(No Model.)

T. T. MARSHALL.

BOOT OR SHOE CRIMPING MACHINE.

No. 295,187. Patented Mar. 18, 1884.

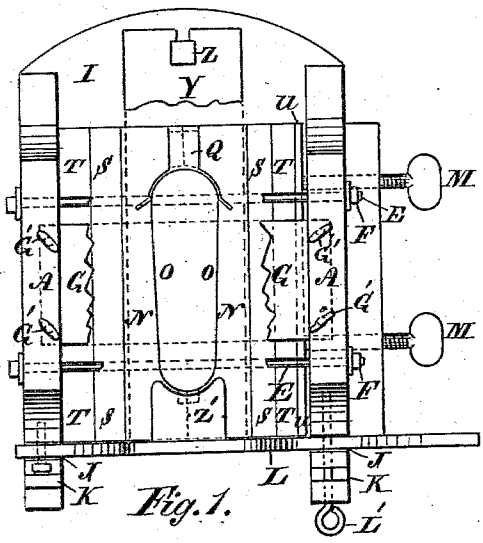


Fig. 1.

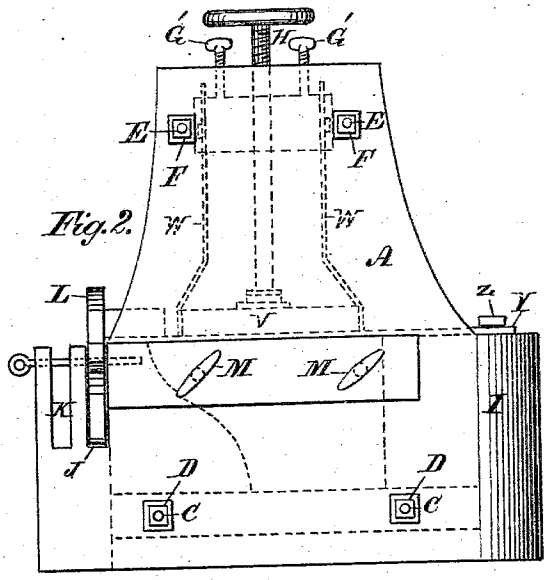


Fig. 2.

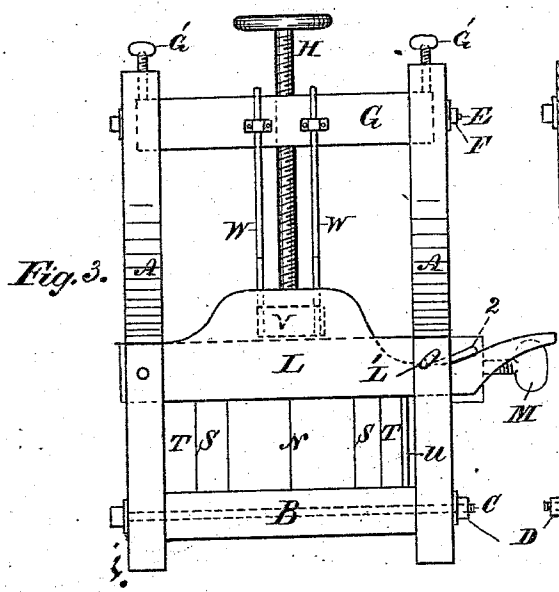


Fig. 3.

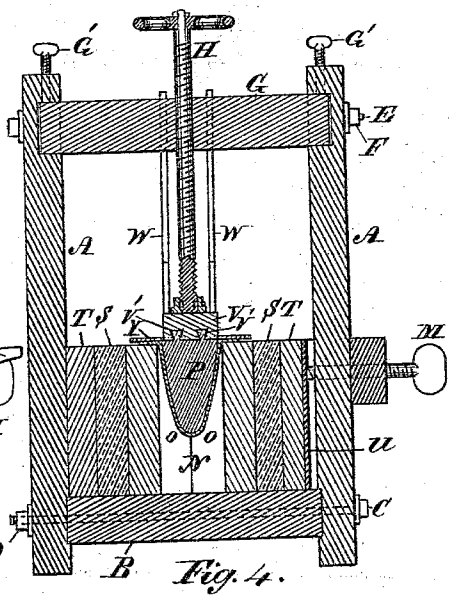


Fig. 4.

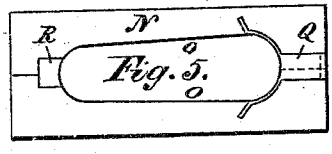


Fig. 5.

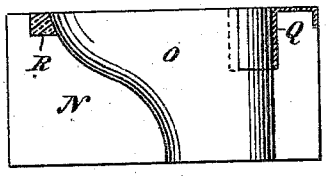


Fig. 6.

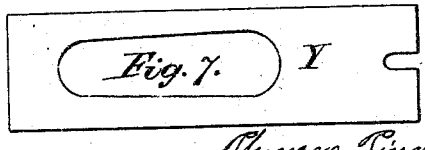


Fig. 7.

Witnesses:
P. C. Whittlet
A. W. Thompson

Inventor:
Thomas Tunnock T. Marshall

N. PETERS. Photo-Lithographer. Washington. D. C.

UNITED STATES PATENT OFFICE.

THOMAS TINNOCK MARSHALL, OF JARVIS, ONTARIO, CANADA.

BOOT OR SHOE CRIMPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 295,187, dated March 18, 1884.

Application filed November 6, 1883. (No model.) Patented in Canada October 12, 1882, No. 15,614.

