

W. D. ORCUTT.
 Rotary Cutter for Trimming the Edges of Boot and
 Shoe Soles.

No. 238,303.

Patented March 1, 1881.

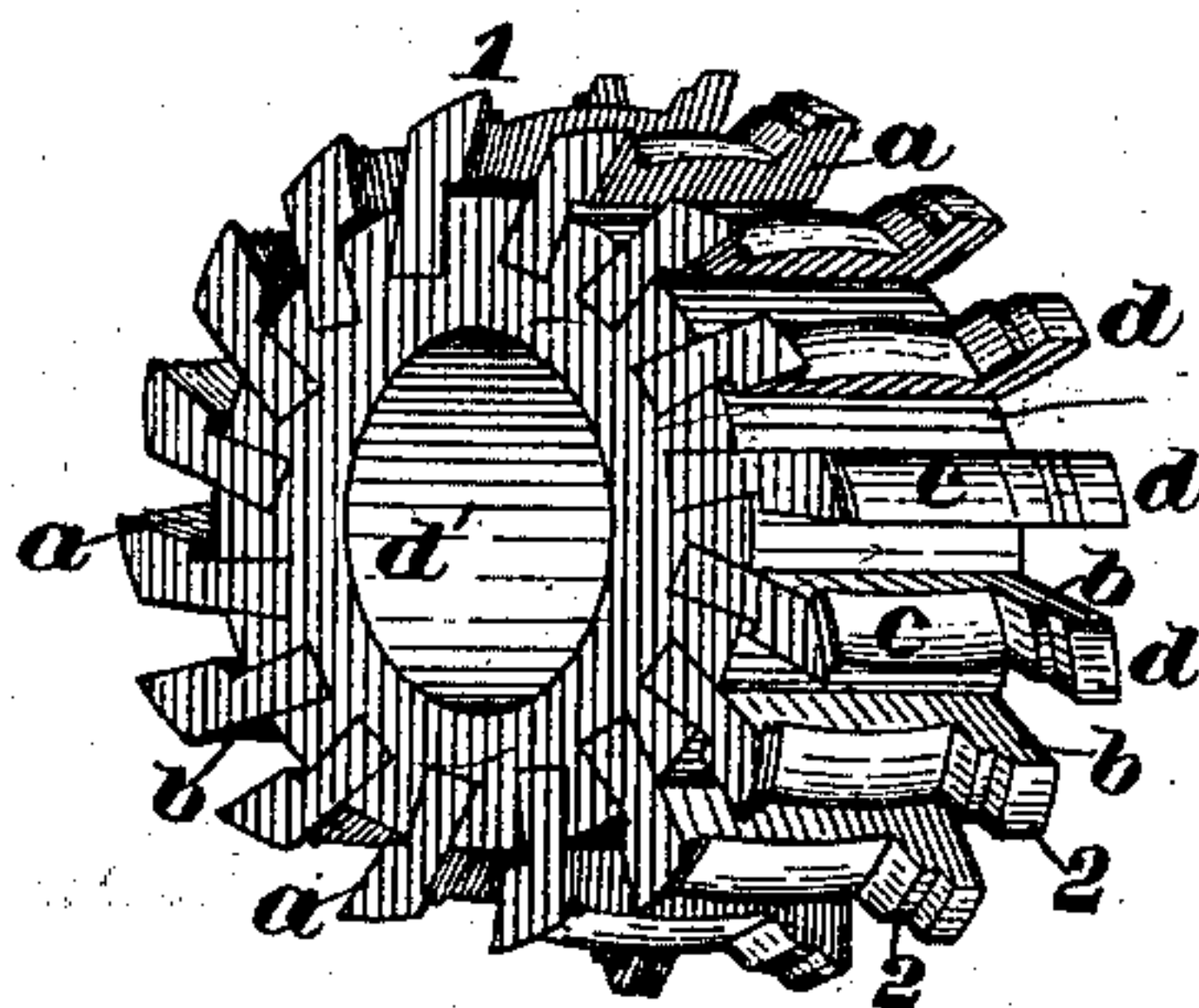


Fig. 1.

