

E. B. STIMPSON.

APPARATUS FOR CUTTING AND ORNAMENTING SHOE UPPERS.

No. 180,672.

Patented Aug. 1, 1876.

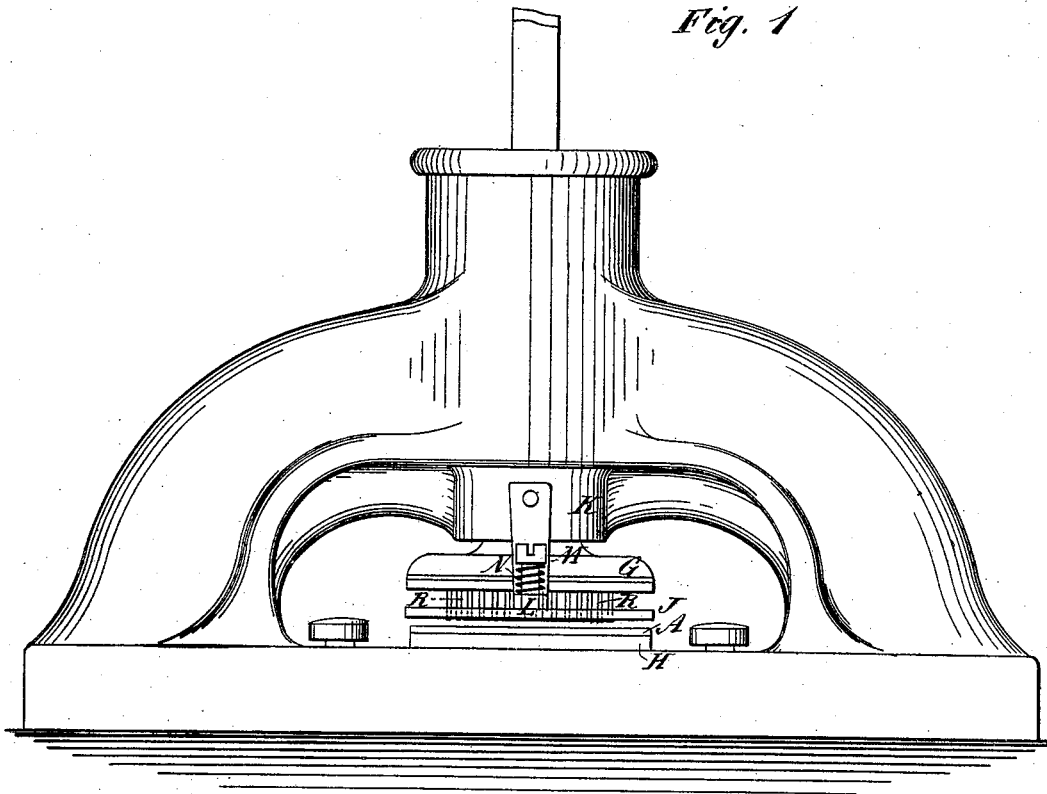


Fig. 1

Fig. 2

Fig. 5

Fig. 6



Fig. 3

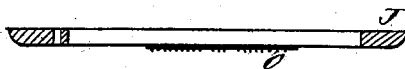
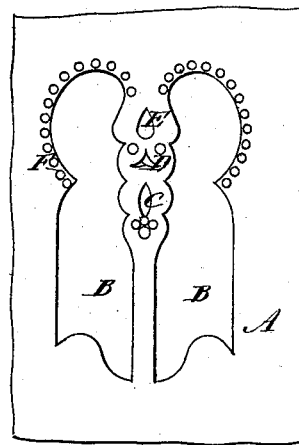
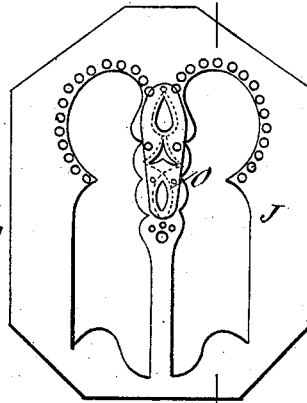
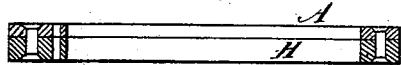


Fig. 4



WITNESSES.

