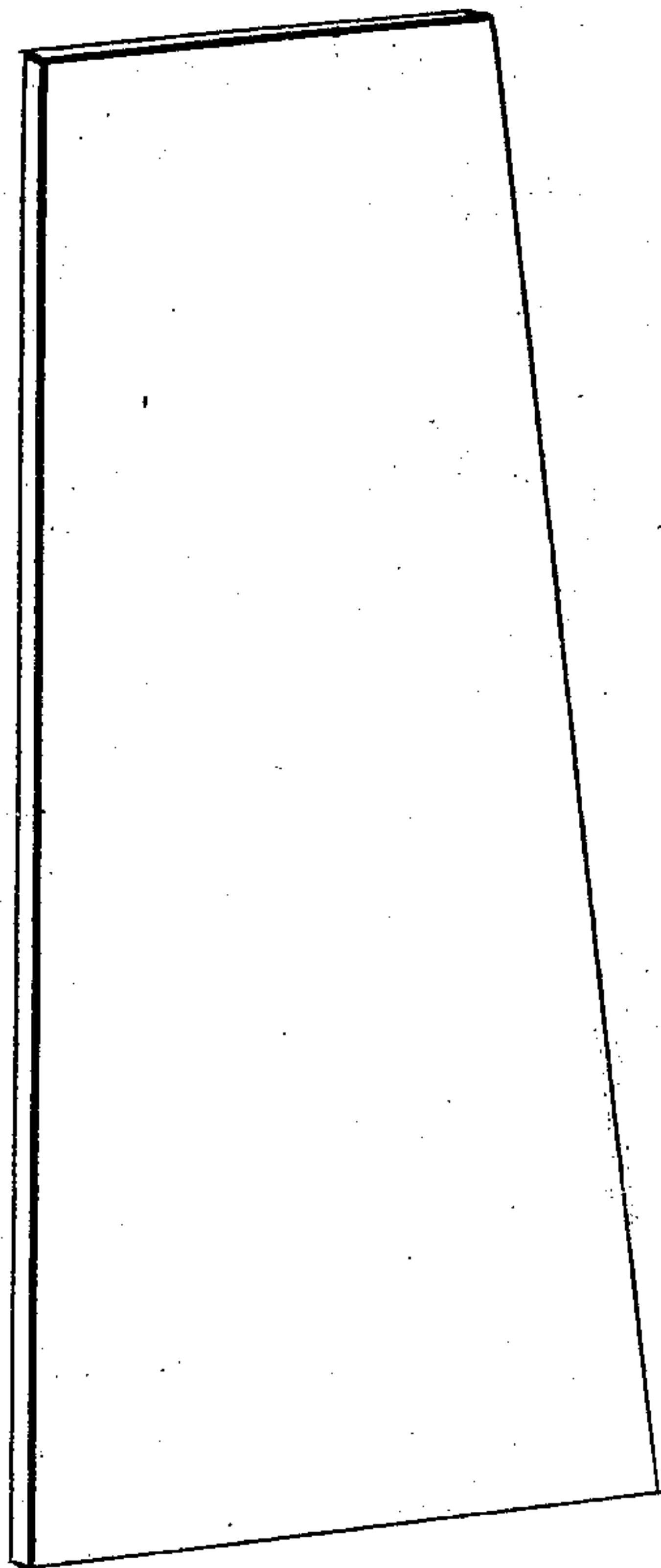
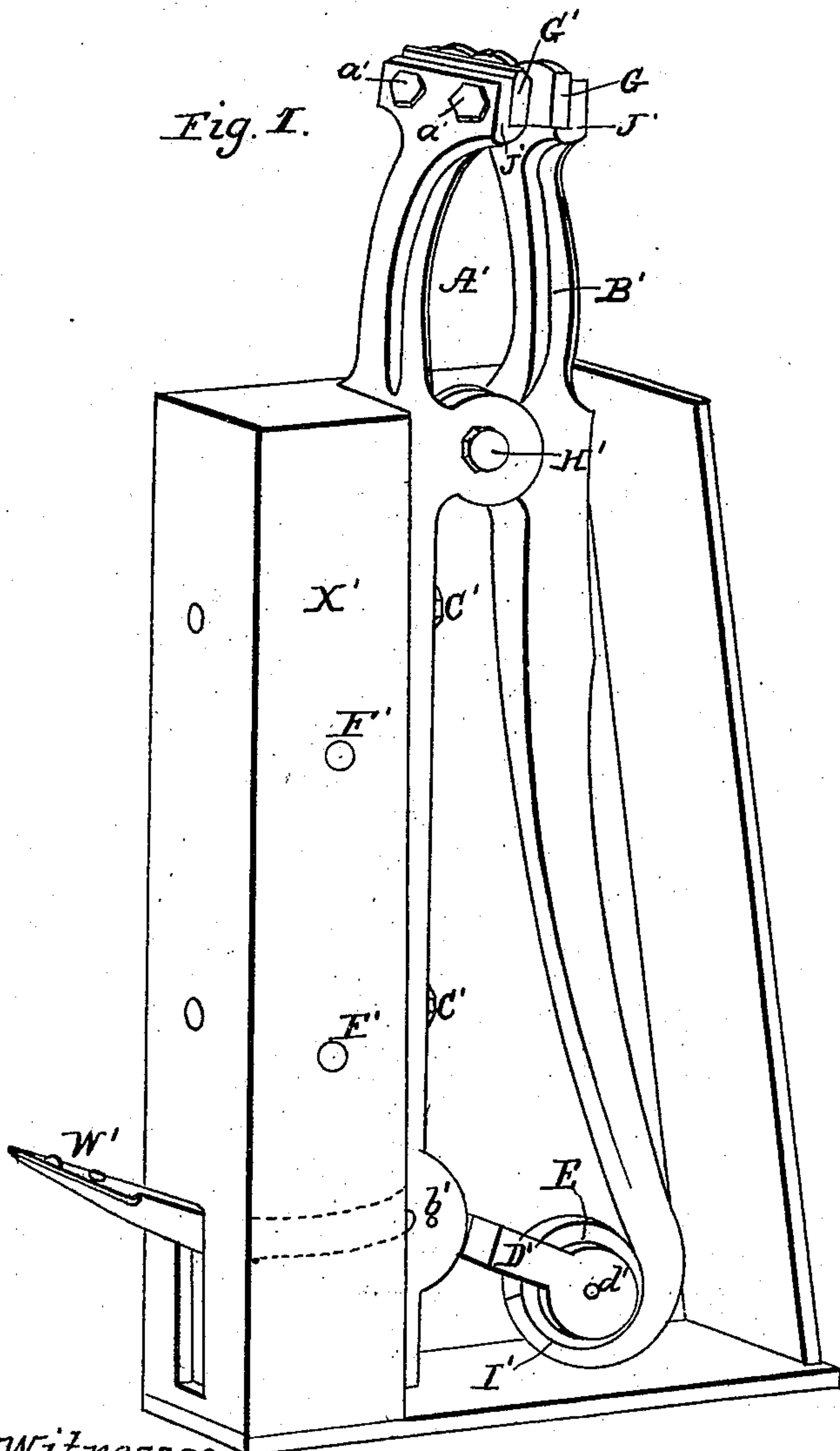
