(No Model.)

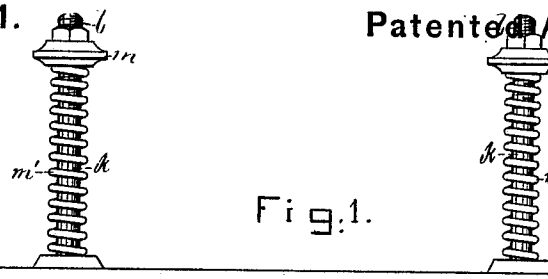
2 Sheets—Sheet 1.

P. R. PICKERING.

Machine for Marking and Punching Holes in Shoe Quarters.

No. 231,191. Patented Aug. 17, 1880.

Fig. 1.



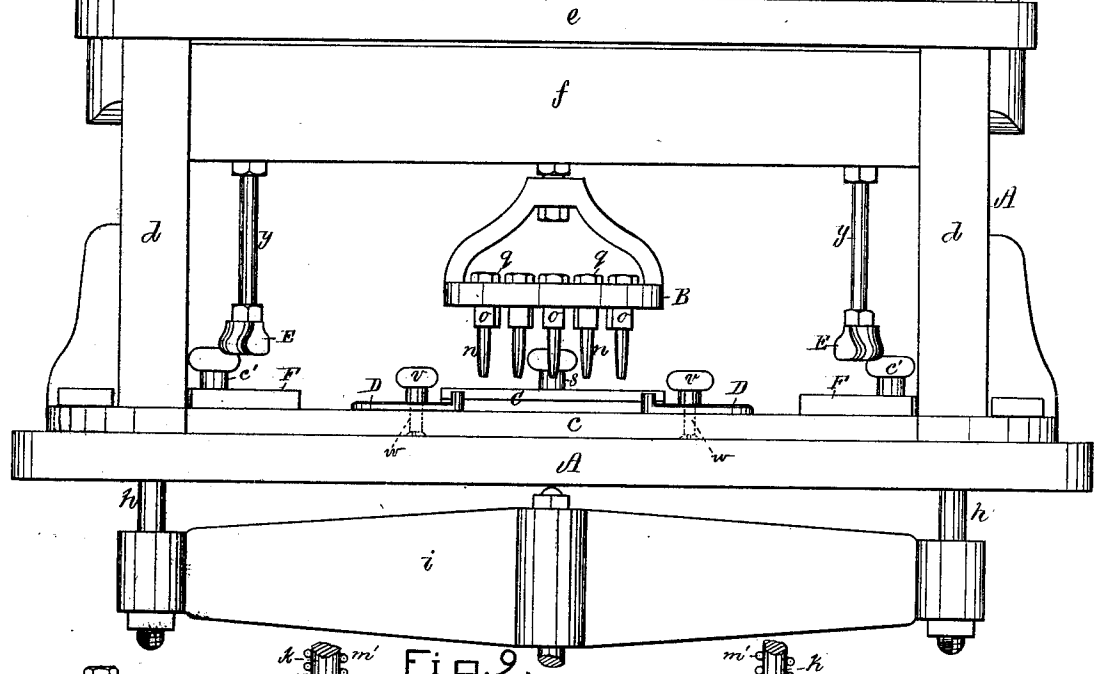
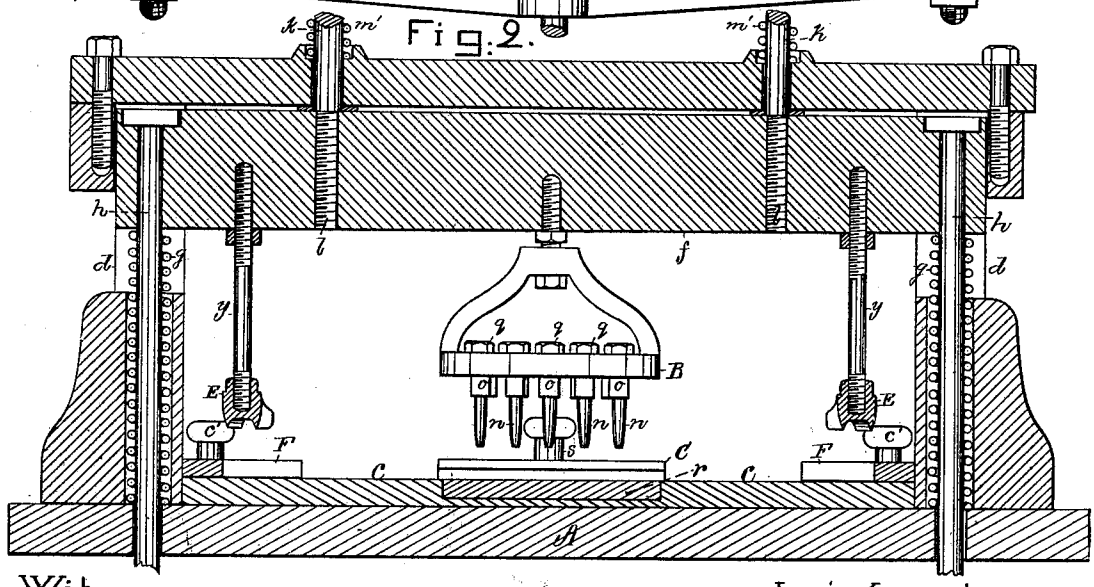


Fig. 2.



