

(No Model.)

H. M. MARTIN.  
AX HELVE FASTENER.

No. 445,730.

Patented Feb. 3, 1891.

Fig. 1.

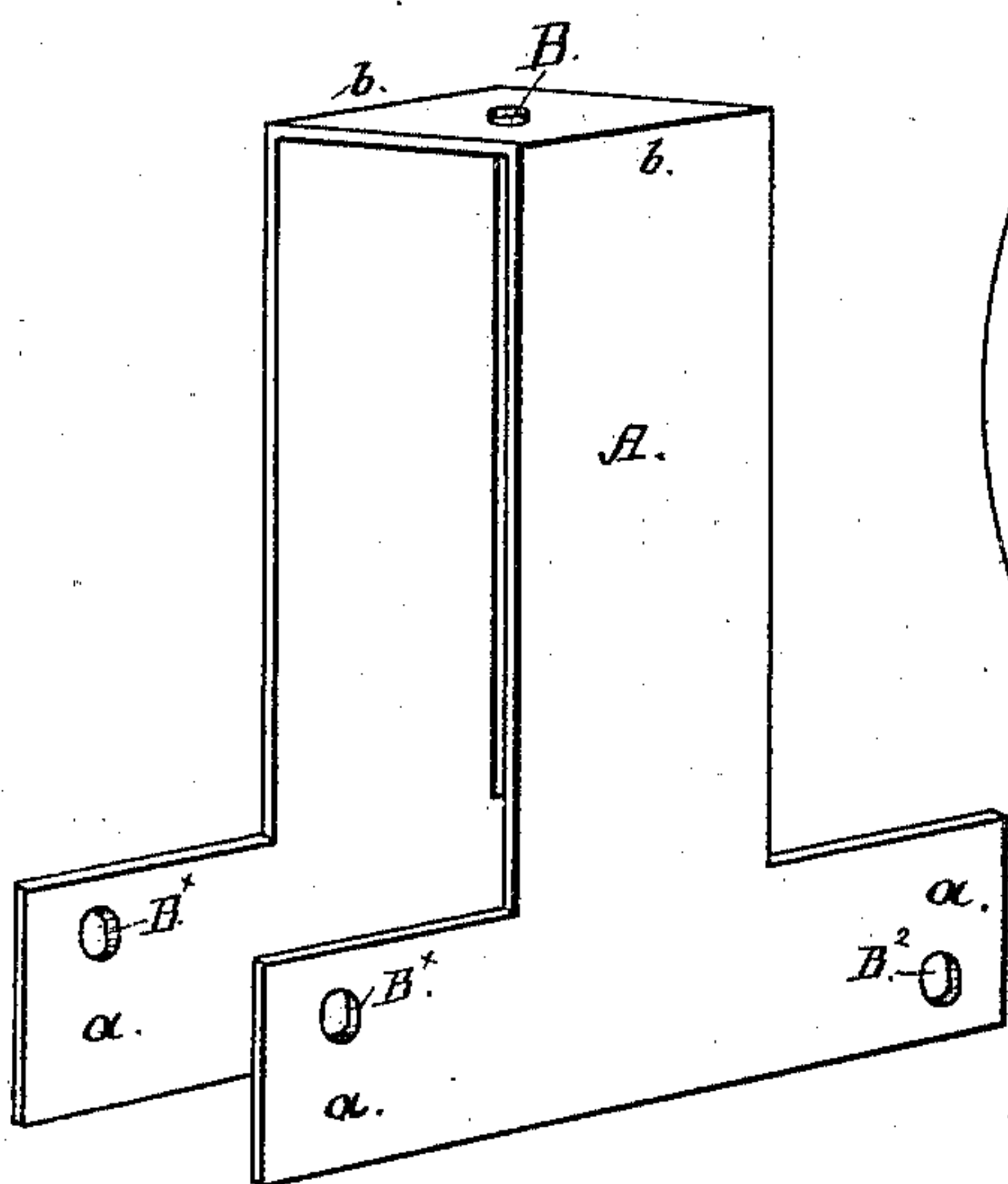


Fig. 2.

