

(No Model.)

3 Sheets—Sheet 1.

W. H. FITZ GERALD.

MANUFACTURE OF WATCH CASE CENTERS.

No. 353,930.

Patented Dec. 7, 1886.

Fig. 1.

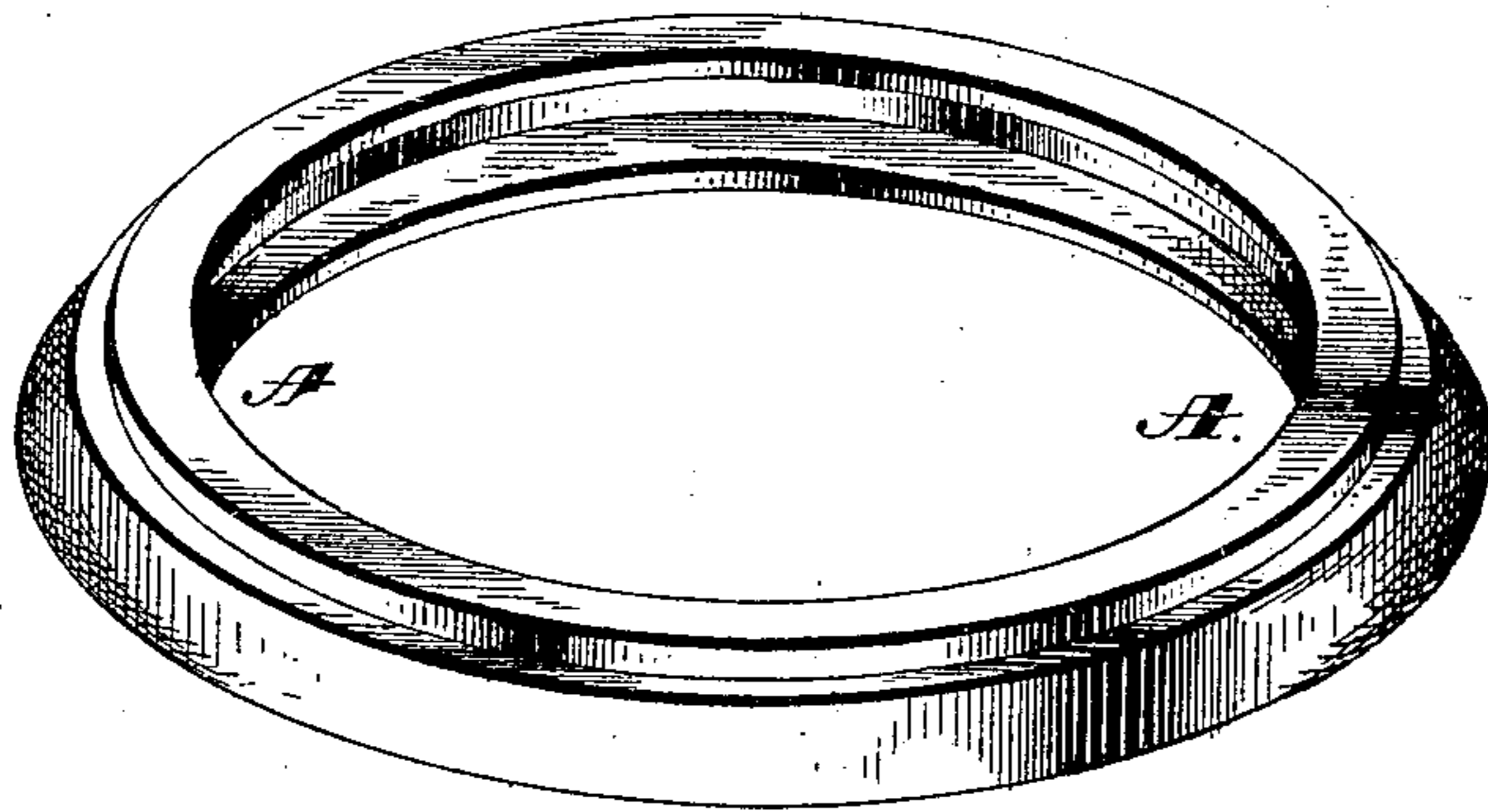


Fig. 2.

