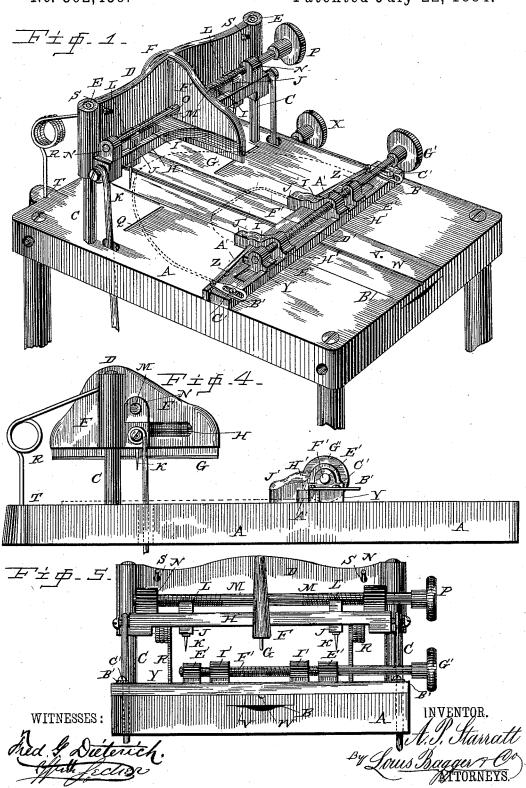
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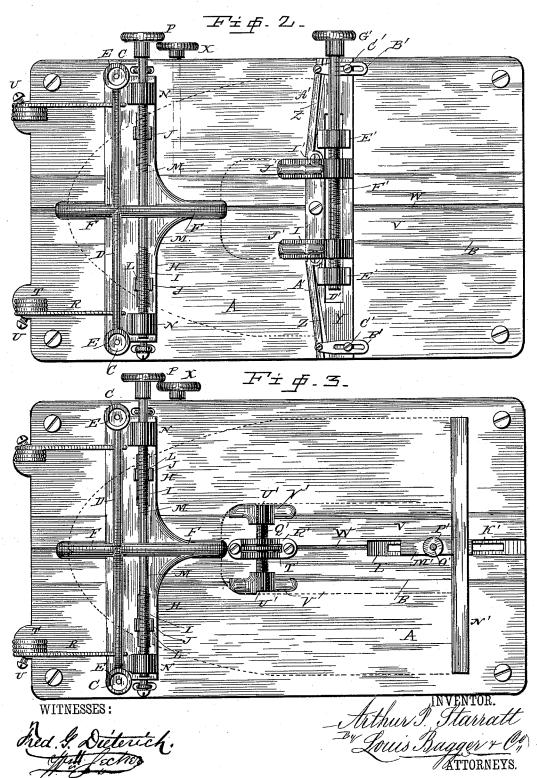
No. 302,439. Patented July 22, 1884.



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## UNITED STATES PATENT OFFICE.

ARTHUR P. STARRATT, OF BROCKTON, MASSACHUSETTS.

## MACHINE FOR MARKING AND GAGING SHOE-VAMPS.

SPECIFICATION forming part of Letters Patent No. 302,439, dated July 22, 1884.

Application filed December 3, 1883. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR P. STARRATT, a citizen of the United States, and a resident of Brockton, in the county of Plymouth and 5 State of Massachusetts, have invented certain new and useful Improvements in Machines for Marking and Gaging Shoe-Vamps; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved machine for marking and gaging vamps. Fig. 2 is a top view of the same. Fig. 3 is a similar view of the machine when long vamps are to be marked and gaged. Fig. 20 4 is a side view of the machine, and Fig. 5 is

` an end view.

Similar letters of reference indicate corre-

sponding parts in all the figures.

My invention has relation to that class of machines for marking vamps for shoes in which the marking-tools are depressed by means of a treadle or similar means upon the vamps, which rest upon a table; and it consists in the improved construction and combination of parts of such a machine, marking and gaging the central line of the vamp and the points at which the toe-tips are to be stitched, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates a table, which may be mounted upon legs or other supports in any desired manner, and which has a longitudinal rectangular groove or recess, B, extending in the center of the table. Two uprights, C C, project from the upper side of the table at one end of the same—one near each side edge—and a yoke or frame, D, having two vertical perforations, E E, one at each end, slide upon the uprights. A transverse plate, F, projects to both sides from this yoke or frame at right angles to the same and at its center, and forms an edge, G, at its lower edge, which projects below the lower edge of the yoke, and is sufficiently sharp to leave a distinct mark in a piece of leather if pressed against it.