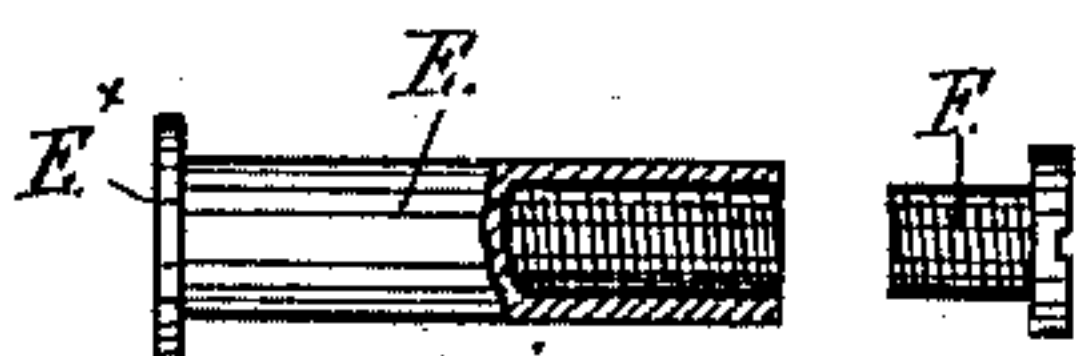
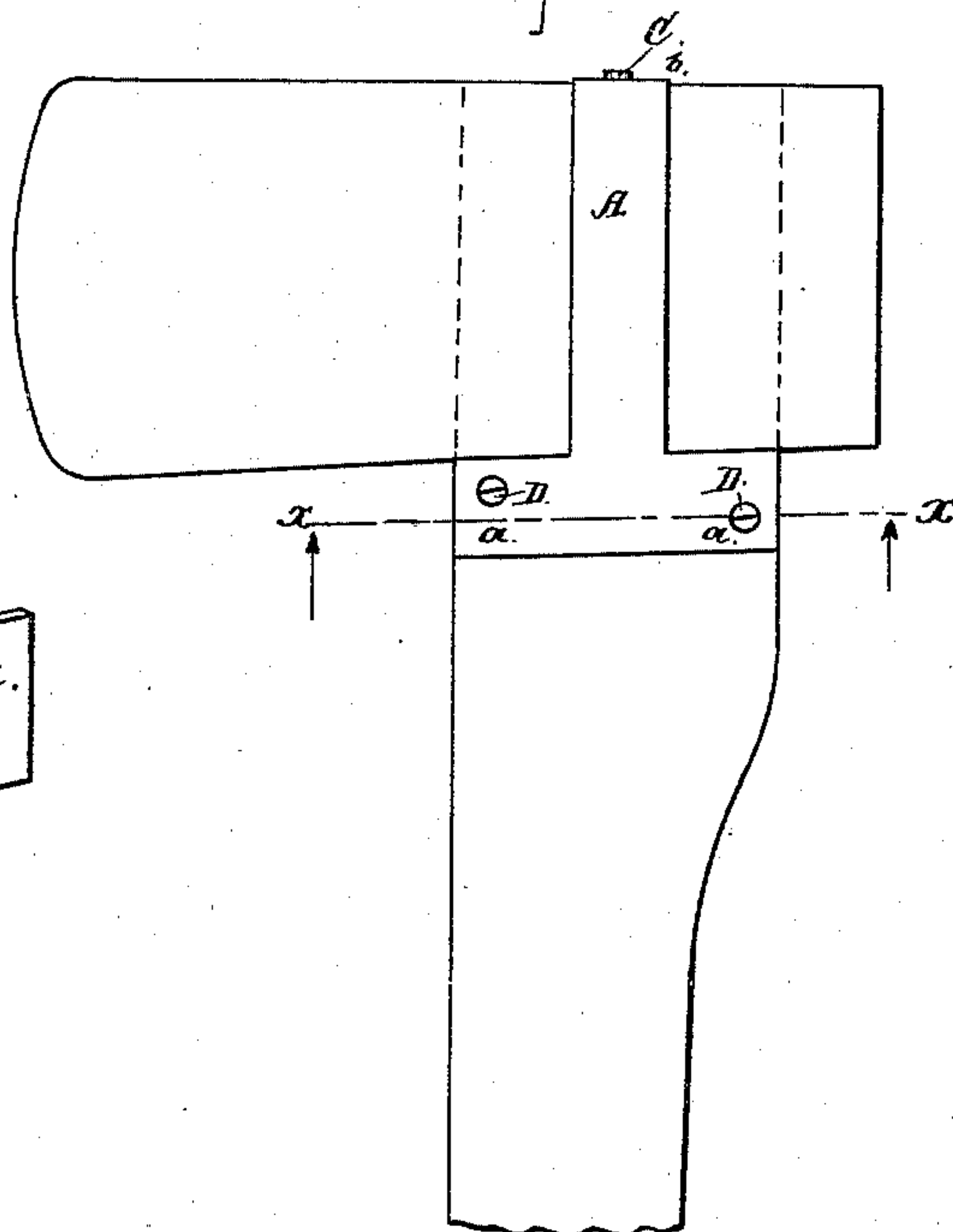


