

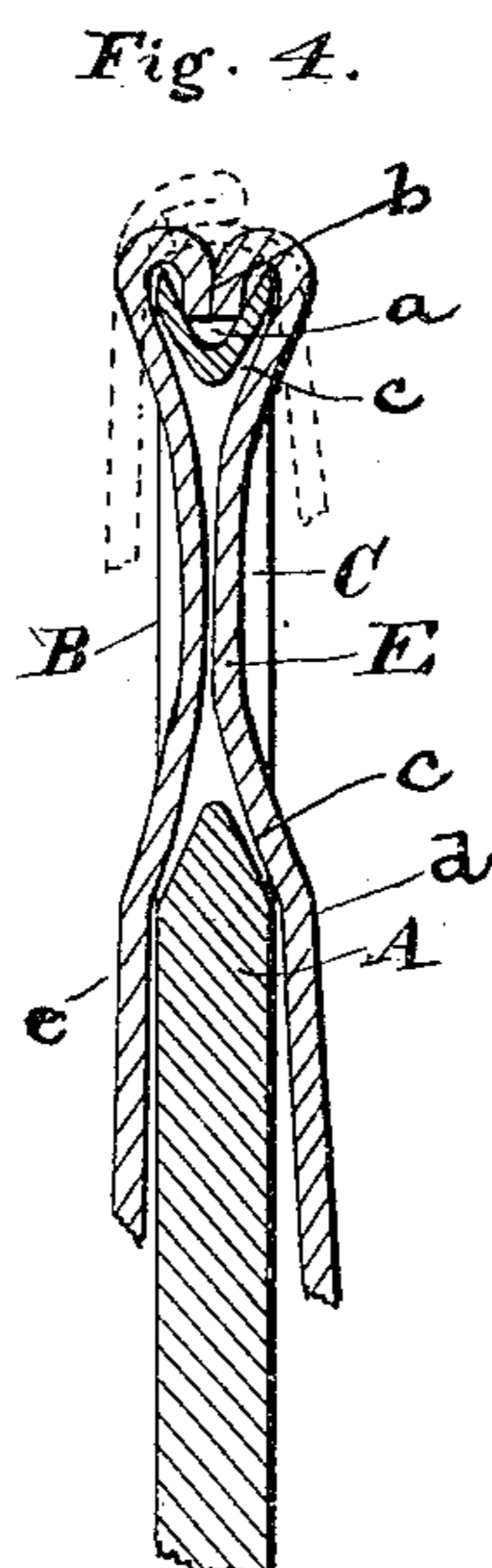
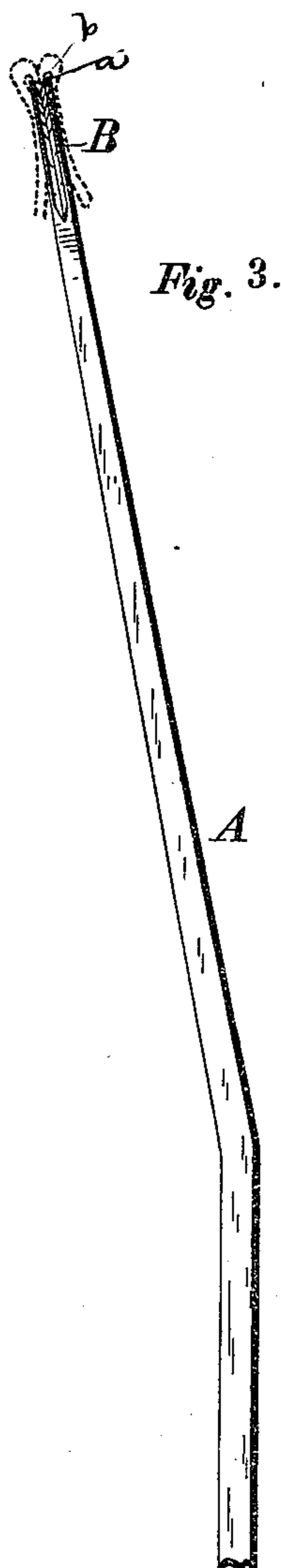
