L. GODDU.

Sole-Channeling Machine.

No. 198,103. Patented Dec. 11, 1877.

Fig. 1.

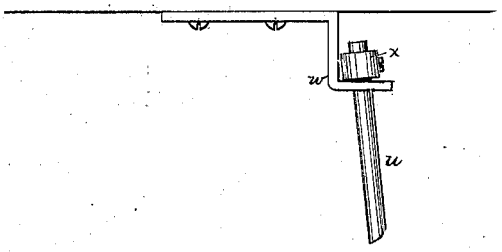
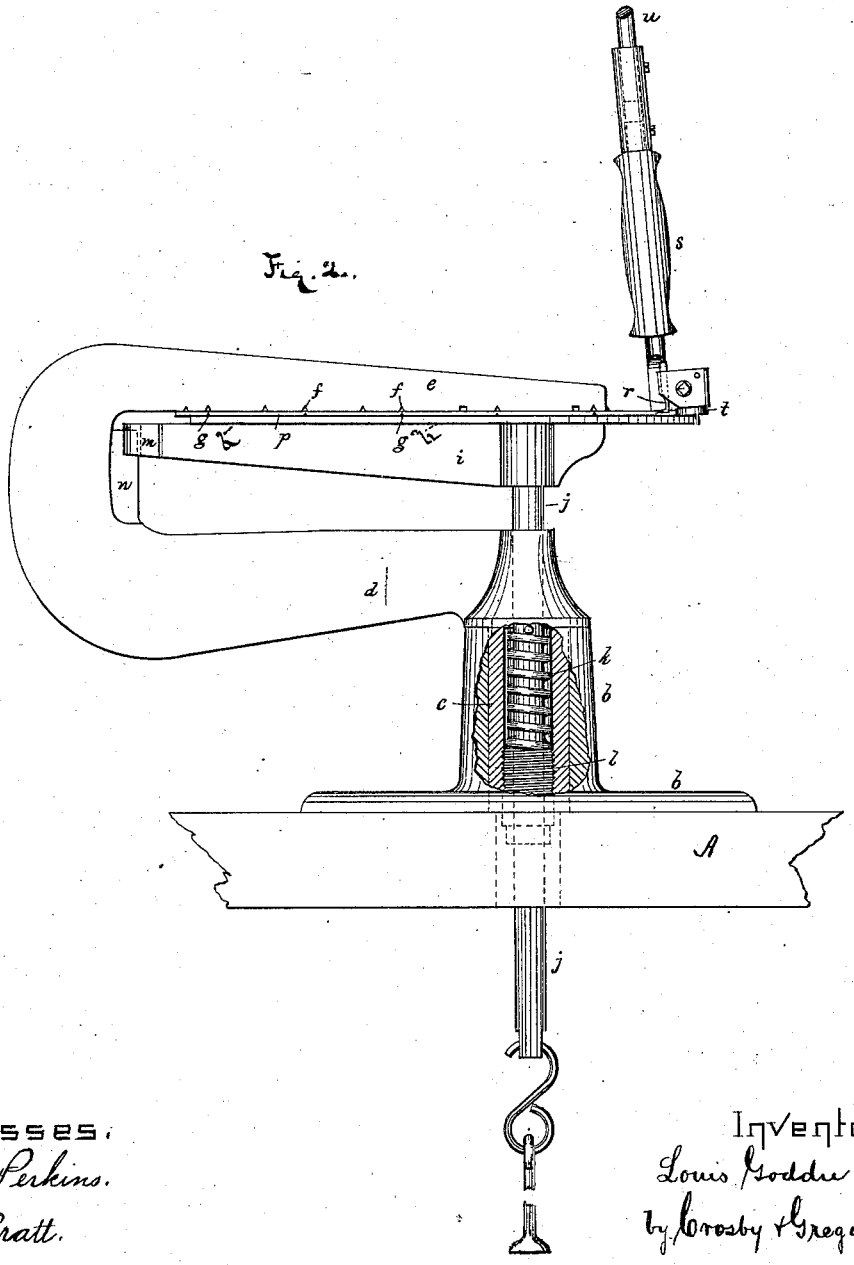


Fig. 2.



Witnesses:

E. C. Perkins.

W. J. Pratt.

Inventor.

Louis Goddu

by Crosby & Gregory Atty

UNITED STATES PATENT OFFICE.