Fig. 3

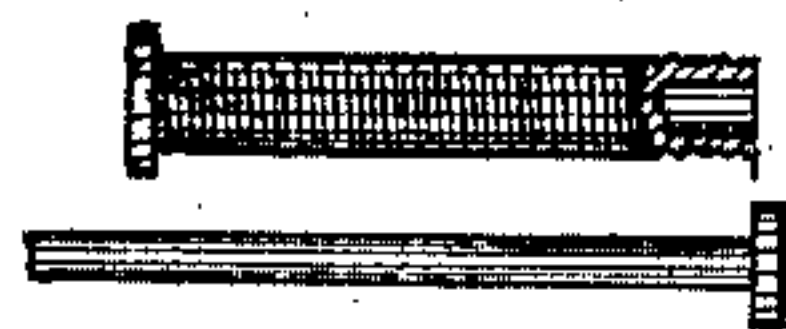
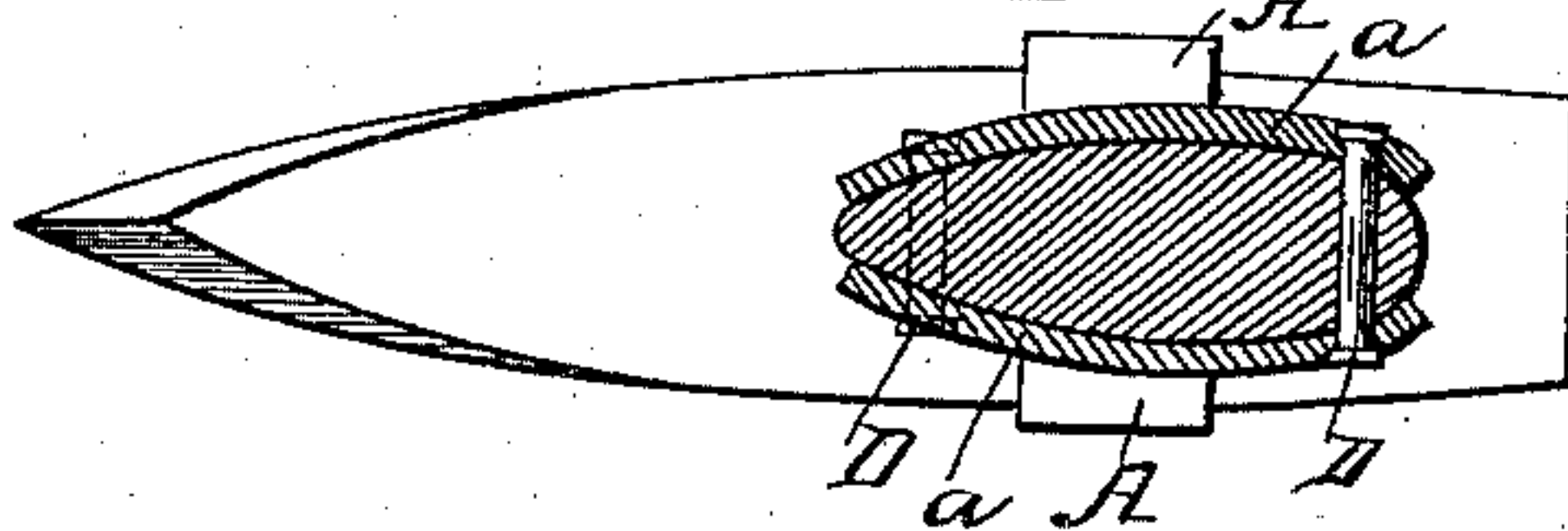