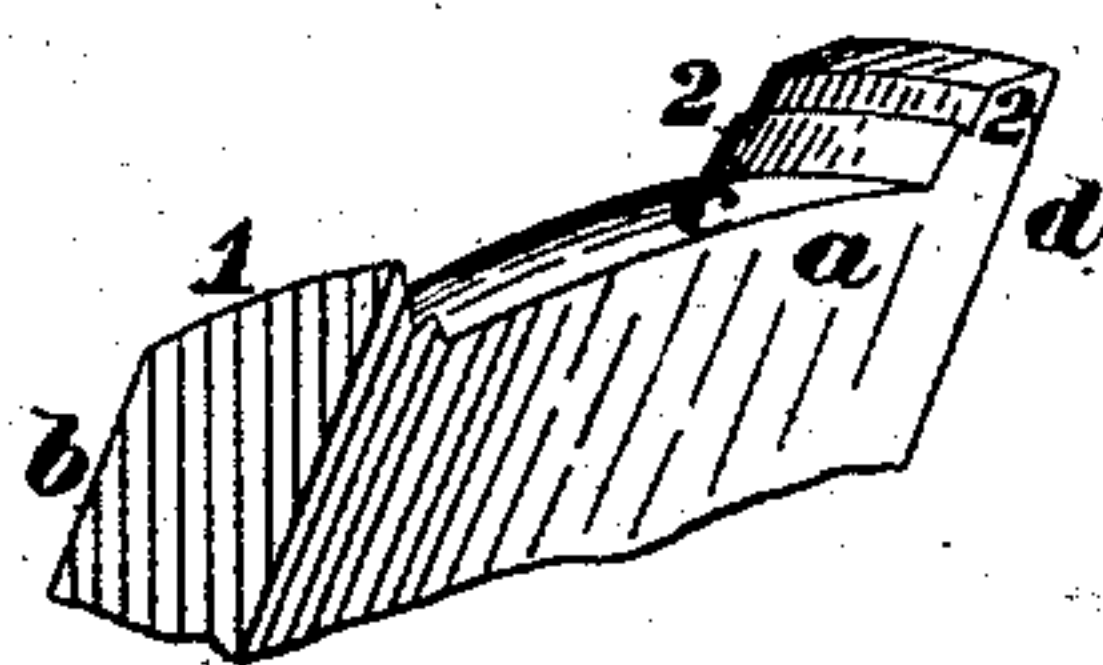


Fig. 2.

