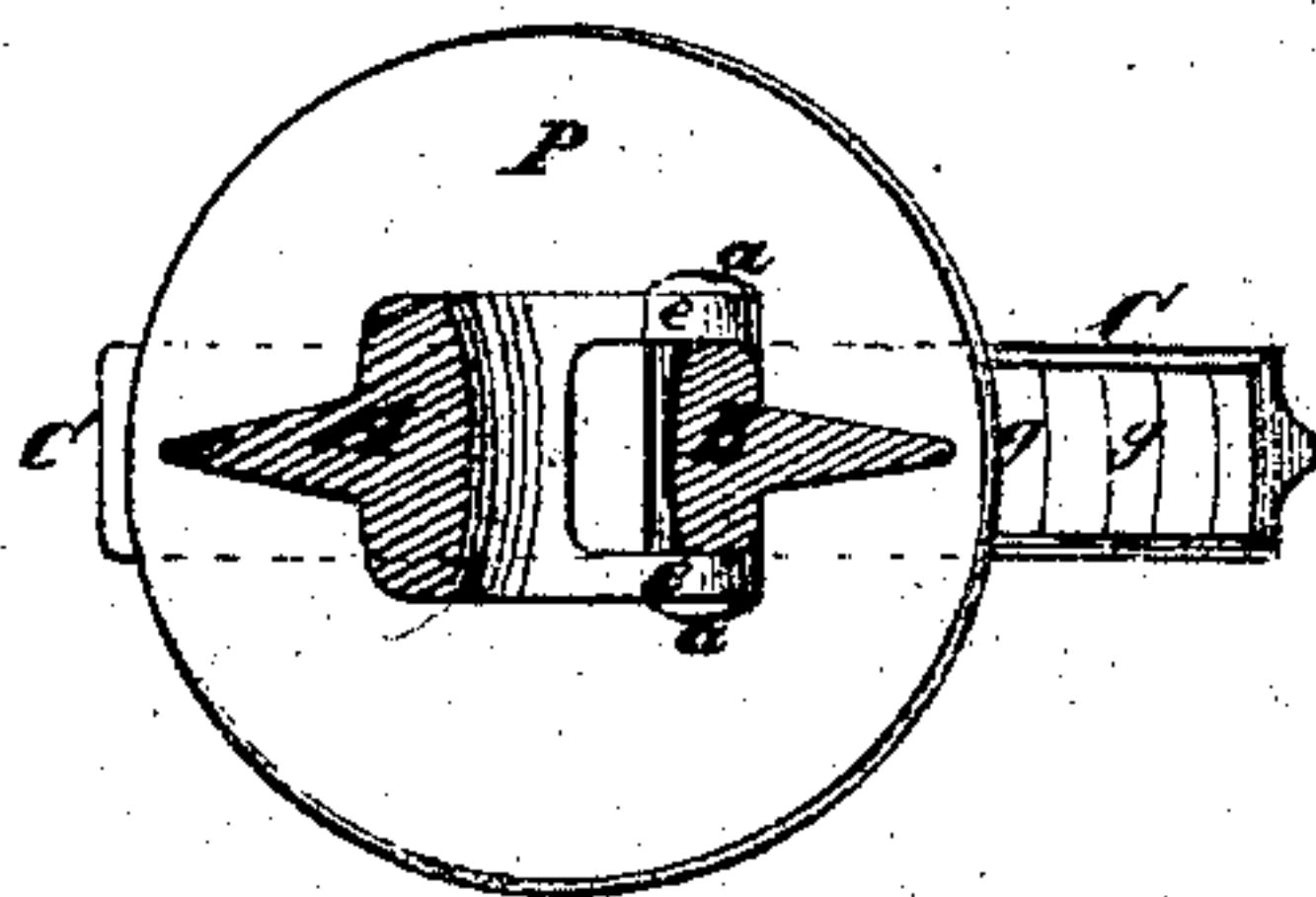


Fig. 2



Witnesses.
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UNITED STATES PATENT OFFICE.