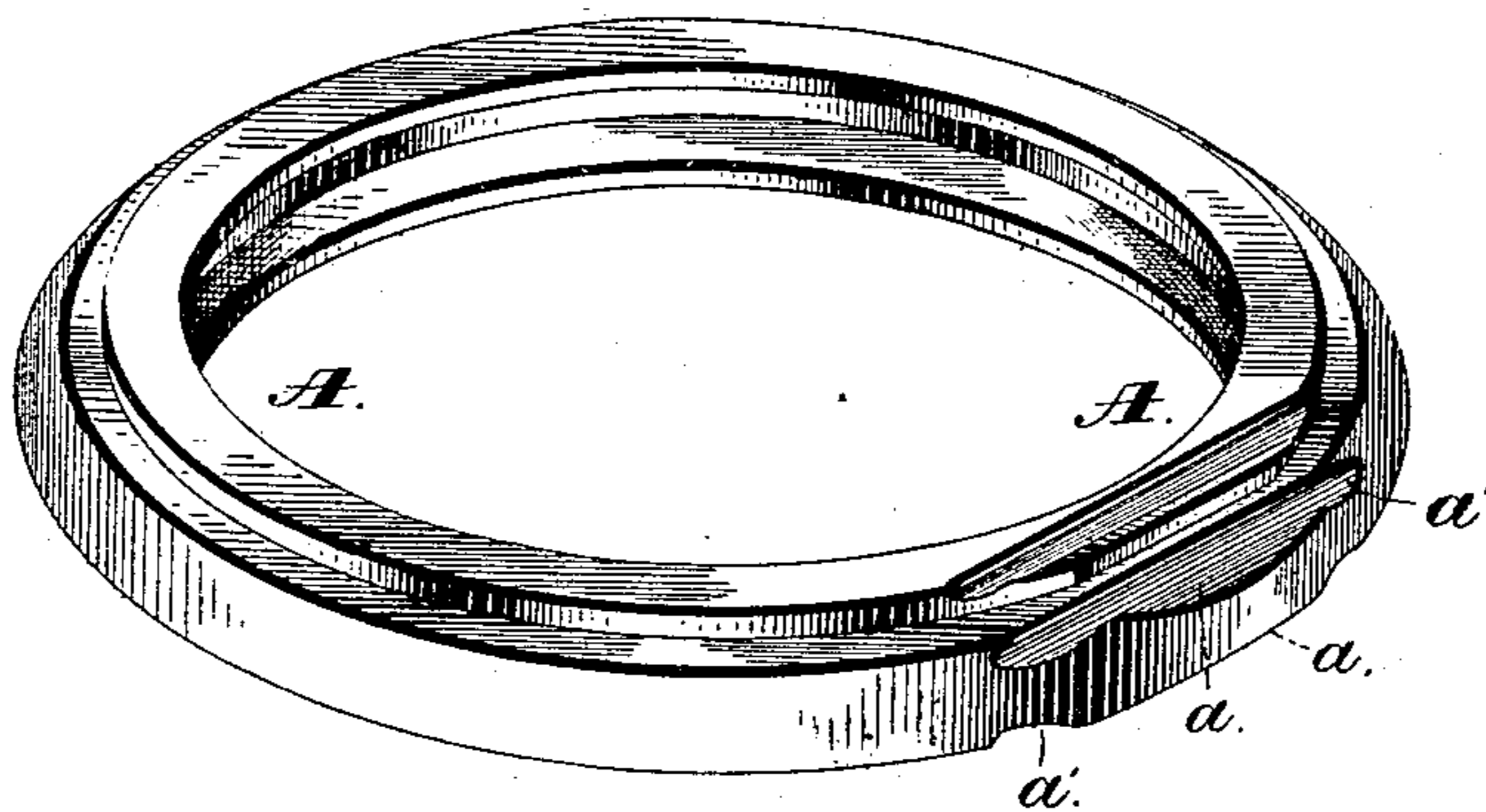
