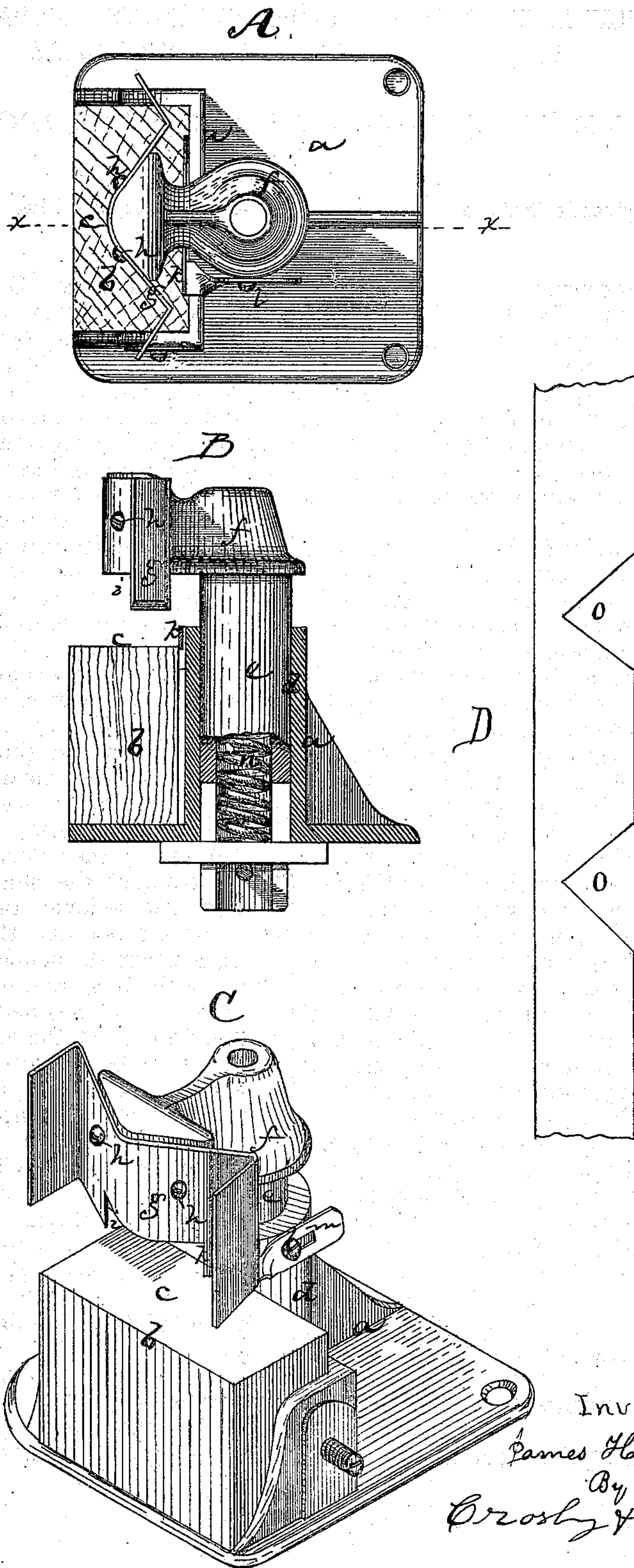


JAMES H. BUSELL.

Machine for Cutting Shoe-Welts.

No. 126,673.

Patented May 14, 1872.



Witnesses.
 Mr. W. Frothingham.
 S. B. Kidder.

Inventor.
 James H. Busell
 By his Attys.
 Crosby & Gould

UNITED STATES PATENT OFFICE.

JAMES H. BUSELL, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HENRY ELMER TOWNSEND, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR CUTTING SHOE-WELTS.

Specification forming part of Letters Patent No. 126,673, dated May 14, 1872.

To all whom it may concern:

Be it known that I, JAMES H. BUSELL, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Cutting Shoe-Welts; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

In making edge-welts for boots and shoes it is customary to use one strip extending around the toe and along each side of the sole, said strip being cut so as to have a thick outer edge, the strip being scarfed therefrom to the opposite edge, so that in section the welt is like a section of a knife-blade, and to easily bend the strip at the opposite corners or ends of the toe portion angling notches are cut, extending from this thin edge. These notches or angles are usually cut by hand, and are not very quickly nor perfectly formed.

My invention relates to a means of simultaneously cutting both notches by a knife-cutter or die, which is made with two pairs of angling blades, the edges being so shaped and so disposed relatively that at one blow of the cutter both notches are formed. This double and angle-edged knife or cutter I attach to a head-piece on the upper end of a vertical rod or shaft which is mounted in a vertical sleeve, in which sleeve it is made capable of free vertical movements, the stress of a suitable spring forcing the rod and cutter-attached head up, and they being thrown down by action of a treadle-lever. The cutter projects over or overhangs a cutter-block, with the top surface of which the plane of the cutting-edge is parallel, and at the back of this block is an edge-gauge against which the thick edge of the welt-strip is held. It is in a machine having this general construction that my invention consists.

The drawing represents a machine embodying my invention.

A shows a plan of the machine; B, a sec-

tion on the line *x x*. C shows the machine in a perspective elevation.

a denotes a strong metal stand, at the front part of which is a block-receiving space for containing the cutter-block *b*, which block has a horizontal cutting-face, *c*. Behind this block is a vertical sleeve, *d*, in which slides a piston or shaft, *e*, having fixed upon its upper end a head, *f*, which overhangs the block and has fixed to it the cutter-blade *g*. This blade is secured to the head by screws *h*, or other suitable fastenings, and has two Λ -shaped cutting-edges, between which is an open space, *i*, these edges or their cutting-plane being parallel to the upper surface *c* of the block *b*. At the back of the block *b* is an edge-gauge, *k*, made adjustable in position by a screw, *l*, and slot *m*, or other devices, the gauge being the surface against which the back of the welt is held, to determine the distance from the back or thick edge of the welt at which the knife shall cut the notches. *n* denotes the spring that forces up the cutter, and to draw it down the bottom of the shaft may be connected with a treadle-lever, the bed-frame *a* being set upon a bench and the treadle connection being beneath the bench. D denotes the welt, showing the form and position of the notches *o o*, the two notches being simultaneously cut by the descent of the cutter to the top of the block, as will be readily understood. By these means the welts are rapidly and very perfectly notched for bending into form.

I claim—

The cutter *g*, made with the two notch-forming edges, the cutter being attached to the overhanging head *f*, and having vertical movements imparted to it to carry it down to and up from the block *b*, substantially as described.

Executed this 15th day of February, A. D. 1872.

JAMES H. BUSELL,

Witnesses:

FRANCIS GOULD,
M. W. FROTHINGHAM.