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# UNITED STATES PATENT OFFICE.

EDWIN B. STIMPSON, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN APPARATUS FOR CUTTING AND ORNAMENTS SHOE-UPPERS.

Specification forming part of Letters Patent No. **180,672**, dated August 1, 1876; application filed June 20, 1876.

*To all whom it may concern:*

Be it known that I, EDWIN B. STIMPSON, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Presses for Cutting and Punching Boot and Shoe Uppers, of which the following is a specification:

My invention relates to machines for cutting out and punching fancy designs on boot and shoe uppers, which consist essentially of a series of small punches, one or more large punches, a bed-die, and a stripper, contrived in the ordinary way of punching-machines, for making ornamental figures in the uppers of shoes; and it consists of the steel die-plate riveted to an iron plate, the object of which is to combine with the die-plate a sufficient body of metal, that will not crack in cooling, to prevent the die-plate from cracking, to which it is so liable in hardening, owing to the irregular, and, in some places, narrow parts of the metal.

It also consists of the stripper suspended from the head of the press by springs to raise it out of the way of handling the goods after the goods are cut, the stripper being fixed on guides which keep it in its proper position.

It also consists of a marking-plate, having small points for marking imitation stitches, or other ornamental design attached to the under side of the stripper-plate for being operated by it.

It also consists of the broad punches for cutting out long strips made concave on the cutting end, whereby they project more at the opposite sides, and shear-cut the goods from both ends of the long slots to the center, whereby they not only cut easier, but they hold the goods in their position on the die, instead of forcing them to one side.

Figure 1 is a side elevation of my improved machine. Fig. 2 is a section through one of the large punches, taken on line *x x*, Fig. 5. Fig. 3 is a section of the stripper. Fig. 4 is a section of the bed-die. Fig. 5 is a plan of the stripper; and Fig. 6 is a plan of the bed-die.

Similar letters of reference indicate corresponding parts.

A is the bed-die, having the large openings

B and smaller ones C, D, E, and F, for which there are corresponding punches or cutters in the movable head G of the press for cutting out ornamental figures in the leather uppers for shoes. This die-plate is riveted to an iron bed-piece, H, of corresponding shape, and having similar openings through it, said iron plate being to hold the heat, and also to hold the steel die-plate, so as not to break when hardening the die. J is the stripper for stripping the work off the punches. It is suspended from the press-head K by the arms L, guide-rods M, and springs N, so that it can rise a certain distance above the bed-die when the punches rise, and thus be out of the way of adjusting the work under the punches.

The springs N allow the head G to press the stripper down when it goes down to drive the punches, and the arms L stop it when it has raised as high as desired, to allow the punches to rise up into it, so that it can strip off the goods.

O represents the marking-plate, attached to the under side of the stripper, for marking ornamental figures to guide the operator in stitching the figures.

This plate may be as shown in the drawing, or it may be extended so as to mark around the line of holes F, or to make any desired figure.

Q represents one of the broad punches for punching out the holes B. It is made concave in the punching-face, as shown in Fig. 2, in order that it may shear-cut the goods from the pivots *a* to the center, and thus have the benefit of cutting in that manner without displacing the goods on the die, which would be the case if sheared in one direction only. R represents the punches for working the small holes F of the die-plate, to make the small perforations in the goods.

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

1. The steel die-plate A, in combination with and attached to a similarly-perforated iron supporting-plate, H, substantially as specified.

2. The stripper J, suspended from the press-head K by springs, and arranged to work up

and down on guides, in combination with punches O R, bed-die A, and the punch-head G, substantially as specified.

3. The marking-plate O, attached to the stripper-plate J, in combination with punch-head G, and bed-die A, substantially as specified.

4. The punches O, having a concave face

and projecting points, *a*, substantially as described, for shearing the goods in opposite directions.

EDWIN B. STIMPSON.

Witnesses:

A. P. THAYER,

ALEX. F. ROBERTS.