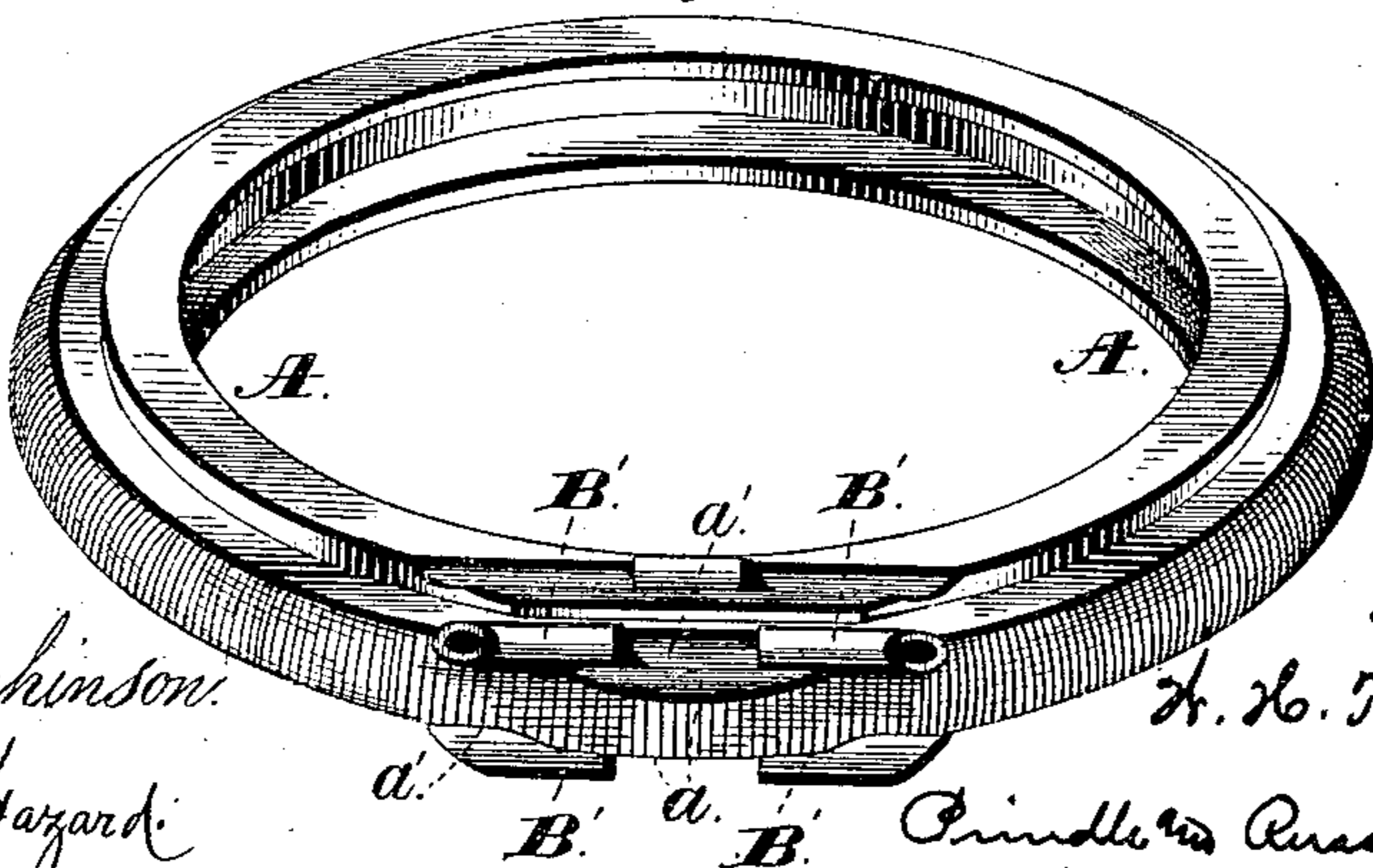