Witnesses.

S. N. Piper

Wm. W. Spunt

Inventor.

Paul R. Pickering.

by R. H. Eddy, atty.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

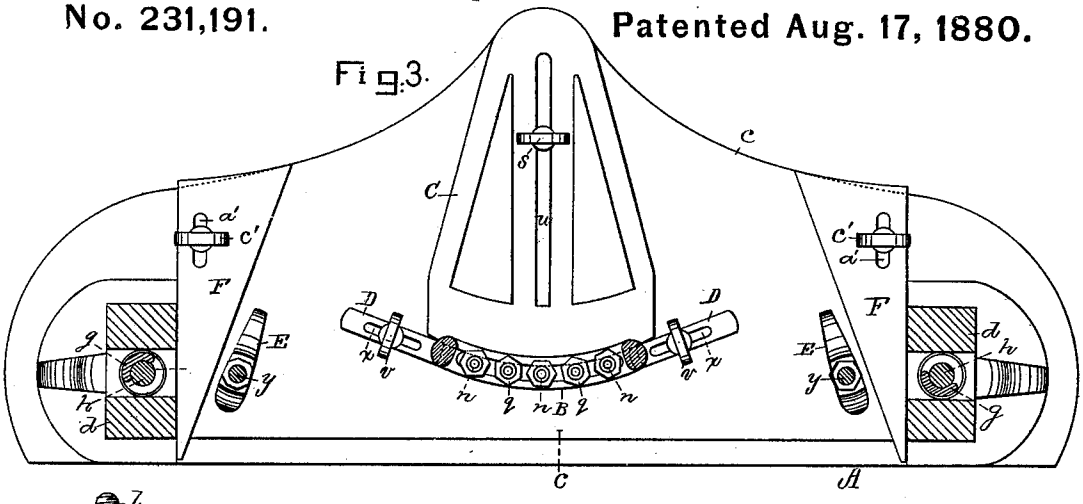
(No Model.) 2 Sheets—Sheet 2.

P. R. PICKERING.

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Fig. 3.



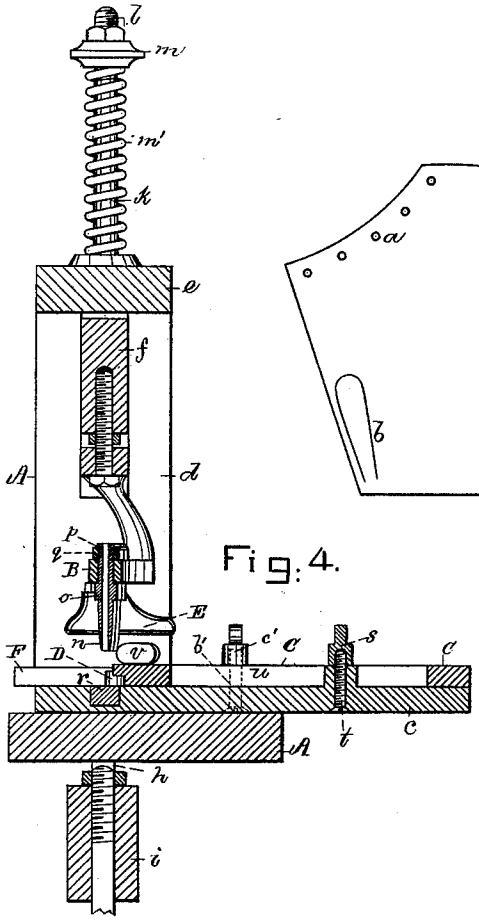


Fig. 4.

Fig. 6.

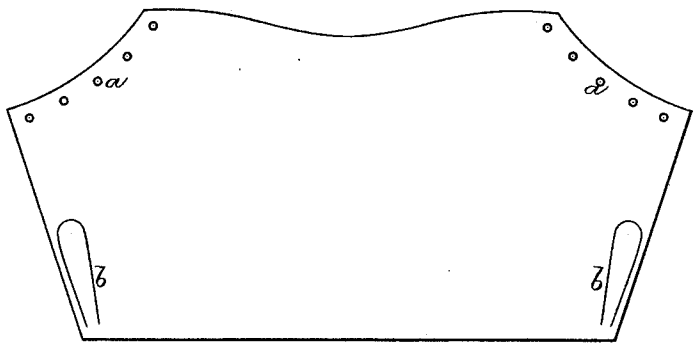
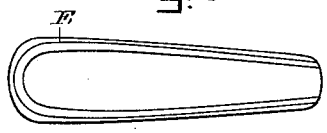


Fig. 5.