To all whom it may concern:

Be it known that I, THOMAS TINNOCK MARSHALL, of Jarvis, in the county of Haldimand, in the Province of Ontario, in the Dominion of Canada, have invented certain new and useful Improvements in Boot and Shoe Crimping Machines; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to improvements on my crimping-machine patented March 21, 1882, No. 255,178, in which one piece of leather is crimped to make the seamless upper-leather for boots and shoes. the aperture for the admission of the foot being afterward slitted or cut out; and my invention has for its object to improve the construction of the machine, whereby crimping can be effected more expeditiously and in a better manner.

My invention consists in the construction of a frame having removable and adjustable parts to adapt the machine to crimp for various sizes of boots and shoes by using molds of different sizes; also, in confining the halved mold-block between rubber plates by clamp-screws and intervening inflexible plates, whereby the halved block will yield to crimp leather of different thicknesses; also, in providing the halved block with a rubber cushion inserted at the toe to prevent abrasion of the leather in crimping, and in a curved plate inserted at the heel to cause the leather to be smoothly crimped; also, in a pressure or covering plate over the halved block to keep the leather smooth and regulate its admission between the halved and last blocks while crimping.

Figure 1 is a plan of my machine, the top partly broken away to show the crimping-blocks. Fig. 2 is a side elevation of the same. Fig. 3 is a front elevation. Fig. 4 is a transverse vertical section. Fig. 5 is a top view of the halved block detached. Fig. 6 is a sectional elevation of one-half of the same, and Fig. 7 is a plan of the covering-plate.

A A are the sides of the machine; B, the bottom floor, notched into the sides and secured by bolts C and nuts D.

E are bolts passing through the sides near the top, and are provided with nuts F, to prevent the sides from spreading.

G is a laterally-adjustable bridge-piece bearing in recesses in the sides, and H is a pressure-screw passing through the bridge G.

I is a fixed block closing one end of the machine, the opposite end open to admit the halved block, hereinafter referred to, and which open end is provided with a gate, L, pivoted in one of the notches, J K, in an extended portion of the side A, and falls into a corresponding notch in the opposite side, whereby the gate, when adjusted in the proper notch and closed, prevents an endwise movement of the block and allows crimping-blocks of different lengths to be used to crimp different sizes of upper-leathers.

M M are thumb-screws in one of the sides A, to clamp the halved block N, each half having a coinciding recess, O; and P is the last-block, entering the recess to crimp the leather to the form of said block P. The heel-joint of the halved block N is covered by a correspondingly-curved metal plate, Q, the vertical edges sliding into cuts in said blocks, which are recessed at top to receive flush the bent-over top of plate Q, and which serves to prevent the halves of the block moving endwise independently; but the main object of the plate Q is to prevent creasing and abrasion of the leather in crimping, by causing it to slip smoothly between the crimping-blocks. The halved block N at the toe is recessed at the joint to receive a rubber cushion, R, to prevent abrasion of the leather while being crimped.

S S are rubber plates outside block N, and T are wooden plates outside plates S, to fill the spaces between plates S and metal plate U and the side A, against which plate U the clamp-screws M M impinge and prevent them injuring the wooden plate when the pressure of the screws is applied to clamp the plates and blocks together. The rubber plates S yield sufficiently under pressure to accommodate leather of different thicknesses.

V is a plate centrally hung to the end of the pressure-screw H, and is prevented from wabbling by braces W W, secured to the ends of the plate and bent up through staples in bridge G. The plate V is provided with dovetail grooves to receive dovetail rails V′ on the

sole of the last-block P, to allow the latter to be slidingly removed and another size substituted when desired.

Y is a metal plate, having an opening corresponding to the sole of the last-block P, and said plate is notched at one end to slide under the head of a screw-button, Z, in the top of block I at the end of the machine. The opposite end of plate Y is held down by pressure of a block, Z′, secured to the inside of gate L, and when the dampened leather is placed between the plate Y and top of halved block N the former will have sufficient pressure to keep the leather smooth while being drawn downward by the last-block in crimping, and thereby produce an even surface, free from creases. The bar or bridge G is movable laterally to allow the point of the screw to be central with the halved block, whereby blocks of different sizes can be used with one machine.

G′ are set-screws to fasten the bridge in position.

L′ is a pin for holding down gate L by insertion of an intermediate wedge, 2.

I claim as my invention—

1. The combination, in a crimping-machine provided with pressure-screw H, of the clamp-screws M M, halved block N, rubber plates S, filling-plates T, plate U, last-block P, and plate Y, substantially as set forth.

2. In combination with the halved block N, the inserted heel-plate Q, and toe-cushion R, as and for the purpose set forth.

3. The combination, with the notched sides A A, of the adjustable gate L, provided with block Z′, pin L′, and wedge 2, for holding down one end of plate Y, as set forth.

4. In combination with the halved block N, having recesses O, the correspondingly-apertured plate Y, covering said block, and removably secured to hold down the leather over the block-orifice in crimping, as set forth.

5. The combination, in a crimping-machine having pressure-screw H, of the last-block P, apertured plate Y, and halved block N, substantially as set forth.

6. The combination, with the sides A A, of the bridge G, pressure-screw H, braces W W, grooved bed V, and last-block P, as set forth, for the purpose described.

7. The combination, in a crimping-machine provided with pressure-screw H, of the clamping-screws M M, halved block N, and rubber plates S, to yield to the enforced pressure of the last-block P, whereby leather of different thicknesses may be crimped, as set forth.

In testimony whereof I have signed this specification in the presence of the two undersigned witnesses.

THOMAS TINNOCK MARSHALL.

Witnesses:
R. C. WHITTET,
A. W. THOMPSON.