LOUIS GODDU, OF WINCHESTER, ASSIGNOR TO McKAY METALLIC FASTENING ASSOCIATION, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SOLE-CHANNELING MACHINES.

Specification forming part of Letters Patent No. **198,103**, dated December 11, 1877; application filed September 18, 1877.

To all whom it may concern:

Be it known that I, LOUIS GODDU, of Winchester, in the county of Middlesex and State of Massachusetts, have invented an Improved Channeling-Machine for Boots and Shoes, of which the following is a specification:

This invention relates to channeling-machines; and consists in a sole-holding clamp, by which the sole to be channeled may be revolved, when combined with a pendulous or loosely-pivoted channeling-tool, under the control and guidance of the operator, by whom it is directed about the sole.

The devices for holding the sole are substantially such as shown in United States Patent No. 167,523, heretofore granted to me.

The drawings represent in side elevation, partially in section, channeling devices embodying my present invention.

A denotes a suitable bench or table, upon which is mounted the socketed standard *b*, which receives the sleeve *c*, projecting from the rotatable frame *d*, having a sole-clamping arm, *e*, provided, preferably, with a series of notches, *f*, to receive pins *g*, projecting from the sole-plate *h*, sustained by the follower *i*, mounted on the rod *j*, provided with a pin or shoulder to rest upon the spiral spring *k*, sustained at its lower end by the screw-plug *l*, fitted to screw-threads made in the sleeve *c*. The follower *i* is forked at *m*, to fit a guide, *n*, or vice versa, so as to retain the sole-plate and arm *e* in their proper relations.

The sole *p* to be channeled having been cut out, the sole-plate is depressed through a suitable treadle connected with rod *j*, a sole is placed upon it, and then the sole-plate is permitted to rise, under the action of its spring *k*, to clamp the sole between the sole-plate and arm *e*, they co-operating together to hold it firmly in position. The edge of the sole will fall within the outside edge of the sole-plate.

The channeling-tool is composed of an angular knife, *r*, of any usual construction, a handle, *s*, and an edge-gage, *t*, made, preferably, as a roller, and adapted to bear against the edge of the sole as the tool is made to travel over the surface of the sole to cut the channel in its upper side. The channeling-tool is connected with a rod, *u*, controlled at its upper end by a guide, *w*, preferably attached to the ceiling at a point substantially in line with the axis of rotation of the sole-plate *h*. This rod is provided with a collar or equivalent to support it when not used.

The slot in the guide to receive the rod is of sufficient size to permit the rod to be tipped far enough to pass about soles of different sizes, and the rod is so held that the tool is free to rest with its own weight upon the sole being channeled.

In order to permit the tool to occupy a position more or less elevated from the supporting plate or table, according to the thickness of the sole, or the pile of soles, the guide will be so placed with relation to the ceiling that the rod may rise and fall vertically.

The operator, a sole being in position on the sole-plate, will place the knife, to commence the channel, at or near the heel, and, drawing the knife toward him, will channel one edge of the sole, the gage following the sole-edge; then he will revolve the table, channeling about the toe, and will then again draw the channeling-knife toward him to cut the channel in the other edge, the change of position of the sole-plate from end to end, as when the shaft *j* is revolved half a revolution, carrying the knife with it away from the operator.

By means of the devices so far described, the movements of the person in channeling the sole will be as would be the case with hand-work. These devices enable the operator to hold the sole firmly in position when drawing the knife along its edge, and to turn the sole end for end quickly, and the knife-rod being guided as described enables the tool to be moved accurately and rapidly.

It is obvious that the channeling-tool, supported as above described, and pendulous, may be so moved by the operator as to follow in a proper path to cut a channel in a sole, even though the sole be not rotated. In such case the sole will be held on a supporting plate or bed, preferably provided with pins, and the channeling-tool, as it is moved about the sole, will be rotated horizontally, so that the knife will project toward the center of the sole. In

this plan the soles may, if desired, be stacked, the operator working upon the top one of the pile.

The friction of the contiguous faces of the leather, augmented by a little pressure, will be sufficient to hold the sole in place.

I claim—

The combination, with a sole-plate to hold a sole, of a pendulous channeling-knife, guided, substantially as described, at a point above the axis of rotation of the sole-plate, and adapted to be moved by the operator, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LOUIS GODDU.

Witnesses:

G. W. GREGORY,

N. S. HOTCHKISS.