Witnesses.

S. N. Piper.

Wm. W. Hunt

Inventor.

Paul R. Pickering.

by attorney.

R. H. Eddy

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

PAUL R. PICKERING, OF GEORGETOWN, MASSACHUSETTS.

MACHINE FOR MARKING AND PUNCHING HOLES IN SHOE-QUARTERS.

SPECIFICATION forming part of Letters Patent No. 231,191, dated August 17, 1880.

Application filed July 12, 1880. (No model.)

To all whom it may concern:

Be it known that I, PAUL R. PICKERING, of Georgetown, of the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Machinery for Marking Shoe-Quarters and Punching the Lacing-Holes thereof; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a front elevation, Fig. 2 a vertical section, Fig. 3 a sectional top view, and Fig. 4 a transverse section, of a machine embodying my invention, the nature of which is fully set forth in the claims hereinafter presented. Fig. 5 is an under-side view of one of the indenters or markers. Fig. 6 is a top view of a shoe-quarter as punched and indented or marked by the machine, there being two sets of lacing-holes, *a*, and two markings, *b*, each of the latter being to indicate the course of the sewing by which the quarter is to be connected with the vamp.

In the drawings, A denotes the frame of the machine, it being provided with a bed-plate, *c*, upon which there are two standards, *d*, connected by a cap-bar, *e*. Underneath the bar *e*, and extended into the standards *d d*, is a bar, *f*, which at its ends is supported on the tops of helical springs *g g*, arranged within the standards. From the bar *f* rods *h* extend down through the springs and are fixed to another bar, *i*, which at its middle is to be suitably connected with a lever or pedal. On manual power being applied to the lever or pedal to depress such, the bar *f* will be moved downward. Furthermore, there is extended up from the said bar *f* and through the cap-bar *e* two rods, *k k*, that at their upper ends are provided with screw-threads *l*, to receive nuts *m*, between which and the cap-bar, and encompassing the rods, are helical springs *m'*. These latter springs are to co-operate with the springs *g* on raising the bar *f* to draw the punches upward out of the shoe-quarter. Should the quarter be too thick for the springs to raise the punches out of it readily, by setting down the nuts on the upper springs the power of the latter may be increased to cause the punches to be withdrawn by the joint action of the springs *g* and *m'*.

B is the carrier of the series of punches *n*, they being adapted to it so as to be adjustable to different distances apart, as occasion may require, each punch being held in position by a shoulder, *o*, and a screw, *p*, and a nut, *q*, arranged as represented. The punch-carrier screws into the bar *f* at its middle, and underneath the punches and in the bed-plate is a bearing-strip, *r*, of wood or other proper material.

In rear of the punches and upon the bed-plate is the adjustable edge-gage C, which is held to the plate by a nut, *s*, that screws upon a screw, *t*, projecting up from the base-plate and through a long slot, *u*, in the gage. This gage is to determine the distance at which the lacing-holes are to be from the next adjacent edge of the quarter. Besides the said gage, and to co-operate with it, are two adjustable end gages, D D, formed as shown, and held in place by clamp-nuts and screws, as represented at *v* and *w*, the screws going up from the bed-plate and through slots *x* in the gages. Furthermore, there extends down from the bar *f* the shanks *y y* of the two indenters E.

Adjustable triangular gages F, arranged on the base-plate, and formed as shown, are for supporting the quarter while being "dinked" or indented or marked by either of the indenters E. The gages F have their longer edges in contact with the inner sides of the two standards, and each gage is right-angled triangular in shape, and is provided with a slot, *a'*, extending through it parallel with the longer edge of the gage. A screw, *b'*, extends up from the base-plate through the slot, and has a nut, *c'*, screwed on it, (the said screw.) Moving the gage in lengthwise changes the distance of its hypotenusal edge relatively to the next adjacent indenter.

In using a machine, a workman, holding a shoe-quarter in his hands, first places one end of it against one of the gages D, and moving the quarter up to the gage C, after which he depresses the punches, so as to cause them to pass through the quarter and form therein one set of the lacing-holes. Next he moves the other end of the quarter up to the other gage D and presses the quarter back against the gage C, as before. Having done this, he again depresses the punches and forms the other set

of lacing-holes. After the lacing-holes may have been thus made the indenters may be employed to mark the quarter near its ends, in manner as shown at *b b* in Fig. 6, the said markings being done by placing the quarter underneath each of the indenters and depressing it upon the quarter.

I claim as my invention as follows:

1. The shoe-quarter-lacing-hole-punching machine, consisting of the back gage and the two end gages and the series of punches, all arranged in the form and having mechanism as described for operating them, as set forth.

2. The combination of the indenters and their adjustable gages with the frame and its lacing-hole punching mechanism, as described, all being to operate as set forth.

PAUL R. PICKERING.

Witnesses:
R. H. EDDY,
WM. W. LUNT.