(No Model.)

W. MANLEY.

TRIMMING CUTTER FOR BOOTS OR SHOES.

No. 342,371. Patented May 25, 1886.

Fig. 5.

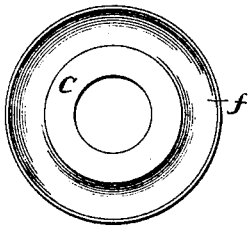


Fig. 2.

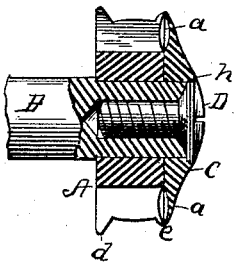


Fig. 1.

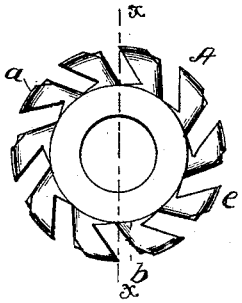


Fig. 3.

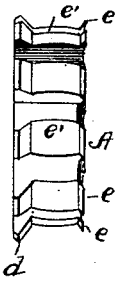
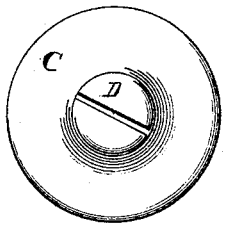


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM MANLEY, OF ROCHESTER, NEW YORK.

TRIMMING-CUTTER FOR BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 342,371, dated May 25, 1886.

Application filed August 5, 1885. Serial No. 173,595. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM MANLEY, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Boot and Shoe Trimming Cutters; and I do hereby declare the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates to parts immediately connected with the feather-edge or rand trimming knives employed on the cutter, whereby the said part of the sole edge is perfectly and rapidly trimmed at the same operation by which the main edge of the sole is trimmed, and whereby a perfect clearance of the cutter is obtained without any clogging thereof by the dust or shavings produced in the operation.

In the drawings, Figure 1 is a view of the outer end of a sole-edge trimmer or cutter constructed according to my invention; Fig. 2, an axial section of the cutter, of a portion of the spindle or shaft on which it is mounted, and of the guard and guide-disk employed in connection therewith, the view taken in the line *x x*, Fig. 1; Fig. 3, a side view of the cutter; Fig. 4, a view of the outer face of the guard and guide-disk used with the cutter; Fig. 5, a view of the inner side of the said disk. Like letters designate corresponding parts in all of the figures.

The parts represented in the drawings are the cutter A, preferably made of one solid piece and formed with peripheral sole-edge-trimming knives *e' e'*, with spaces between them parallel with the axis of the cutter, and with feather-edge-trimming knives *e e*, projecting from the peripheries of the other knives at their outer ends; the spindle B, on which the cutter is mounted; the guard and guide-disk C, used in connection with the cutter and applied against its outer end, so as to shield the feather-edge-trimming knives; and a screw, D, by which the said disk is attached to the shaft and the cutter is secured thereon. There are also shown inclined faced guards *d d*, projecting from the inner ends of the main edge-trimming knives.

First, as to the points of improvement in this invention, the knives *e e*, which form the feather-edge, welt, or rand trimming part of the cutter, and which are in part coincident with the outer ends of the main edge-trimming knives, are made concave on the outer face of the cutter from the peripheries thereof to the inner extremity or base thereof, as shown most clearly in Fig. 2; or, if not entirely into the base of the cutters, at least far enough from the outer edges to furnish sufficient open spaces between the cutters and the disk C to allow a free clearance of the dust and shavings produced by this part of the cutter. With this construction no holes or discharge-openings are required through the disk C. To further prevent clogging and make the clearance more free, the rear edges, *b b*, of this part of the cutter are rounded or beveled off, as shown most clearly in Fig. 1; and this is all that is required in the construction of the knives of the cutter to effect the purpose set forth.

Although the concave form of the ends of the cutter-knives is all that is necessary to effect this purpose, I find that it is preferable to make the interior surface of the shield-disk C also somewhat concave opposite to these knives, as shown at *f*. This widens the spaces between the knives and disk, and gives additional freedom to the passage of dust and shavings, and by it the concavity of the knives may be lessened, if desired.

Since the cutter-knives *e e* are thin and slight, they are liable to be easily damaged, and should not be subject to uneven pressure of the disk C against them. I therefore provide for firmly securing the said disk to its spindle, so that it cannot swerve out of proper position. For this purpose the screw D, which is screwed into the end of the spindle B, has two shoulders, *g h*, on the inner surface of the head, one bearing firmly against the end of the spindle and the other bearing against the disk around the eye through which the shaft of the screw passes, as shown in Fig. 2. These shoulders may preferably be conical to fit in countersinks, thereby more perfectly centering the disk in position.

I claim as my invention—

1. The knives *e e*, formed with concave ends and rounded rear edges, *b b*, substantially as and for the purpose herein specified.

2. The combination of the feather-edge or rand trimming knives *e e*, formed with concave ends and rounded rear edges, *b b*, with the disk C, made concave on its inner surface, substantially as and for the purpose herein set forth.

3. The combination of the knives *e e*, the spindle B, the disk C, and the double-shouldered attaching-screw D, substantially as and for the purpose herein specified.

Witness my hand this 3d day of August, A. D. 1885.

WILLIAM MANLEY.

Witnesses:
W. T. FONDA,
T. J. SWANTON.