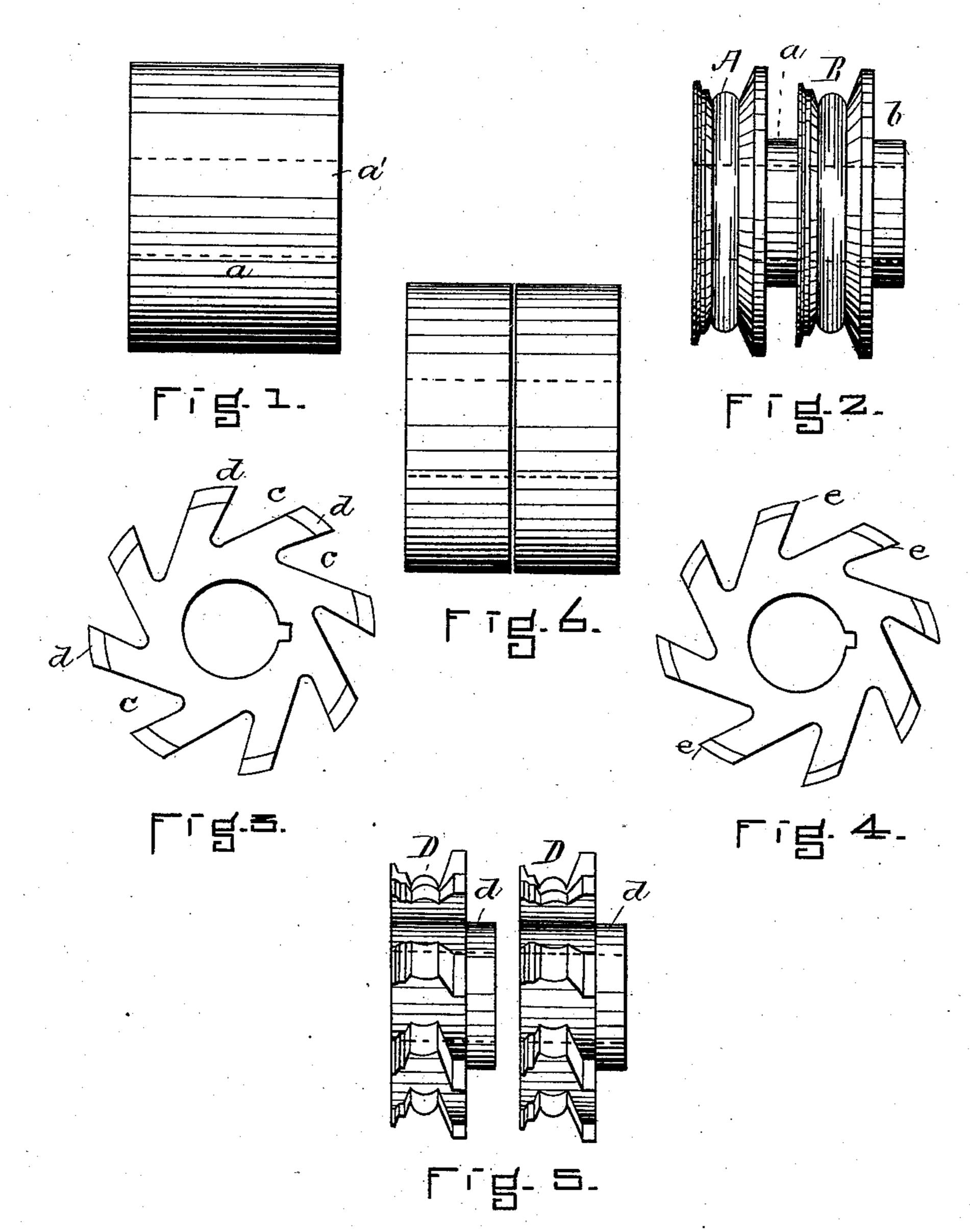
(No Model.)

