

S. H. REYNOLDS & G. B. NEWHALL.

Feather-Edge Skiving-Knives for Shoe-Making.

No. 158,439.

Patented Jan. 5, 1875.

Fig. 1

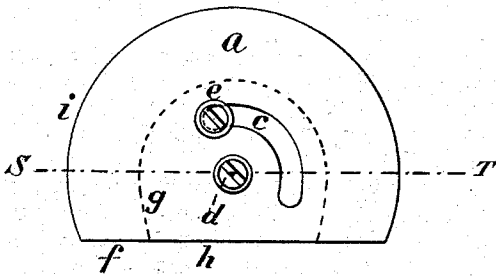


Fig. 2

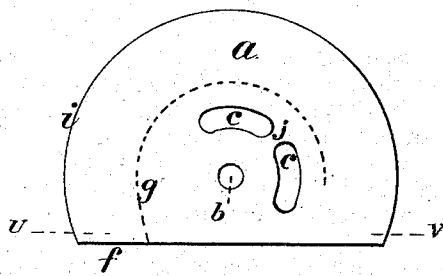


Fig. 3



Fig. 4



Witnesses.

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SILAS H. REYNOLDS AND GEORGE B. NEWHALL, OF LYNN, MASS.

IMPROVEMENT IN FEATHER-EDGE SKIVING-KNIFE FOR SHOE-MAKING.

Specification forming part of Letters Patent No. **158,439**, dated January 5, 1875; application filed July 1, 1874.

To all whom it may concern:

Be it known that we, SILAS H. REYNOLDS and GEORGE B. NEWHALL, of Lynn, in the county of Essex and State of Massachusetts, have invented a new and useful or Improved Feather-Edge Skiving-Knife for Boot and Shoe Soles, of which the following is a specification:

This invention relates to the cutting-blade or knife employed for the purpose of imparting a bevel to that portion of the sole which projects beyond the upper leather, whereby the edge of the sole presents a thinner and lighter appearance than the actual thickness thereof would otherwise admit; and the invention consists in a knife formed of a sheet of metal, the circular line of which is at all points equidistant from a pivotal center, this periphery embracing an arc of a circle, and containing from five-eighths to three-fourths of a circle, the cutting-edge being formed in a line parallel with a line radial from the center, the cutter being centrally pivoted and formed with a curved slot, through which passes a locking-screw for holding it in position, yet allowing the cutter to be periodically rotated as use and sharpening shall wear back the cutting-edge, thus allowing a perfect adjustment of such edge to the feeding-rolls. This cutter is also "dished," or formed with a curved diametrical line, for the double purpose of insuring rigidity and also imparting to the cutting-edge the requisite angle relatively to the axis of the rolls.

Figure 1 is a top or plan view of the cutter, and showing the pivoting and locking screws in position. Fig. 2 is also a plan view, with screws omitted, but showing a slight modifi-

cation of the cutter. Fig. 3 is a vertical section taken on line S T, Fig. 1; and Fig. 4 is a vertical section taken on line U V, Fig. 2.

In the drawings, *a* represents the cutter. *b* is the central or pivotal hole. *c* is the curved slot. *d* is the pivot; *e*, the locking-screw, and *f* the cutting-edge. The extent of this edge is shown in Figs. 2 and 3 by the extent of straight line *h*, which is embraced between line *i* and dotted line *g*. This edge is always so ground as that it shall be parallel with a line drawn through the center, as is line S T. *j* is a narrow bar, so remaining as that it intersects slot *c*, thereby imparting to that portion of the cutter outside the slot the rigidity and support of the metal next the center.

By forming the cutter in the manner shown, with an edge adjustable by rotation upon a common center, and with a concave upper face, as shown in Figs. 3 and 4, a large saving in expense is effected. The cutter is more readily adjusted to the other parts of the machine, and performs its office more efficiently than if constructed in the usual manner from a narrow ribbon of steel, and almost the entire circuit of this cutter may be economized before it is worn out and useless.

We claim—

The knife *a*, formed as a segment of a circle, provided with a slot or slots, *c*, and turning upon its pivot *b*, all substantially as shown and described.

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Witnesses:

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