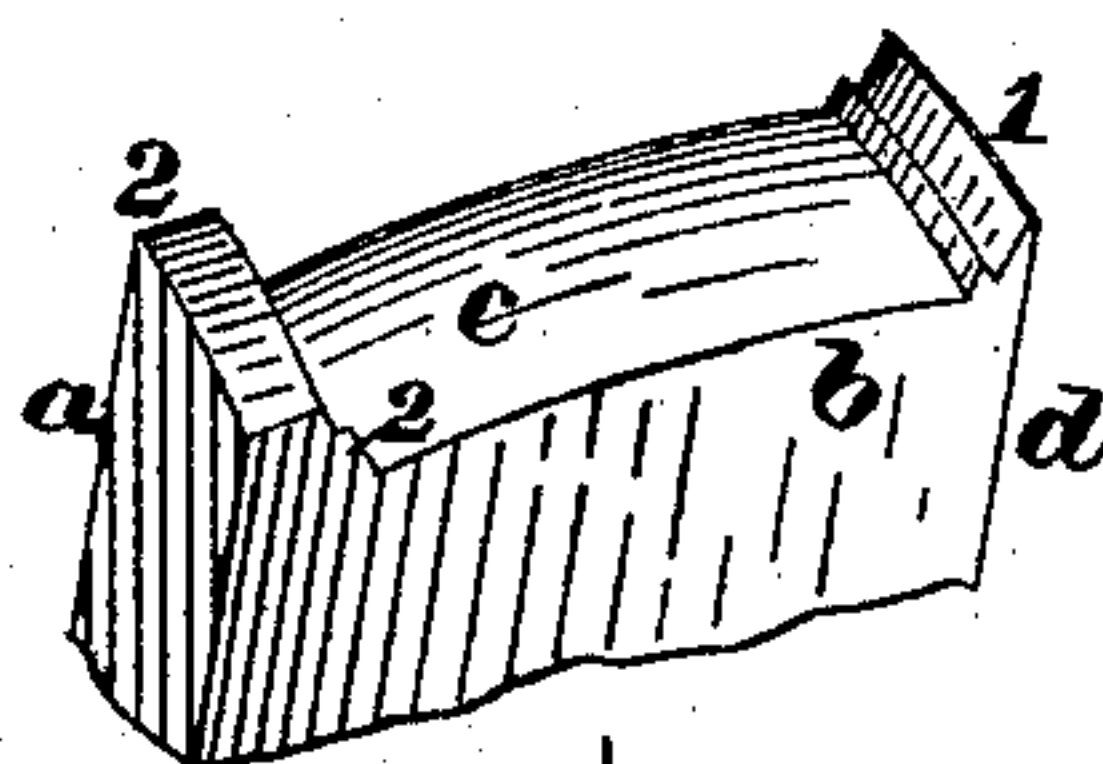


Fig. 3.

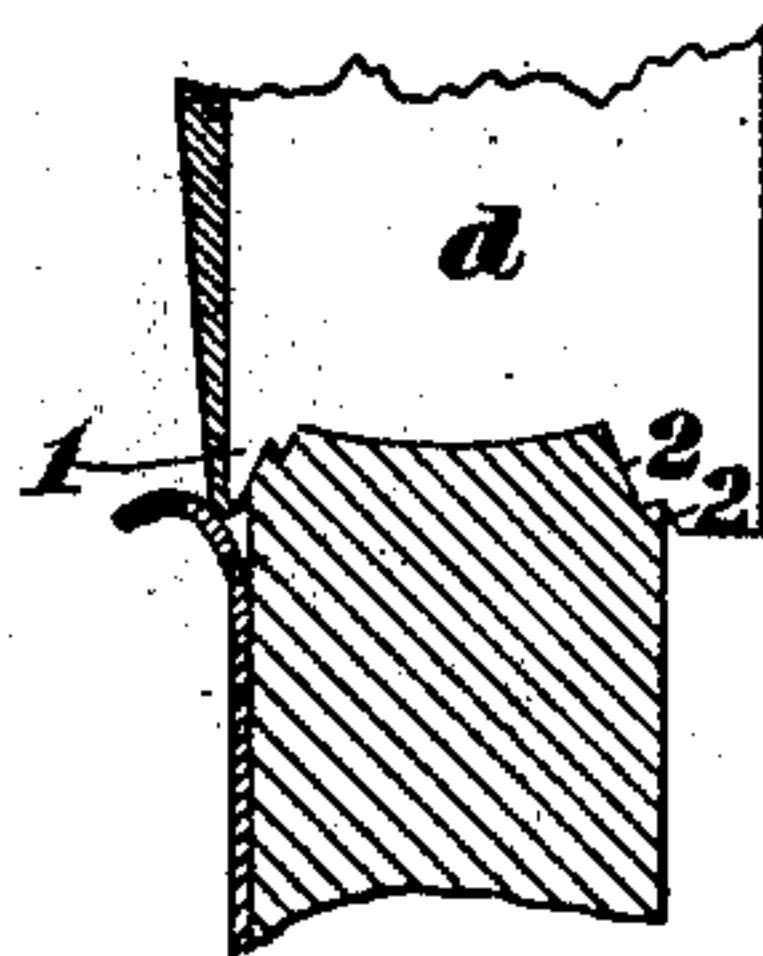


Fig. 4.

Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM D. ORCUTT, OF BOSTON, MASSACHUSETTS.

ROTARY CUTTER FOR TRIMMING THE EDGES OF BOOT AND SHOE SOLES.

SPECIFICATION forming part of Letters Patent No. 238,303, dated March 1, 1881.

Application filed January 6, 1879.

To all whom it may concern:

Be it known that I, WILLIAM D. ORCUTT, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Rotary Cutters for Trimming the Edges of Boot and Shoe Soles, of which the following, taken in connection with the accompanying drawings, is a specification.

10 My invention relates to that class of rotary cutters consisting of a series of cutting-blades arranged about a common hub; and it consists in certain peculiarities of construction of the blades, more fully described below.