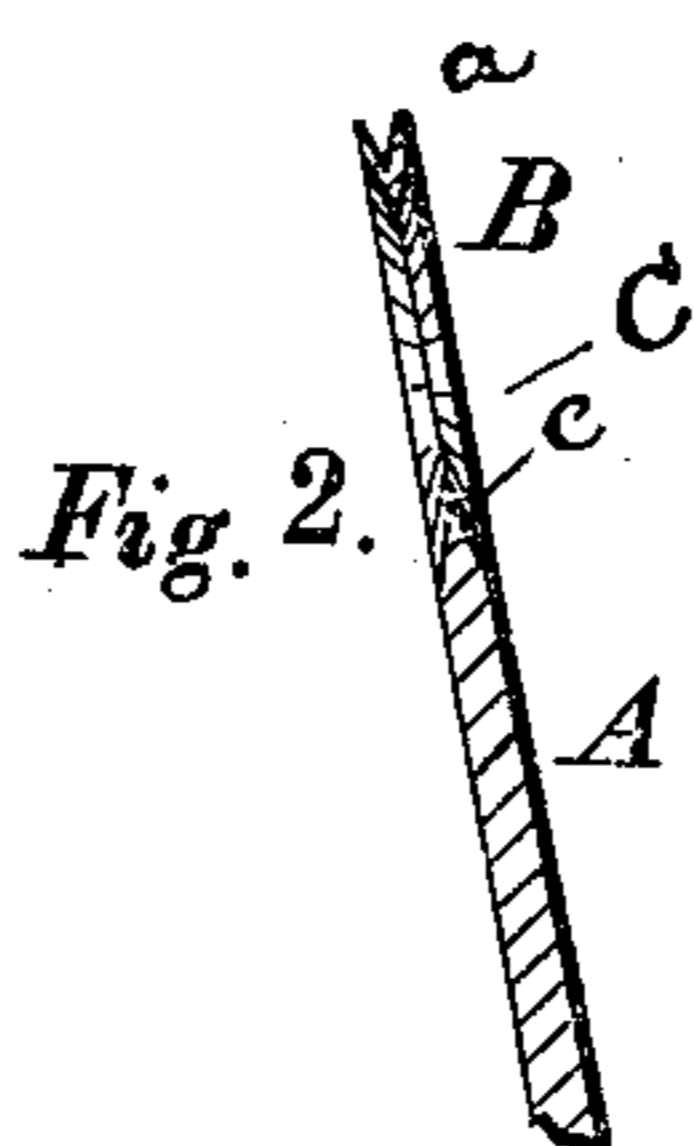
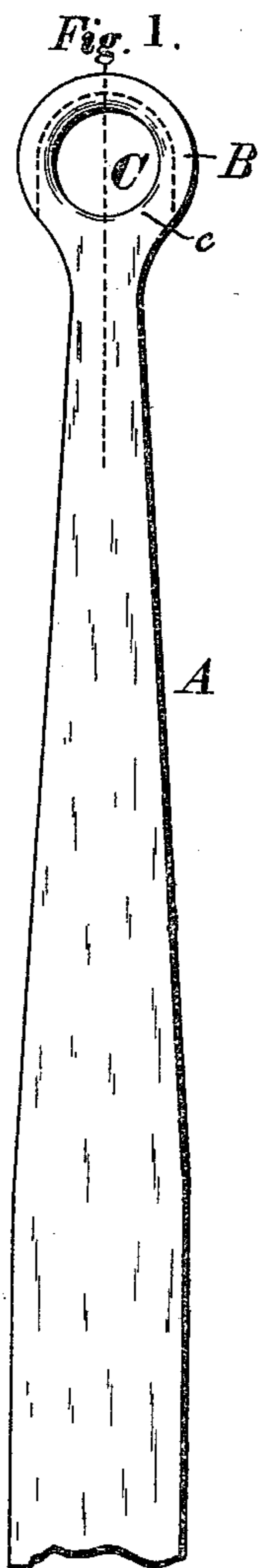
(No Model.)