C. H. TRASK.

METHOD OF MAKING ROTARY CUTTERS.

No. 372,050.

Patented Oct. 25, 1887.



WITNESSES. J. M. Dolan. Fred B. Dolan.

Chu. K. Zak Chially Chuk + Jayanas

United States Patent Office.

CHARLES H. TRASK, OF LYNN, MASSACHUSETTS, ASSIGNOR TO THE DUPLEX SHOE TRIMMER COMPANY, OF PORTLAND, MAINE.

METHOD OF MAKING ROTARY CUTTERS.

SPECIFICATION forming part of Letters Patent No. 372,050, dated October 25, 1887.

Application filed February 8, 1887. Serial No. 226,907. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. TRASK, of Lynn, in the county of Essex and State of Massachusetts, a citizen of the United States, 5 have invented a new and useful Improvement in the Method of Making Rotary Sole-Edge Cutters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The invention relates to a method of forming sole-edge cutters in groups of two or more, whereby the cost of manufacture is materially lessened, because less labor and time are re-

15 quired in making them.

Heretofore it has been customary to make such cutters singly or one at a time. The present method involves the making of two or more simultaneously from a block of metal of suitable size, and then separating the block into independent or separate trimmers.

In the drawings I have represented the process as applied to the manufacture of two trimmers; but it is obvious that three or more can

25 be formed in the same manner.

Referring to the drawings, Figure 1 is a view in elevation of a metal block of a length sufficient to form two trimmers with hubs. Fig. 2 represents the said block reduced by the 30 simultaneous operation thereon of proper shaping-tools into two partially formed right trimmers. Fig. 3 is an end elevation of the block after it has been submitted to a further operation, whereby teeth are formed in both trim-35 mers. Fig. 4 is an elevation representing the teeth of the trimmers as "backed off." Fig. 5 is a view in side elevation showing the block separated into two separate or distinct trimmers. Fig. 6 represents the block as sepa-40 rated or divided into two parts before the cutters are formed, instead of after.

In practicing the invention the block a, of metal of suitable length, is reduced to substantially the shape represented in Fig. 1, and is provided with a central hole, a. This block is then mounted upon an arbor, and is submitted to the action of a suitable turning tool, whereby there is simultaneously formed thereon the partially-formed cutter A, the

partially-formed cutter B, and the hub α of 50 the cutter A, and the hub b of the cutter B. The block as thus shaped is then submitted to another machine, whereby the cross-recesses c are formed through both sections A B, the block being moved in relation to the cutting- 55 tool or the cutting tool in relation to the block to form the recesses across both sections A B of the block as a continuous operation. This forms the teeth D upon both sections A B, and the teeth are then backed off by a suitable tool 60 to form the cutting edges e, (see Fig. 4,) and the block is then divided into two right cutters, or left, as may be wished, (see Fig. 5.) each of which has a hub, d, and which are in every respect counterparts. Of course the 65 same result can be effected by mounting upon an arbor separate blocks of a size to produce a single trimmer, instead of a block of a length to produce two or more, and submitting the blocks to the action of tools which simultane- 70 ously form the sections A B and hubs a b.

If desired, the trimmer may be made without hubs a b, and when so formed there will be no hub section between the two sections A B.

The edge or periphery of the counterpartsections A B may have any other desired configuration than that shown, and for sole-edge trimming this edge configuration is changed very considerably to suit the varying thick- 80 nesses of soles, as well as the pitch of the edge.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

The process of forming counterpart sole-85 edge trimmers, the simultaneous forming in one or more metal blocks of the sections A B, which are substantially counterparts, either with or without the hubs a b thereon, forming in said sections A B cross-recesses c, and then, 90 if the sections are made in one block, cutting or sawing the block into separate or independent trimmers, as and for the purposes de-

CHARLES H. TRASK.

In presence of— F. F. RAYMOND, 2d, FRED. B. DOLAN.

scribed.