L. S. BRIDGES.

Mechanism for Setting and Finishing Shoe-Sole Edges.

No. 219,442. Patented Sept. 9, 1879.

Fig. 1.

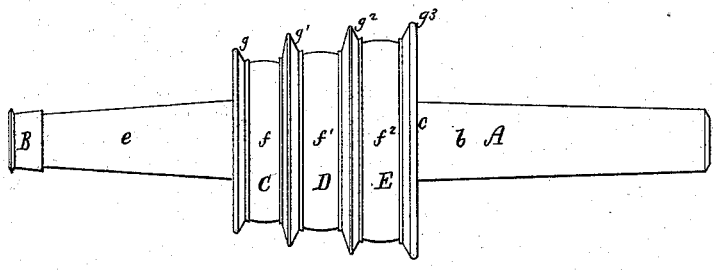


Fig. 3.

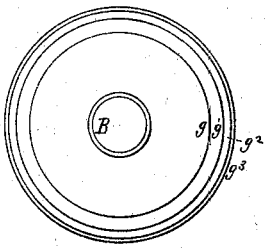
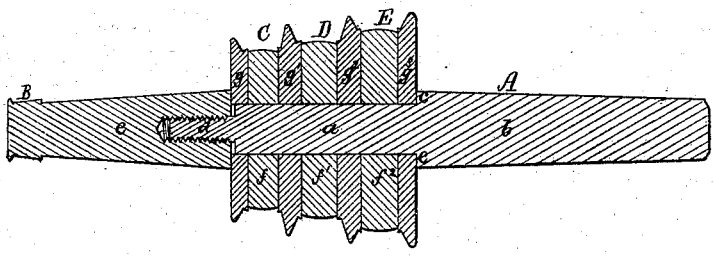


Fig. 2.



Witnesses.

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LORENZO S. BRIDGES, OF WOODVILLE, MASSACHUSETTS.

IMPROVEMENT IN MECHANISMS FOR SETTING AND FINISHING SHOE-SOLE EDGES.

Specification forming part of Letters Patent No. **219,442**, dated September 9, 1879; application filed June 25, 1879.

To all whom it may concern:

Be it known that I, LORENZO SMITH BRIDGES, of Woodville, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Mechanisms for Setting or Finishing Shoe-Sole Edges; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a side elevation, Fig. 2 a longitudinal section, and Fig. 3 is an end view, of a sole-edge finisher containing my invention.

The said finisher as represented is intended for setting the edges of the shanks and fore parts of soles of different thicknesses. It saves the necessity of having to remove from the arbor an edge-setter and supplying its place with one of a different size, as occasion may require.

In the drawings, A denotes the setter-arbor, having the part *a*, on which the series of fore part edge-setters is arranged, turned down, of less diameter than the rest or part *b*, there being at the junction of the two parts *a* and *b* a shoulder, *c*, as shown. The part *a* at its outer end is provided with a screw, *d*, upon which is screwed the shank or carrier *e* of a sole-shank edge-setter, B, formed and arranged as shown. The said carrier *e* serves not only to support the shank-edge setter, but as a nut to hold, with the shoulder *c*, the set or series of fore-part setters C D E firmly in place in the arbor.

Each of the said setters not only varies in width, but in diameter, with respect to that immediately next to it—that is to say, the bed-disk f^1 of the second setter, D, is not only a little greater in diameter but wider than the bed-disk *f* of the setter C. The same may be said with respect to the bed-disk f^2 of the setter E relatively to the bed-disk f^1.

Furthermore, the flange or flange-disk g^1 between the two bed-disks *f* and f^1 has a diameter greater than that of the first or end flange or flange-disk *g*. The flange-disk g^2 has a diameter greater than that of the flange disk g^1 and less than that of the end flange-disk, g^3.

Were each of the flanges or flange-disks of the composite edge-setter alike in size or made with their diameters equal to each other, and were each of the bed-disks so made, though varying in width, the composite edge-setter could not be used to advantage, because in attempting to use either of its second or third setters the upper of the shoe would be liable to be forced or carried into contact with the periphery of the flange of the next adjacent setter, and in consequence thereof to be creased or injured thereby.

To prevent such injury to the upper from taking place I make not only the bed-disk, but the flanges or flange-disks, to vary or increase in diameter relatively to each other in manner as represented, in which case it will be seen that in forcing a shoe-sole against the second or middle bed-disk the flange-disk g^1 will enter the space between the sole and the upper; but the flange-disk *g*, by being less in size than the disk g^1, will not touch the shoe-upper while the arbor and the series of edge-setters may be in revolution. So in forcing the sole against the largest bed-disk the flange or flange-disk g^1, by having a diameter less than that of the disk g^2, will not touch or be liable to touch the upper.

I would remark that the sole-shank edge-setter is to be used with each of the fore-part edge-setters in finishing the edge of a shoe or boot sole; all of which will be easily understood by shoemakers.

What I claim as my invention is as follows:

A composite fore-part edge-setter, substantially as described, consisting of a series of two or more separate beds or bed-disks, $f f^1 f^2$, varying in width and diameters, as explained, and a series of separate flanges or flange-disks, $g g^1 g^2 g^3$, therefor, arranged therewith and varying in their diameters, substantially as set forth, all of such disks and flanges being arranged with each other and combined with an arbor, essentially in manner as represented.

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Witnesses:

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