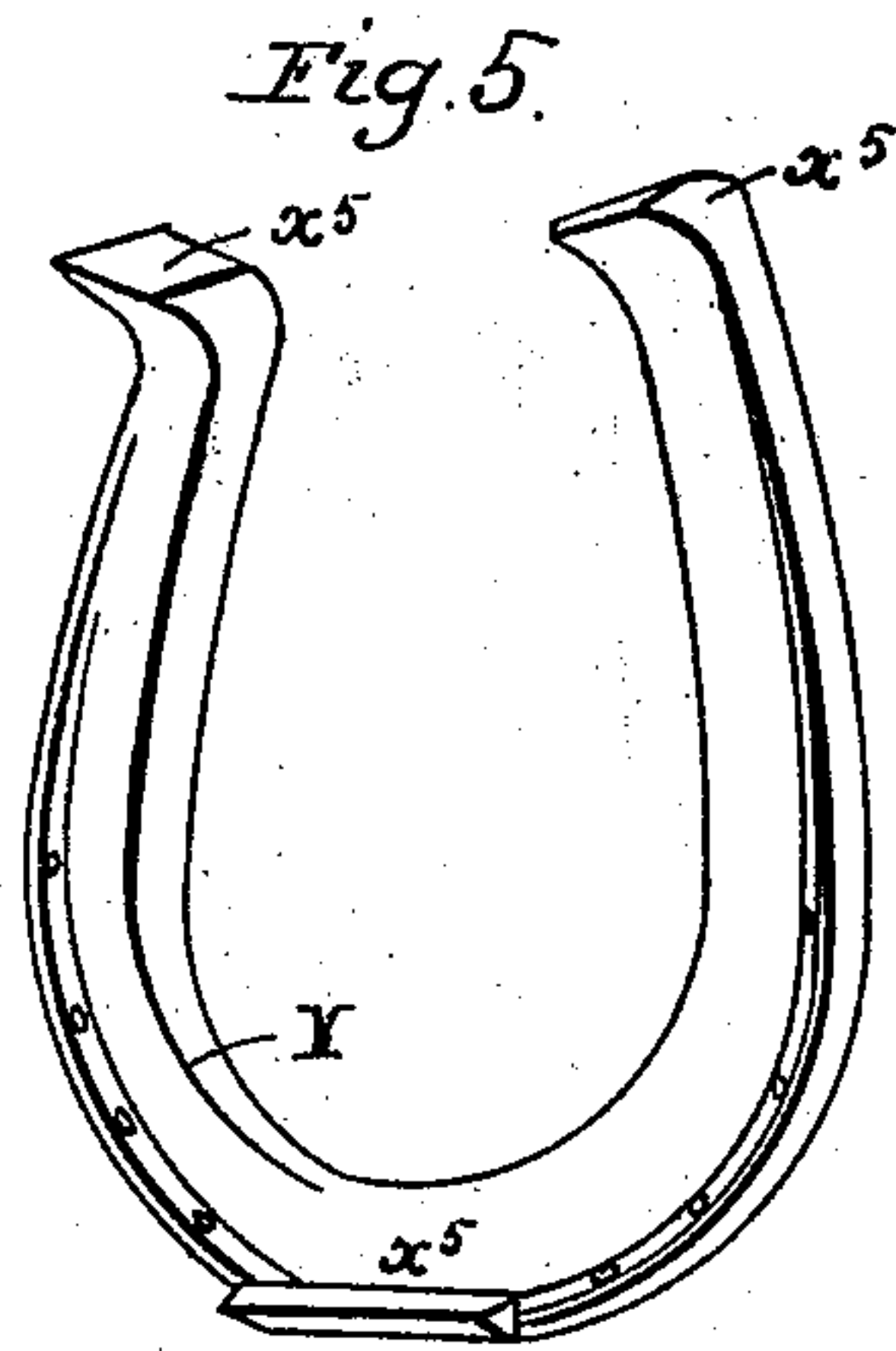