THEODORE TERRELL, OF YONKERS, NEW YORK.

IMPROVEMENT IN SAW-FILERS' VISES.

Specification forming part of Letters Patent No. 117,483, dated July 25, 1871.

To all whom it may concern:

Be it known that I, THEODORE TERRELL, of Yonkers, in the county of Westchester and State of New York, have invented a new and Improved Saw-Filer's Vise; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing forming a part of this specification.

This invention consists in a novel manner of hinging the jaws of the vise together by means of a lug or pivot cast on each side at the lower end of the movable jaw, which fit within bearings or notches on the corresponding end of the stationary jaw, and are kept in place by a spring interposed between the jaws above the operating-screw of the vise, thereby obviating the necessity for drilling a hole in the jaw for a pivot-pin. It also consists in a clamp of peculiar construction for attaching the vise to a bench, whereby the necessity for boring a hole, for the reception of the clamping-screw, through the table or bench, is obviated, and facility obtained for so attaching the vise to the edge of a bench that it may be turned in any direction.

In the accompanying drawing, Figure 1 is a side view of a vise constructed according to my invention. Fig. 2 is a horizontal section of the same taken at the line *x x* in Fig. 1, and Fig. 3 is a perspective view of the clamp detached.

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

A is the stationary jaw of the vise, on the bottom of which is cast a circular base-plate, P, from the center of which the clamping-screw E extends downward. On each side of this jaw, just above the base-plate, are cast bearings or rounded notches *e e*, which receive pivots or lugs cast on the bottom of the movable jaw B of the vise. Cast into or otherwise rigidly secured to the middle portion of the said jaw A is the screw S, and on the corresponding portion of the movable jaw B is formed a boss, *c*, extending through which is a hole for the passage of the screws S by means of a nut, N, on which the vise is operated. Just above the said screw in each of the jaws is a recess, *f*, provided for the reception of one of the ends of a steel bow-spring, G. C is the clamp, consisting of a piece of cast or other iron, of a bent form, substantially as

shown in Figs. 1 and 3. This is provided on its binding-surface with teats *c c*, and has extending vertically through it an elongated slot or hole, *b*, through which the clamping-screw passes; and on the forward portion is an upwardly-extending projection, on which there is a series of step-like notches, *g g*.

To secure the vise to a table or bench it is applied thereto so that the clamping-screw bears against the edge and the base rests on the top thereof. The clamp is then adjusted to its under side, with one of its notches *g* supporting the outer edge of the base-plate of the vise. The nut is then turned on the screw to tighten and bind the clamp to the table, and the vise is as rigidly secured to the table and may as easily be turned thereon as though secured by passing the clamping-screw through the table in the ordinary manner. While the vise is being turned the edge of the circular base-plate remains supported in one of the notches of the clamp. When the vise is at rest the nut N on the screw S forms the fulcrum of the movable jaw B; therefore the spring G above the fulcrum, forcing the said jaw open or away from the stationary jaw, keeps the pivots *a a* on its lower end within the bearings or notches *e e* on the stationary jaw A. When the nut N is turned on the screw S to tighten or close the jaw B, the pivots *a a* form the fulcrum of the jaw and are still kept within their bearings by the spring, and on unscrewing the nut to loosen or open the jaw the spring still preserves the hinge.

What I claim, and desire to secure by Letters Patent, is—

1. The combination of the pivots *a a* on the jaw B with the bearings *e e* on the jaw A, and the interposed spring G, when said spring is arranged relatively to said pivots and bearings and to the screw S, substantially as and for the purpose herein described.

2. The combination, with the circular base-plate P and holding-down screw E, of the clamp C, constructed with a slot and a series of step-like notches, *g g*, substantially as and for the purpose herein set forth.

THEODORE TERRELL.

Witnesses:

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