I. FRICHETTE.

Counter-Press.

No. 161,774. Patented April 6, 1875.

FIG. 1.
PLAN

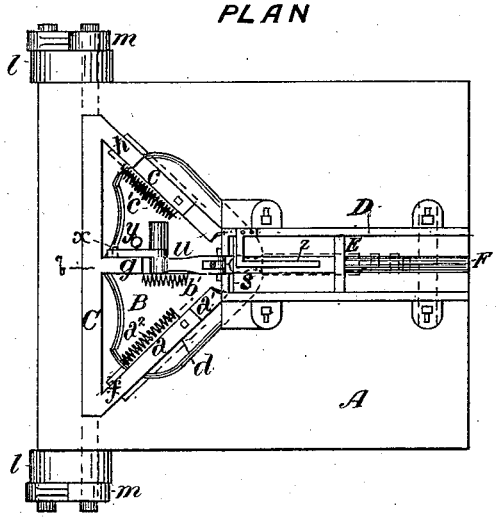

FIG. 2.
SIDE ELEVATION

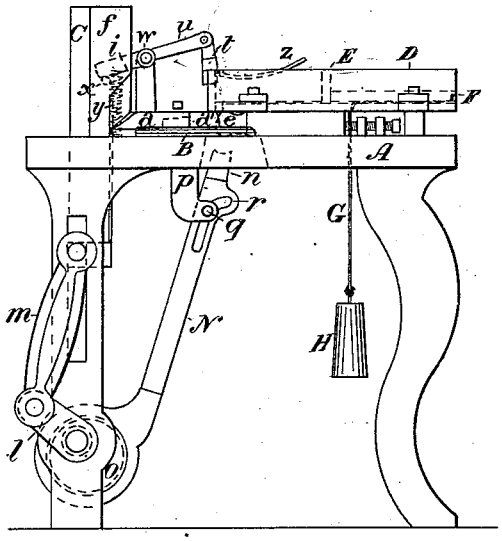

FIG. 3.
DETAIL

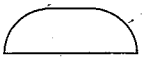

FIG. 4.
DETAIL

Witnesses
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ISAÏE FRÉCHETTE, OF ST. HYACINTHE, CANADA.

IMPROVEMENT IN COUNTER-PRESSES.

Specification forming part of Letters Patent No. **161,774**, dated April 6, 1875; application filed March 10, 1875.

To all whom it may concern:

Be it known that I, ISAÏE FRÉCHETTE, of the city of St. Hyacinthe, in the county of St. Hyacinthe, in the Province of Quebec, Canada, have invented a new and useful Improvement in Counter-Presses, of which the following is a specification:

The object of my invention is to rapidly and evenly form the pieces of leather or other material into the necessary shape for the stiffening of the heels of boots and shoes, and to make the counter-press used for that purpose self-feeding.

Reference being had to the annexed drawings, where similar letters indicate like parts, Figure 1 represents a plan of a machine embodying my invention; Fig. 2, a side elevation of same; Fig. 3, a detail of material before being formed; Fig. 4, a detail of material after being formed.

Letter A is the table of the machine, on which are three bars, *a*, *b*, and *c*, arranged to slide in the dovetailed groove *d*, in the raised portion B of the table A. These bars are provided with movable dies, as a^x, which fit the mold *e*, and are worked by the frame C, the projecting pieces of which, *f g h*, are beveled at the bottom ends, as shown at *i*. As the frame C comes down these beveled edges slide on the ends of the bars *a*, *b*, and *c*, which are formed with a corresponding bevel, and force them forward until the faces of the dies are in contact with the mold *e*, or nearly so, the spiral springs a^2, b', and c' bringing them back as the frame C rises. The frame C receives its motion from the shaft *k* through the cranks *l* and connecting-rods *m*. The machine is also provided with a fourth die, *n*, fastened in the end of the rod N, and worked by the eccentric *o*, the object of which is to press up the bottom edge of the material against the bottom of the mold *e*. Attached to the under side of the table A are the snugs *p*, in which is fastened a guide-pin, *q*, the rod N being provided with a slot, *r*, through which the pin *q* passes to keep it in its proper position. By the peculiar shape of the slot *r*, when the rod N is drawn down, it is also drawn back between the snugs *p*, so as not to impede the passage of the finished piece as it falls from the mold *e*.

The self-feeding of the machine is accomplished as follows: A feeding-trough, D, is placed above the table A, in such a manner that one end of it is immediately over the face of the mold *e*, at which place there is a slot, *s*, in the bottom of the trough D, extending from side to side, and of such a width as to allow only one piece of the material to pass. There is also an opening in the end of the trough D, in which the block *t* slides up and down when worked by the lever *u*, which is pivoted at *w*. The end of the lever *u* is raised by a pin, *x*, in the frame C, and brought down by the spiral spring *y*. In the trough D is a movable board, E, attached to the bar F, which slides in a dovetailed groove in the bottom of the trough D. At the opposite end of the bar F, to which the board E is attached, it is provided with a hole, through which a cord or chain, G, passes, the end being brought along under the bar F some distance, and passed down through the table A, and made fast to a weight, H, below.

The mode of operation is as follows: The material being cut into the form shown by Fig. 3, a number of pieces are placed in the feeding-trough D, when the weight H, acting through the cord G and bar F, presses the board E against them, and forces them toward the front end of the trough. As the frame C rises the block *t* is depressed by the lever *u* forcing one of the pieces through the slot *s* onto the table A, in front of the mold *e*. As the shaft *k* revolves, the frame C comes down again, forcing the dies against the mold *e*, and the piece of the material, being between them, is forced into the required shape, as shown in Fig. 4.

The trough D is also furnished with a spring, *z*, at the front end, and extending back, with an upward curve, as shown, to keep the pieces of material down in their place in the trough when being pushed forward by the board E.

What I claim as my invention is—

1. In combination with the table A, the bars *a b c*, grooves *d*, raised portion B, dies

a^1, mold *e*, and frame C, having projections *f g h*, with beveled ends *i*, spiral springs a^2 *b'* *c'*, shaft *k*, cranks *l*, and connecting-rods *m*, substantially as and for the purposes described.

2. In combination with the table A and mold *e*, the die *n*, rod N, provided with the slot *r*, eccentric *o*, snugs *p*, and guide-pin *q*, substantially as and for the purposes described.

3. In combination with the table A, the feeding-trough D, having slot *s*, board E, bar F, cord G, weight H, and spring *z*, substantially as and for the purpose described.

4. In combination, with the trough D, the block *t*, lever *u*, pivot *w*, pin *x*, and spring *y*, substantially as and for the purposes described.

ISAÏE FRÉCHETTE.

Witnesses:

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