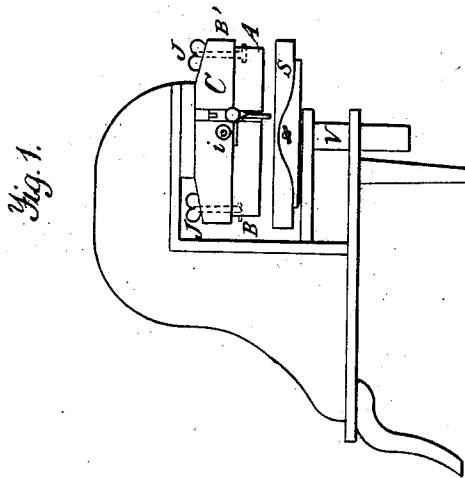
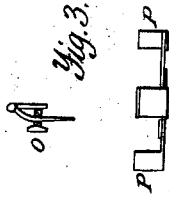
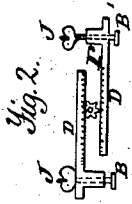


T. A. Curtis,
Shoe Sole Machine,
No 76,408, Patented Apr. 7, 1868.



Witnesses.
F. C. Thayer.
James G. Arnold.

Inventor:
Timothy A. Curtis

United States Patent Office.

TIMOTHY A. CURTIS, OF BROOKFIELD, MASSACHUSETTS.

Letters Patent No. 76,408, dated April 7, 1868.

IMPROVED SOLE-CUTTING MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, TIMOTHY A. CURTIS, of Brookfield, in the county of Worcester, State of Massachusetts, have invented certain new and useful Improvements in Sole-Cutting Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, due reference being had to the accompanying drawings, by the letters of reference marked thereon, in which—

Figure 1 shows a side view of my improvements, and

Figures 2 and 3 show some parts hereinafter more particularly described.

The objects of my invention are to provide an efficient means to secure the knife to its holder or head, which shall be readily adjustable to the different sizes of knives, and keep them even on the centre of motion, and not spring or throw them out of shape, and also to secure a convenient gauge, easily adjustable to the different kinds of work, and operating with the cutter.

To these ends, the nature of the invention consists in providing the knife-holder with two T-headed bolts, with thumb-nuts, and arranged to slide with racks, worked by a pinion in the centre, or near it; also, in arranging the gauges on each side of the knife-holder, so that one of them will be right alternately, and the operation of cutting will throw them up ready for the knife to turn.

The knife A, (see drawings,) is made in the usual manner, and with a hole at each end, a little down from the top, for the bolts B B' to hook into. C is the head, in which the bolts slide by means of the racks D D, fig. 2, operated by the pinion I, and J J are the nuts to tighten the bolts and hold the knife firm. L is a gauge, made to fit and slide in a groove in the heads, the point being adjustable by the screw O, as shown in fig. 3, so as to be set towards or from the knife A. The other gauge is similarly placed on the other side of the head C, not shown in the side view. At fig. 3 is also shown a spring-follower, which is placed inside the knife, and held there by its projecting lips, which fit into notches in the upper edge of the knife, the rubber springs P P sliding to and from the middle, to adjust to different sizes. S is the cutting-block, working with the slide V, which may be operated by any suitable means, these parts to be supported by framework, and the other parts may be of the forms in use, or other suitable form; and, their uses being well known, it is not deemed necessary to show or describe them here, and it is evident that hook-bolts may be used, instead of the form shown.

The operation of fastening the knife in place is to turn the pinion holding the knife up until the hooks of bolts catch in the holes, and then tighten the thumb-nuts J J. The simultaneous movement of the bolts keeps them equidistant from the centre, and thus trues the knife, the short knives coming inside the bolts and the large ones outside. The operator, standing in front of the machine, feeds the stock from one hand, and with the other slides down the gauge, and then brings the edge of the leather to it, and the table rises, making the cut and raising the gauge up. As the table falls, the head turns half round, and the operator repeats as before, the gauges being set to their proper places.

I am aware that bolts and nuts have been used to secure the knives to the holder; these I do not claim, but What I claim as new, and desire to secure by Letters Patent, is—

1. Securing the knife to the head, by means of the bolts, in connection with the racks and pinion, or other means of adjusting them, substantially the same, when constructed in the manner and for the purposes and operating substantially the same as above set forth and described.

2. The adjustable gauges, attached to head C, substantially as described.

TIMOTHY A. CURTIS.

Witnesses:

F. C. THAYER,
JAMES G. ARNOLD.