J. S. TURNER.

Throat-Plate for Boot and Shoe Sewing-Machines.

No. 199,759.

Patented Jan. 29, 1878.

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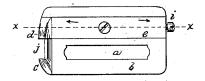
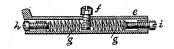


Fig. 2.



Fig. 3.



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UNITED STATES PATENT OFFICE.

JOSEPH S. TURNER, OF ROCKLAND, MASSACHUSETTS.

IMPROVEMENT IN THROAT-PLATES FOR BOOT AND SHOE SEWING MACHINES.

Specification forming part of Letters Patent No. 199,759, dated January 29, 1878; application filed October 18, 1877.

To all whom it may concern:

Be it known that I, JOSEPH S. TURNER, of Rockland, in the county of Plymouth and State of Massachusetts, have invented an Improvement in Throat-Plates, of which the following is a specification:

This invention relates to throat plates adapted to enter the channels cut in the soles of boots or shoes, or other articles of leather, to keep such channels open for sewing, or

while being pricked.

Such channel opening throat-plates as now commonly made have fixed rigid supportingsurfaces in advance of and behind the line of movement of the awl, so as to sustain the sole when the awl passes down through it.

Such throat-plates as now used are with difficulty retained in the curved portions of the channel, both when sewing and when turning corners. To obviate this difficulty I have made one of the supporting surfaces within the channel at one side of the awl-preferably that one behind the awl-movable substantially parallel with the plane of the surface of the sole, so that such point may move to the right or left to follow the contour of the channel, be it more or less curved.

Figure 1 represents, in top view, a channelopening throat-plate embodying my invention; Fig. 2, a front end view thereof; and Fig. 3, a

section on line x x, Fig. 1.

This throat-plate is adapted to be attached to the post of an ordinary wax-thread sewingmachine by means of a screw passed through the slot a in the base b. The guide and solesupporting point c in front of the awl is shown as fixed; but the guide and supporting point d behind the awl, in the direction of the feed, is made so as to yield from its position in Fig. 1, in line with guide c, to the right or left, or in the direction of the arrows, so that such guide-point may follow and remain in the channel, whether it be more or less curved toward the right or left, or the sole be turned to the right or left as it is fed forward under the awl. If both points were fixed, the channel acting upon one would throw the other point out of the channel. This guide d rises from a shank, e, fitted in guideways in the base b. (See Fig. 2.)

The shank is provided with a center-pin, f, to hold a spring or springs, g, acted upon by adjusting screws hi, to equalize the force of the springs, so as to retain the movable guidepoint d in line with the fixed guide-point c, and to permit such guide-point d and shank to move to the right or left of the position occupied by it in Fig. 1. The awl descends in the space or open throat j.

This device is also specially useful in a machine to prick holes in leather, the awl entering the stock at one side and emerging from

the bottom of the channel.

I am aware that a channel-opening guide has been made to move with the needle in the direction of the feed. I have made the points of such size that they enter and successfully follow the narrow channel commonly used in hand-sewed work, whereas in the other usual openers, having a stationary bearing in the channel in front of and behind the throat, the channel is necessarily made larger.

1. In a channel-opening throat-plate, the combination, with the guide c, of the guide d, adapted to yield laterally to the curvature or

position of the channel.

2. A fixed guide to enter and follow a channel at one side of the awl-passage, in combination with a guide at the opposite side of the awl-passage, adapted to yield laterally to the right or left of the fixed guide, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

JOSEPH S. TURNER.

Witnesses:

G. W. GREGORY. W. J. PRATT.