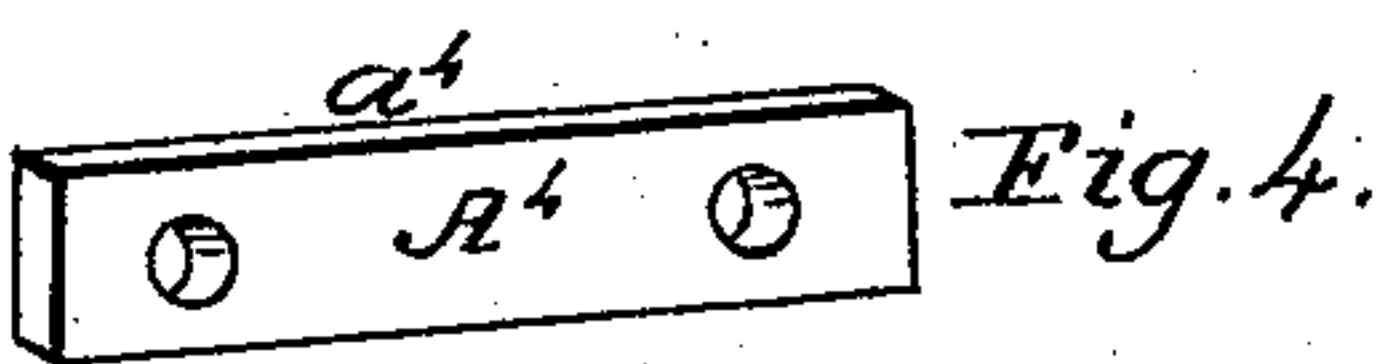
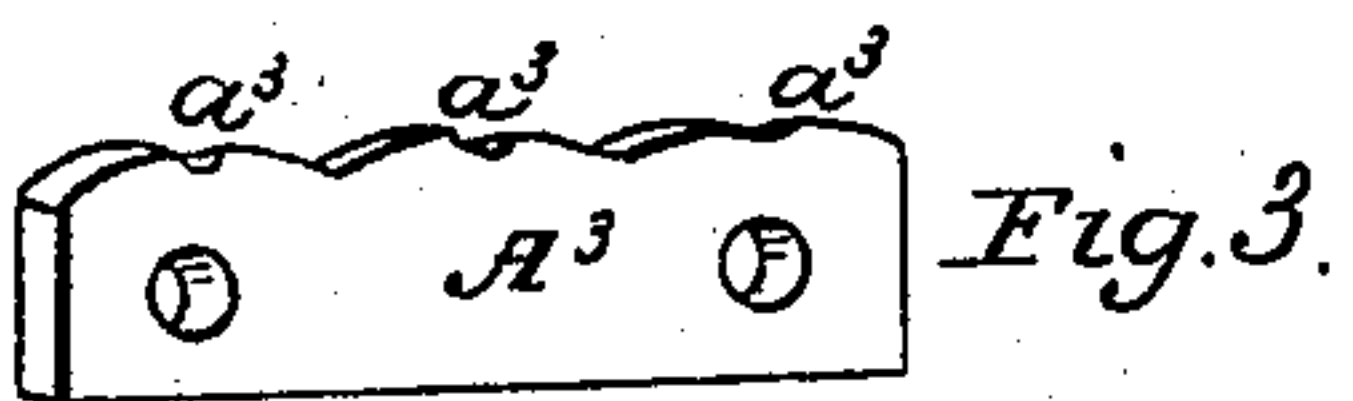