The lower edge of the yoke is provided with a forwardly-projecting flange or plate, H, which has two longitudinal slots, I, extending from both sides of the transverse plate to- 55 ward both ends, and two blocks, J, forming points K at their lower ends and having recesses L at their upper ends, forming one-half of a female screw, slide in these slots. A right and left hand screw, M, turns in bearings  $\breve{\mathbf{N}}~\mathbf{N}~$  60 at each end of the yoke, and with its middle in a perforation, O, in the transverse plate, bearing with its threads in the female-threaded recesses of the pointed sliding blocks, and is provided at one or both ends with a milled 65 disk, P, by which it may be turned, moving the sliding blocks closer together or farther apart, as desired. The points of these sliding pointed blocks fit into transverse slots Q in the table when the yoke is depressed, which 70 may be done by rods hinged to the ends of the yoke and passing downward through the table to a treadle, or by any other desirable means; and two springs, R, fitting with their upper ends into perforations S in the ends of 75 the upper edge of the yoke, forming spirals at their central portions and fitting with their lower ends into perforations T in the table, in which they are adjusted by means of set-screws U, serve to raise the yoke after it has been de- 80 pressed. Abar, V, rectangular in cross-section, and having a longitudinal groove, W, in its upper side, exactly in the central line, slides in the longitudinal recess in the table, and may be adjusted in the same by a set-screw, X, pass- 85 ing into the groove from one side of the table. A transverse bar, Y, is secured upon the upper side of this sliding bar, and has the edge facing toward the sliding yoke cut off obliquely toward the ends, as shown at Z, and two arms, 90 A', hinged at their inner ends to the center of the bar, bear against these oblique edges, and may be swung out from them, being adjusted in their angle to the edges by two slotted flat plates, B', hinged at one end to the arms near 95 their outer ends, and sliding with their slots upon screws C' fitting in perforations in the upper side of the transverse bar, by which screws they may be adjusted. The upper surface of the transverse bar has a longitudinal 100 recess, D', at the ends of which are bearings

left hand screw, F', turn, one end of which is provided with a milled disk, G', by which it may be turned, and the threaded parts of the screw pass through female-threaded perforations H' in blocks I', which have reduced lower parts sliding in the recess, and forwardly-projecting ends J', which bear with their under sides upon the upper surface of the table.

The foregoing description is of the gage used 10 for short vamps. When long vamps are to be gaged and marked, the forward end of the sliding bar has a longitudinal slot, K', at its central line and a longitudinal recess, L', forming steps at the edges of the slot. A block, 15 M', slides in this recess, having a transverse bar, N', secured upon its forward end, sliding with its under side upon the upper surface of the sliding bar and the table, and having a headed screw, O', bearing with its head against 20 the under side of the edges of the slot, passing up through the slot and the block, and having a milled nut, P', upon its upper side, by which screw the block and the transverse bar may be adjusted in the slot. A right and left hand 25 screw, Q', turns with its central smooth portion in a bearing, R', upon the upper surface of the sliding bar for marking and gaging long vamps, and is provided with a milled disk, S', at its middle, which projects through a slot, 30 T', in the bearing, and passes with its threaded ends through and turns in perforations U' in two long blocks, V', the outer sides of which are slightly curved and bear against the inner edges of the forward end of the slot in the 35 vamp to be marked.

When the machine is to be used for gaging and marking short vamps, the pointed blocks are adjusted at their proper distance, the vamp placed with its obliquely-cut rear edges 40 against the hinged arms upon the transverse bar, which arms are adjusted to bear perfectly against them, and the forwardly-projecting blocks are adjusted to bear against the inner edges of the open slot at the rear end of the 45 vamp, when the sliding bar may be adjusted to place the vamp under the sliding yoke in such a manner that when the yoke is depressed the pointed blocks and the markingedge will strike the vamp at their proper 50 places—that is, the points marking near the edges of the vamp, where the rear edge of the toe-tip is to be placed, and the marking-edge marking the central line in the vamp. Vamps of the same size may be marked by simply plac-55 ing them in position under the yoke with their rear and inner edges touching the hinged arms and the adjustable blocks, and thereupon depressing the voke.

When long vamps are to be marked, the rear 60 edges of the same are placed against the transverse bar upon the forward end of the longitudinally-sliding bar, which is adjusted at such a distance from the laterally-sliding blocks at the rear end of said bar as the inner end of 65 the slot of the vamp and the rear edges of the

same are, the rest of the parts operating in the same manner as by the short vamps. In this manner vamps may be marked and gaged in a moment of time and perfectly accurate, and the machine is capable of being adjusted 70 to fit any size and shape of vamp.

Having thus described my invention, I claim and desire to secure by Letters Patent of the

United States—

1. A machine for gaging and marking vamps 75 for shoes, consisting of a reciprocating frame having a longitudinal central marking-edge and two laterally-adjustable points for marking the position of the toe-tips, and means for centering the vamp under the frame, as and 80 for the purpose shown and set forth.

2. The combination of a vertically-reciprocating yoke having means for reciprocating it, and having a central longitudinal marker and two laterally-adjustable points for marking 85 the position of the toe-tips, and a central longitudinally-sliding bar having a transverse bar and two centering-blocks fitting upon the ends of a right and left hand screw, as and for

the purpose shown and set forth.

3. The combination of a table having a central longitudinal groove and two vertical guide-rods at one end, a yoke sliding upon the guide-rods and having a plate projecting at right angles, forming with its lower edge a 95 longitudinal marker, and having a flange at its lower edge provided with two longitudinal slots and two bearings at the ends of the slots, two marking-blocks sliding in the slots. provided with points at their lower ends, and 100 one-half female threaded recesses at their upper ends, a right and left hand screw turning in the bearings and fitting with its threaded portions in said threaded recesses for adjusting the marking-points laterally, means for 105 depressing the yoke, springs fitting with their upper ends in perforations in the upper portion of the yoke, a bar sliding in the longitudinal recess of the table and having a central longitudinal groove, and a transverse bar 110 secured upon the longitudinally-sliding bar and adapted to be adjusted for the rear edges of the vamp to bear against, a right and left hand screw turning in bearings upon said transverse bar and having a milled disk for 115 turning it, and two centering-blocks sliding in a slot in the transverse bar, having the threaded portions of the screw fitting and turning in threaded perforations in them, and adapted to bear against the inner edges of the open 120 slot in the vamp, all constructed to operate as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

ARTHUR P. STARRATT.

Witnesses:
WM. W. WILKINS,
H. H. CHASE.