15 Figure 1 is a perspective view of one form of rotary cutter embodying my invention. Figs. 2 and 3 are perspective views (enlarged for greater clearness) of the upper portion of one of the blades. Fig. 4 is a cross-section, enlarged, illustrating my improved cutter as used.

20 The blades *d* of my improved cutter have a flat front face, *a*, a flat rear face, *b*, and a top surface, *c*. A number of ridges, 1 2, extend across this top surface or circumferentially of the cutter, making what is called a "molded" or "fancy" surface, which is the converse of the sole-edge desired, every ridge 2 2 making a corresponding depression in the sole-edge, the ridge 1 at the side of the cutter, and when
25 in use next the rand-guide takes out the rand or welt.

30 The main feature of my invention consists in the blade thus formed with a flat front face and a molded or fancy top surface the converse of the sole-edge, and having the ridge 1 or the ridges 2 2, either or both extending across its top surface—that is, extending from front to back, as shown in the drawings, my improved cutter having a series of such blades,
35 the cutting-edges of each blade extending to one side of the cutter to adapt it for use on the edge of the sole next the upper, and each cutting-edge having the same relation with the axis as all the others. Each blade *d* is shown in this instance as a distinct piece secured to a hub, *d'*, substantially as in United States Patent No. 82,402, to Harrington, dated September 22, 1868. My invention, however, does not relate to the mode or process of manufacture, but to the article of manufacture; and
40 the blades and hub may be in one piece and

constructed by any suitable mode or process too well known to need description, and I disclaim, as any part of my invention, both the cutters and both the modes of manufacture described in the patent to Harrington above named, and in the patent to Brown, No. 45,294, dated November 29, 1864.

55 The flat front faces, *a*, of the blades are not radial, but are so inclined as to make each blade slightly hooking, and thereby form a knife-edge at the intersection of the flat front face with the top surface, *c*, and its ridges 1 2 2. This is very desirable, for if the front faces, *a*, be not so inclined the tool will be a scraper rather than a rotary cutter.

60 The blades are made quite thick from front to rear, so that they may be ground back as they become dulled, and they are ground only on their front faces, *a*, these faces being always maintained at substantially the same pitch. The grinding is done with a flat grinding-surface, (the flat side of a small emery-wheel,) and does not alter at all the shape of the cutting-edge of the blades. The tops *c* and ridges 1 2 2 are inclined rearward to give the necessary clearance, as will be well understood.

65 I am aware of the Patent No. 207,395, to Corthell, but in that cutter each blade is flat on top, and its front face is molded, the cutting-edge being formed by the intersection of the flat top and molded front face, and the ridge corresponding to the ridge 1 of my cutter is across the front face of the blade, or nearly radial, instead of across the top *c* of the blade, or nearly circumferential, as in my cutter. The same is true of the ridges corresponding to the ridges 2 of my cutter. When the ridge 1 is at one side of the front face, as in Corthell's cutter, the height of the projection above its base is limited by the necessary closeness together of the blades. Moreover, the depth of cut is always less than the height of the projection. The main object of my invention is to provide a sole-edge cutter in which the depth of cut is the same as the height of the projection, and in which the height of the projection is not limited by the closeness together of the blades. I am also aware of the patents to Brown and Harrington, above mentioned, but both those cutters are wholly unsuited for trimming sole-edges, and both lack the ridge 1
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at one side of the top surface of the blade for taking out the rand, and also lack the ridges 2 2 for beading the sole-edge. I disclaim, therefore, all that is shown in either of the 5 above-named patents.

What I claim as my invention is—

1. A rotary cutter for trimming sole-edges, the blades *d* of which are provided with flat front faces, *a*, and have their outer or peripheral ends, *c*, molded throughout to a uniform 10 shape, the converse of the desired shape to be given to the sole-edge, and slightly eccentric to the axis of the cutter, substantially as described.

2. A rotary cutter for trimming sole-edges, 15 the blades *d* of which are each provided with a flat front face, *a*, and a slightly eccentric outer or peripheral end, *c*, having formed thereon the end ridges, 1 and 2, extending circumferentially across said face, substantially as 20 and for the purposes described.

Executed at Boston, Massachusetts, this 2d day of January, A. D. 1879.

WILLIAM D. ORCUTT.

Witnesses:

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