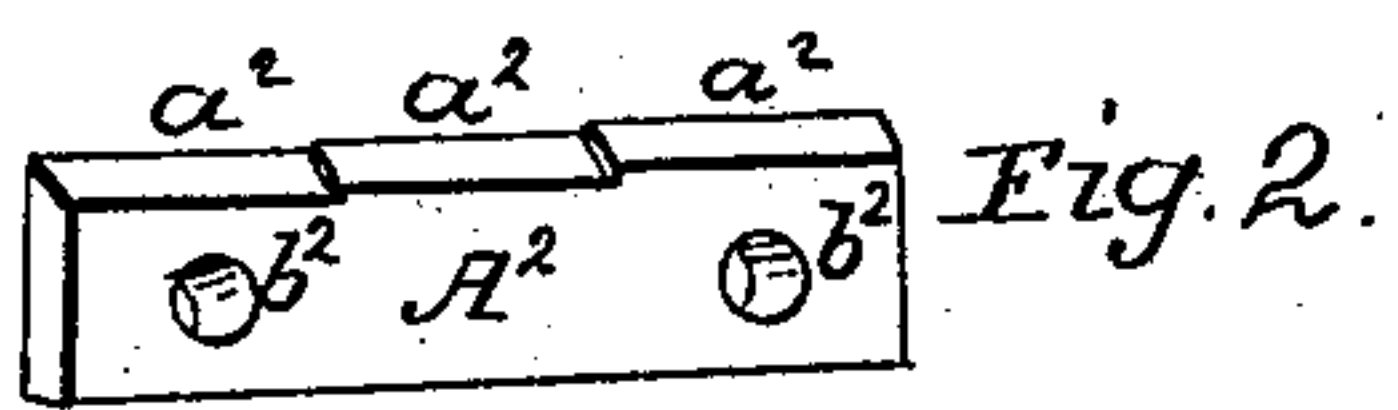