C. B. HATFIELD.

TURNING IRON FOR SHOE UPPERS.

No. 354,190.

Patented Dec. 14, 1886.



Witnesses

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Geo. B. Selden—

UNITED STATES PATENT OFFICE.

CHARLES B. HATFIELD, OF ROCHESTER, NEW YORK, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO FRANK S. UPTON AND CHARLOTTE HATFIELD, BOTH OF SAME PLACE.

TURNING-IRON FOR SHOE-UPPERS.

SPECIFICATION forming part of Letters Patent No. 354,190, dated December 14, 1886.

Application filed September 9, 1886. Serial No. 213,063. (No model.)

To all whom it may concern:

Be it known that I, CHARLES B. HATFIELD, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Turning-Irons for Shoe Uppers, and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the figures and letters of reference marked thereon.

This invention relates to an improved turning-iron for use in turning in the edge seams of shoe-uppers or like articles composed of two or more thicknesses of material stitched together at the edges preparatory to the final operation of beading or compressing the material upon the inclosed seam. The turning iron or stake heretofore generally employed for this purpose consisted of a flat bar with rounded end and corners, over which the material stitched together at the edges was turned and drawn to form the preliminary bend in the material on either side of the inclosed seam. The front and rear faces of the said iron or stake, at or near the end over which the material was turned and folded, were parallel or slightly inclined toward the upper edge, so that when the material was drawn down against said faces with the stitched edges folded between the two pieces, not only would the bead or fold be irregular, owing to the slipping of the turned-in edge from one side to the other of the iron, but it would be imperfectly formed, owing, in part, to the difficulty experienced in grasping and drawing the folded material close down over the edges of the iron, and the large angle presented at the point where the bend was to be made.

My present invention, which is designed to overcome or in a great measure obviate the defects, consists, generally, in forming an opening in the end of the turning iron or stake below or in proximity to the edge upon which the material is turned and folded, to permit the operator to more readily grasp the material near the edge by pinching the two sides together through the said opening.

It also consists in the turning-iron perforated

at the end and having the edges of said perforated portion beveled or inclined inward from the turning-edge, to present a more acute angle over which the material is drawn and the bend formed; and it consists, further, in providing the iron with a groove in its upper edge or face, to receive and guide the turned-in edges, all as hereinafter more fully described, and set forth in the claims.

In the accompanying drawings, Figure 1 is a front view of my improved turning-iron. Fig. 2 is a section on the dotted lines, Fig. 1. Fig. 3 is an edge view. Fig. 4 is an enlarged sectional view of the turning-edge, showing by dotted lines the turning-edge of irons previously in use.

Similar letters of reference in the several figures indicate the same parts.

My improved turning-iron consists, essentially, of a standard, A, fixed or held in an upright position, and preferably bent, as shown, away from the operator, for convenience in applying and manipulating the material.

The upper end or head, B, of the iron is preferably curved or rounded, as shown, and in the edge is formed a circumferential groove, *a*, for the reception of the turned-in edges *b* of the material. In the rounded portion or head B is formed a hole or opening, C, with beveled edges or sides, *c*. As thus constructed, the turning or folding edge of the iron comprises a ring or annulus mounted upon and secured to the standard A, the said ring or annulus being provided with a circumferential groove and beveled walls.

The operation of the device is as follows: Taking, for example, a shoe-upper composed of the outside leather or upper proper, *d*, and the lining *e*, united by a row of stitches near the edge, the two pieces thus united are turned and placed upon the iron with the edges *b* in the groove *a*, and the leather *d* and lining *e* turned down upon the opposite faces of the iron. The operator now presses the two pieces *d* and *e* together through the opening C, at the same time drawing them down and pressing the material against the edges of the ring.

As will be readily observed, the opening in

the head of the iron not only facilitates the operation of drawing and pressing the edges of the material by permitting the two pieces to be grasped and held together while being drawn down, but it permits the two pieces to be drawn inward over the narrow turning-edge thus formed, this last-named operation being facilitated by beveling the walls of the opening, so as to present at the outer edge a more acute angle.

The difference in action between the old form of turning-iron and my improved implement, and the advantages possessed by the latter, are illustrated in Fig. 4, wherein the improved turning-iron with the material in position is shown by full lines, and the old form of iron and material thereon by dotted lines.

The annular form of turning-head is especially well adapted for turning scallops or corners, as the material can be drawn over the edges upon all sides toward the center.

If desired, one of the edges of the groove in the head may be made shorter or narrower than the other, for the purpose of throwing the seam more to one side than the other.

Having thus described my invention, what I claim as new is—

1. An improved iron for turning shoe-up-

pers and similar articles, comprising the annular head or turning-edge mounted upon a standard, substantially as described.

2. The herein-described turning iron or stake, consisting of a standard provided with an annular head and grooved turning-edge, substantially as described.

3. The improved turning iron or stake provided with an annular head mounted upon a standard, the interior wall of the annulus being beveled, substantially as and for the purpose set forth.

4. An improved turning iron or stake substantially such as herein described, consisting of an annular head having beveled sides, mounted on a standard and provided with a circumferential groove, substantially as described.

5. An improved turning iron or stake substantially such as described, consisting of a standard provided at its upper end with a narrow turning-edge grooved for the reception of the turned-in edge of the material, the sides of the said turning-edge being beveled, substantially as described.

CHARLES B. HATFIELD.

Witnesses:

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