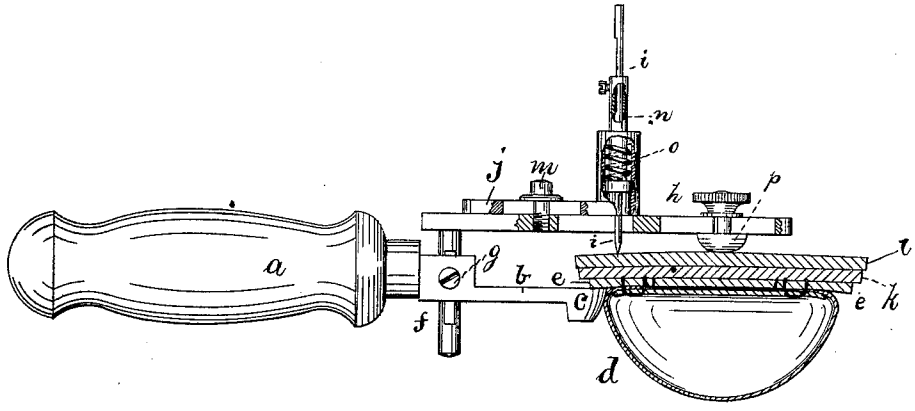
J. S. TURNER.

Sole-Marking Tool for Channeling.

No. 213,712. Patented Mar. 25, 1879.



Witnesses.

L. P. O'connor.

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UNITED STATES PATENT OFFICE.

JOSEPH S. TURNER, OF ROCKLAND, MASSACHUSETTS.

IMPROVEMENT IN SOLE-MARKING TOOLS FOR CHANNELING.

Specification forming part of Letters Patent No. **213,712**, dated March 25, 1879; application filed December 7, 1878.

To all whom it may concern:

Be it known that I, JOSEPH S. TURNER, of Rockland, county of Plymouth, State of Massachusetts, have invented an Improvement in Sole-Marking Tools for Channeling, of which the following description, in connection with the accompanying drawing, forming a part thereof, is a specification.

This invention relates to a tool for marking the outer sole after it has been applied or tacked to a lasted upper or inner sole, to indicate the line upon which the outer sole is to be channeled. The marking-point is preferably made adjustable toward and from a gage which bears upon the upper fitted to the last at or near the welt, and a portion of the tool upon which the marker is mounted is made vertically adjustable to suit the tool to soles of different thicknesses.

The invention also relates to a novel method of laying out a channel in a sole which has not been cut out or shaped externally by dies.

The drawing represents in side elevation and partially in section one form of tool containing this invention, it being shown as fitted to a shoe. (Shown in cross-section.)

Projecting from the handle *a* is a bar, *b*, having a gage-face, *c*, suitably shaped to enter the angle between the upper *d* and welt *e*. The bar *b* receives within it a rod, *f*, made vertically adjustable by means of a screw, *g*, to permit the arm *h*, carried by the rod, and carrying the marker *i* and its adjustable holder *j*, to be raised or lowered, according to the thickness of the inter sole, *k*, and outer sole, *l*.

The holder *j*, slotted at its shank to receive the set-screw *m*, has within it the marker *i*, adjustably held in a movable head or plunger, *n*, provided with a collar, and held pressed down for a certain distance by a spiral spring, *o*. The marker is thus made adjustable horizontally with reference to the gage *c*, so as to mark upon the face of the outer sole a mark which shall follow the outline of the upper and last near the welt, the said line being marked upon the sole more or less near the center of the shoe, according to the thickness of edge wanted for the shoe outside the channel.

This tool is specially adapted to mark the line for a channel, which is afterward cut by hand or otherwise along the said mark, such a shoe being prepared to have its welt and outer sole punched and trimmed by a machine described in another application for patent filed by me in the United States Patent Office, and the welt and sole so punched and trimmed are to be subsequently stitched by drawing through the holes a hand-operated waxed-end, as described in a patent of the United States heretofore granted to me.

Ordinarily, in welted work, the outer sole is cut out and shaped in a die, and is not applied to the lasted upper and inner sole until the welt has been trimmed by a hand-knife to extend as uniformly as is possible to make it, measuring by the eye only, and then the sole is trimmed to the welt-edge, and the sole being so properly trimmed its edge is used as the gage for the channeling-tool.

In this my plan the welt is applied to the inner sole and upper in the usual way, after which pieces of leather for the outer sole and inner sole are applied to it, (if both are to be used;) but the said pieces of leather not being sole-shaped by a die, but being oblong and irregular, cannot be used as a gaging surface against which the gage may rest when marking the sole.

The tool being properly set, with the foot *p*, substantially at or near the center of the ball of the foot, the gage is placed in contact with the upper, as shown, and the tool is carried about the shoe from end to end, except about the extreme heel end, thereby making a mark thereon to define the place for the channel.

It is obvious that the lower end of the marker may be sharpened, so as to cut a channel into the outer sole instead of simply marking it.

I claim—

1. The gage *c*, to bear upon the upper at or near the welt, combined with a spring hold or marker to mark the outer sole, substantially as described.

2. The gage to bear against the upper near the welt and a device to mark or channel the bottom of the outer sole, combined with a vertically-adjustable frame, to provide for soles of different thickness.

3. The gage to bear against the upper near the welt and a device to mark or channel the outer sole, as described, combined with a marker-holder made horizontally adjustable toward or from the face of the gage, substantially as 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,
N. E. WHITNEY.