S. B. SKIFF.  
Horseshoe Vise.

No. 34,786.

Patented March 25, 1862.



Witnesses:

H. G. A. Loh  
Wm. H. Sherman

Inventor:  
Stephen B. Skiff

# UNITED STATES PATENT OFFICE.

STEPHEN B. SKIFF, OF NEW BEDFORD, MASSACHUSETTS.

## IMPROVED VISE FOR HOLDING AND SWAGING HORSESHOES.

Specification forming part of Letters Patent No. 34,786, dated March 25, 1862.

*To all whom it may concern:*

Be it known that I, STEPHEN B. SKIFF, of New Bedford, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement on a Vise for the Holding of Horseshoes and Swaging their Calks; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of my invention. Figs. 2, 3, and 4 are perspective views of the dies. Fig. 5 is a perspective view of a horseshoe.

My invention consists in affixing movable and adjustable dies to the jaws of a vise for swaging and forming the calks of metallic shoes, and in operating a vise and gripping the shoes between the dies by means of a treadle.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In Fig. 1, A' B' is the vise, secured to post X' by bolts C' C'. D is a treadle hung in a movable joint in the vise at b' and passes through a mortise in post X', as indicated by the dotted lines. E' is a friction-wheel affixed in a crutch D' by pin d'. G' G' are dies secured to the jaws J' J' by bolts a' a'. H' is a hinge and connects A' and B'. I' is the lower end of B', (the movable part of the vise,) bent in the form of a curved hook.

In Figs. 2, 3, and 4, A<sup>2</sup> A<sup>3</sup> A<sup>4</sup> are dies. a<sup>2</sup> a<sup>2</sup> a<sup>2</sup> a<sup>3</sup> a<sup>3</sup> a<sup>3</sup> a<sup>4</sup> are bevels designed to form corresponding bevels on the calks. a<sup>2</sup> a<sup>2</sup> a<sup>2</sup> in Fig. 2 is an oblique bevel for the swaging of sharp calks. a<sup>3</sup> a<sup>3</sup> a<sup>3</sup> is a form for raising a clip on the toe of the shoe. a<sup>4</sup> is a form for smooth calks.

In Fig. 5, y is a horseshoe. x<sup>5</sup> x<sup>5</sup> x<sup>5</sup> are

calks. z<sup>5</sup> is a strong bevel on the inside of the calk.

Operation: The several parts of the shoe-vise being constructed as herein described, the dies affixed to the jaws as herein specified, the vise A' attached to post X' by bolts C' C', and post X' secured to the anvil-block by bolts F' F', its operation may be noted. When the steel designed to form the calks is welded to the shoe, the shoe is put between the jaws of the vise so that the steel will project over and rest on the die. One foot placed on the treadle at w' will cause the friction-wheel E' to travel up the inclined plane formed by the lower end of B', causing the dies to grip the shoe at z<sup>5</sup>, (see Fig. 5,) when the calks are quickly and accurately swaged by hammering. When the foot is removed from the treadle, the weight of E' will cause it to fall and assume the position indicated by the engraving, and the weight of the lower end of B' will cause it to swing in and follow the friction-wheel in its descent until the wheel rests in the curved hook I'.

I do not confine my invention to swaging the calks of horseshoes. Calks on any metallic shoe may thus be formed. Neither do I claim any device previously invented or patented for swaging or forming the calks of shoes; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

A hinge-vise A' B', with movable and adjustable dies G' G' affixed to the jaws J' J', on which to form the calks of shoes, the treadle D', and friction-wheel E', constructed and operating substantially as and for the purpose set forth and described.

STEPHEN B. SKIFF.

Witnesses:

H. G. O. COLE,

WM. H. SHERMAN.