Fig. 3a

Fig. 4.



Witnesses:

Wm. Mayer  
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# UNITED STATES PATENT OFFICE.

HOWARD M. MARTIN, OF TACOMA, WASHINGTON.

## AX-HELVE FASTENER.

SPECIFICATION forming part of Letters Patent No. 445,730, dated February 3, 1891.

Application filed June 9, 1890. Serial No. 354,806. (No model.)

*To all whom it may concern:*

Be it known that I, HOWARD MARC MARTIN, a citizen of the United States, residing at Tacoma, in the county of Pierce and State of Washington, have invented a new and useful Ax-Helve Fastener, of which the following is a specification.

This invention relates to an improved means for retaining and holding the ax-helve in the eye of an ax; and it has for its object a device simple and cheap in construction and very effective in practice.

To attain this end my invention consists, essentially, in a thin metal band bent double to fit over the outer end of the eye and ax-helve and confined to the end of the latter, while the inner ends of the band are formed with a right-angled strap securely connected to the helve in front of the ax, as will more fully appear by reference to the following description and accompanying drawings.

In the drawings, Figure 1 is a detached view of my device for fastening axes to their helves. Fig. 2 is also a plan view of the ax with holding-band in position. In Fig. 3 is shown a screw device for fastening the band to the ax and helve. Fig. 3<sup>a</sup> is a modified form of the fastening shown in Fig. 3. Fig. 4 is a section of Fig. 2 on line *x x*, looking in the direction of the arrows.

In practice the band A is first cut or stamped out of thin sheet-steel medium in softness in a manner to form the end straps or arms *a a*, when suitable holes *B B<sup>x</sup> B<sup>2</sup>* are punched. The band is then bent at right angles upon itself to form shoulders *b b* to fit over the outer portion of the eye of the ax and end of the helve, the latter having been placed in position in the eye of the ax. The arms of the band are then drawn over the sides of the ax in line with the eye and the arms or straps pressed or bent down upon both sides of the helve, so that the inner edges will butt against the metal of the inner face of the eye of the ax and form close joints, thus encompassing one edge or face and both sides of

the ax. The band is secured to the helve by a screw C in the end, which passes through the band and into the wood of the helve or handle, as well as by screws, which pass through the arms or straps and helve or handle in front of the eye, as seen at D D.

In order to clamp and firmly secure the band to the helve in front of the eye, I have devised a peculiar fastener, which consists in a threaded pipe or sleeve E, having a head or washer E<sup>x</sup> at one end. This pipe or sleeve is passed through the punched and bored holes and clamped tightly by the screw F, engaging the threads of the pipe or sleeve. A good substitute for this interior-threaded pipe may be employed, however, by threading the pipe on the outside, leaving both ends open, with a rim or washer on one end, and screwing the pipe into the helve and passing a pin with a head at one end through the pipe and welding the other end to the washer or plate upon that side of the helve. By this means the ax is firmly fastened to the helve, and should the helve shrink away from the eye the ax will not fly off in handling as now and oftentimes wound the chopper or user.

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

The combination, with an ax and helve or handle extending through the eye of the ax in the usual way, of a strap or band consisting of the body encompassing one edge and both sides of the ax in line with the eye and helve, and having T-heads upon the ends thereof, which press down upon the sides of the helve and butt against the metal of the inner edge or face of the eye of the ax, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal.

HOWARD M. MARTIN. [L. S.]

Witnesses:

C. L. FOWLER,  
F. L. PRESBREY.