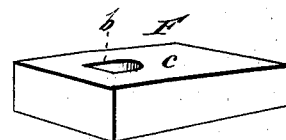
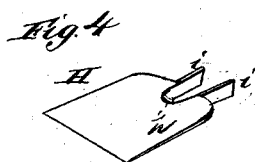
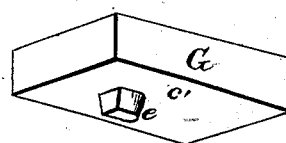
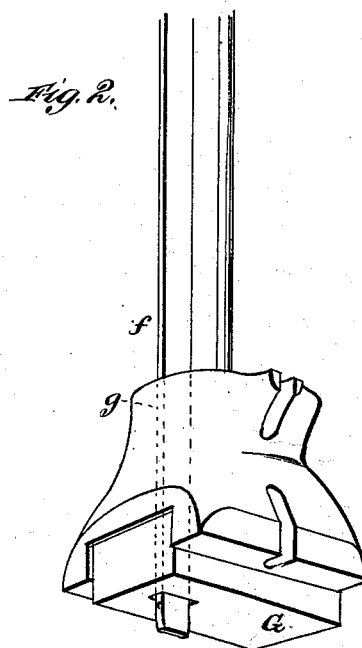
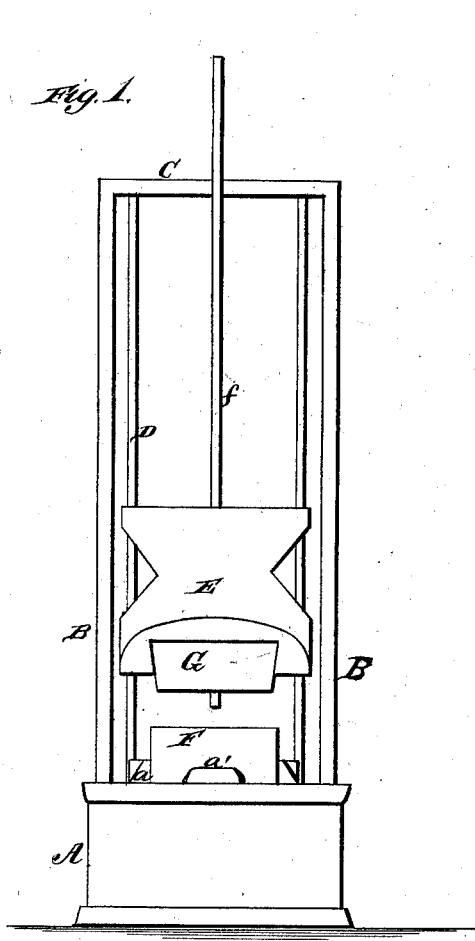


A. SCHWEHR.
Device for Manufacturing Hoes.

No. 216,224.

Patented June 3, 1879.



WITNESSES
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UNITED STATES PATENT OFFICE.

ALBERT SCHWEHR, OF SANDUSKY, OHIO.

IMPROVEMENT IN DEVICES FOR MANUFACTURING HOES.

Specification forming part of Letters Patent No. **216,224**, dated June 3, 1879; application filed January 25, 1879.

To all whom it may concern:

Be it known that I, ALBERT SCHWEHR, of Sandusky, in the county of Erie and State of Ohio, have invented a new and valuable Improvement in Dies for the Manufacture of Hoes; 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, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side elevation of my device. Fig. 2 is a perspective view of the hammer. Figs. 3 and 4 are perspective detail views.

This invention has relation to dies for the manufacture of pressed and welded hoes; and it consists in the improvements in the construction of the same, hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings similar letters of reference indicate corresponding parts in the several figures.

From a solid foundation or base, A, rise two uprights, B B, which are connected at the top by a cross-piece, C.

The lower ends of ways D D are secured in the base A, and their upper ends are held by the cross-piece C.

A drop-hammer, press-hammer, or power-hammer, E, works up and down in the ways D D, and may be operated either as a drop-hammer, press-hammer, or power-hammer by any suitable mechanism.

Upon the base A and resting in guards *a a'* is a die, F, having a recess, *b*, and a beveled face, *c*. The recess *b* is elongated, beveled downward and inward at one end, and made oval at the other; or it may be of any other suitable shape.

In the under face of the hammer E, secured in any suitable manner, as by a wedge, is a second die, G, having a beveled face, *c'*, corresponding with the face *c*, and a slot through which the point *e* of the bar *f* passes to press the metal of the hoe into the recess *b* to make the depression, which is afterward cut or punched out to permit the eye to be formed by welding or brazing.

The bar *f* is passed through the slot *g* in the hammer E, and may be operated in any suitable manner, as by a screw, or by blows upon

its upper end, to form the depression before mentioned.

The lower end, *e*, of the bar *f* should correspond with that of the recess *b*, except that it should be smaller, and both may be varied to form any suitable-shaped eye in the hoe. The metal (which may be of any suitable kind) from which the hoe is to be made is first shaped at the edges by any suitable means, such as shearing, hammering, or the like, and then placed upon the die F. The bar *f* is then caused to descend upon the blank H by any suitable power, and the lower end, *e*, presses the metal into the recess *b*, where it is held until the hammer E descends and shapes the blade of the hoe between the dies. The blank H is then removed from the dies, sheared or punched into the desired shape, and the indented portion *h* punched out.

The two prongs *i i* left after punching out the indented part *h* are then welded or brazed together by hand, or in any other suitable manner, and formed to any desired shape of eye. The hoe thus formed may be strengthened by having a rib pressed in it. To accomplish this one of the dies should be provided with a groove and the other with a corresponding rib in its face.

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

1. The combination of the base A, having uprights B B and ways D D, with the die F, having recess *b* in its face, and the hammer E, having slot *g* and carrying the die G, provided with a recess, through which the bar *f* passes to form the projection *e*, substantially as and for the purposes set forth.

2. The process herein described for manufacturing hoes by punching the depression *h* in the blank by means of the bar *f*, shaping the blank by the dies F and G, shearing or punching the depression *h* from the blank to form the prongs *i i*, and then welding or brazing the prongs *i i* to form the eye of the hoe, as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ALBERT SCHWEHR.

Witnesses:

GEO. BACHMANN, Jr.,
J. L. DE WITT,