

UNITED STATES PATENT OFFICE.

JOSEPH RIDER, OF WOOSTER, OHIO.

BOOT-PATTERN.

Specification of Letters Patent No. 4,068, dated June 2, 1845.

To all whom it may concern:

Be it known that I, JOSEPH RIDER, of Wooster, in the county of Wayne and State of Ohio, have invented a new and useful Improvement in Movable Patterns for Cutting Boots; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, which represents the different parts thereof, Figure 1 being the front pattern; Fig. 2, the back pattern.

The nature of my improvement consists in the construction and arrangement of the sliding parts of the patterns and the scale adapted thereto.

To construct this pattern I cut a form A out of sheet brass or other suitable material the front edge of which forms the curve of the instep; the outline of this is shown in Fig. 1, bounded by the dotted lines along the back edge which is under the sliding piece B. This piece A is no wider than the smallest boot to be cut and the foot part is also of a corresponding size; on this piece A is fastened by studs or screws another piece B as shown in the figure, there being slots therein to allow it to slide on the studs fastened to said plate A. The upper slot *b* is of curved form and is made near the upper end of the plate. The lower slot *c* is straight, or nearly so, and is situated just above a line level with the instep. They both incline upward, as they run back, so that as the piece B slides out it shall be elevated; an index *x* at the lower slot is for the purpose of marking the sizes as hereafter named. To the lower end of plate B there is a smaller plate C attached having vertical slots in it which are slightly curving so that as the piece C is drawn down, the upper end is drawn in a little, while the lower end is carried outward, as shown in the Fig. 1. This is the draft piece, and is for the purpose of regulating the draft. This is very important, as it requires the greatest skill of the cutter to determine the draft of boots of different sizes which this determines at once, and on this depends the fitting of the boot. The end of the draft piece extends under the instep forward a little distance to meet the instep piece D. This piece in its lower outline corresponds with

the outline required of the sole at that point. The upper part is somewhat triangular with a small projection upward at its highest point for the continuation of a nearly vertical slot *d*, through which the stud or screw is put that attaches it to the piece A. There is also another similar slot (*e*) further forward, and lower, for steadying it. There is also added to plate A a sliding toe piece E, with a slot *f*, in it parallel with the line of the top of the foot. The two last named pieces have indexes to denote their distance from the instep. There is also in addition to the index *x*, to the back slide B, above named another one below it *y*, which is for the measuring of the last, as hereafter named.

The operation of this machine is as follows, the back slide is drawn out to the proper distance for the size of the ankle the upper end moving faster than the lower one to make the corresponding size above, by means of the curved slot *b*; the number to which slide B, is drawn out on the scale *y*, added to the number on the index of the instep piece E, gives the number of the last, the scale of the instep piece D, gives the size of the instep; the draft piece C, is then brought down to a line with the instep piece as shown in the drawing. The index to this draft piece then designates the length to which the draft piece H Fig. 2, constructed similar to draft piece C already described on the back must be set at.

The back is composed of two parts F and G similar in form to the leg part of the pattern shown in Fig. 1, with the foot part cut off in a vertical line on F, and the slide G, is constructed and moves similar to that lettered B, Fig. 1, the draft piece H operating similar to that *c*, before described in Fig. 1. The index *g*, for regulating the slide G by, is similar to the one marked *x* in Fig. 1. By this pattern the backs of boots can be cut with the greatest exactness.

Having thus fully described my improvements in boot patterns what I claim as my invention and desire to secure by Letters Patent is—

1. Combining the plates A and B and F, and G in the manner described by means of the curved slot *b* and straight slot *c*, ar-

ranged in the manner and for the purpose set forth. I also claim the combination of the draft piece C with the slide B, in the manner herein specified.

- 5 2. I also claim in combination with the front pattern A the separate pieces for measuring the toe and instep as set forth.

3. And lastly I claim the combination of the index y with the index on the toe piece E for the purpose above specified.

JOSEPH RIDER.

Witnesses:

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HORATIO HOSKINS.