Fig. 3.



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Fig. 4.

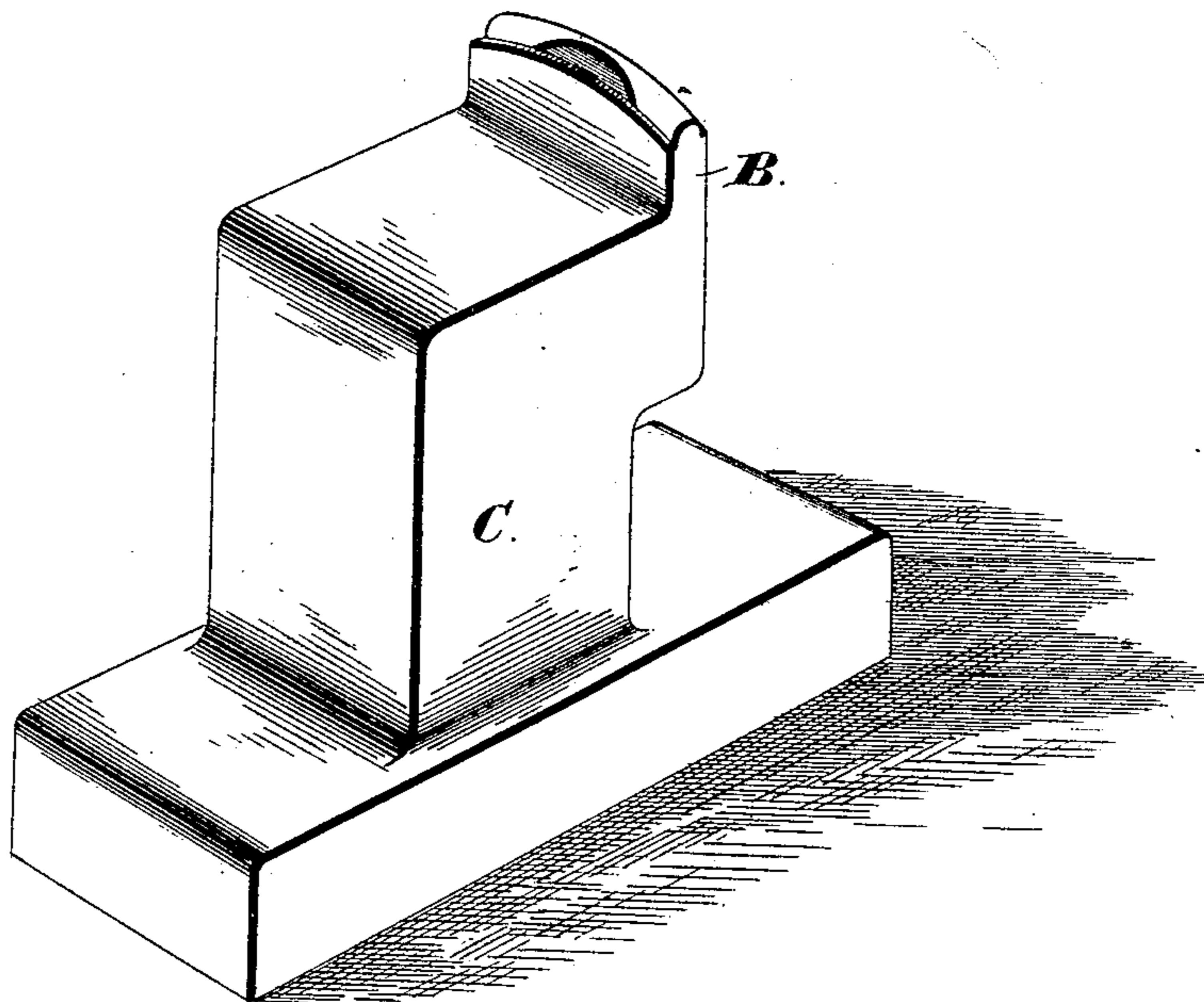
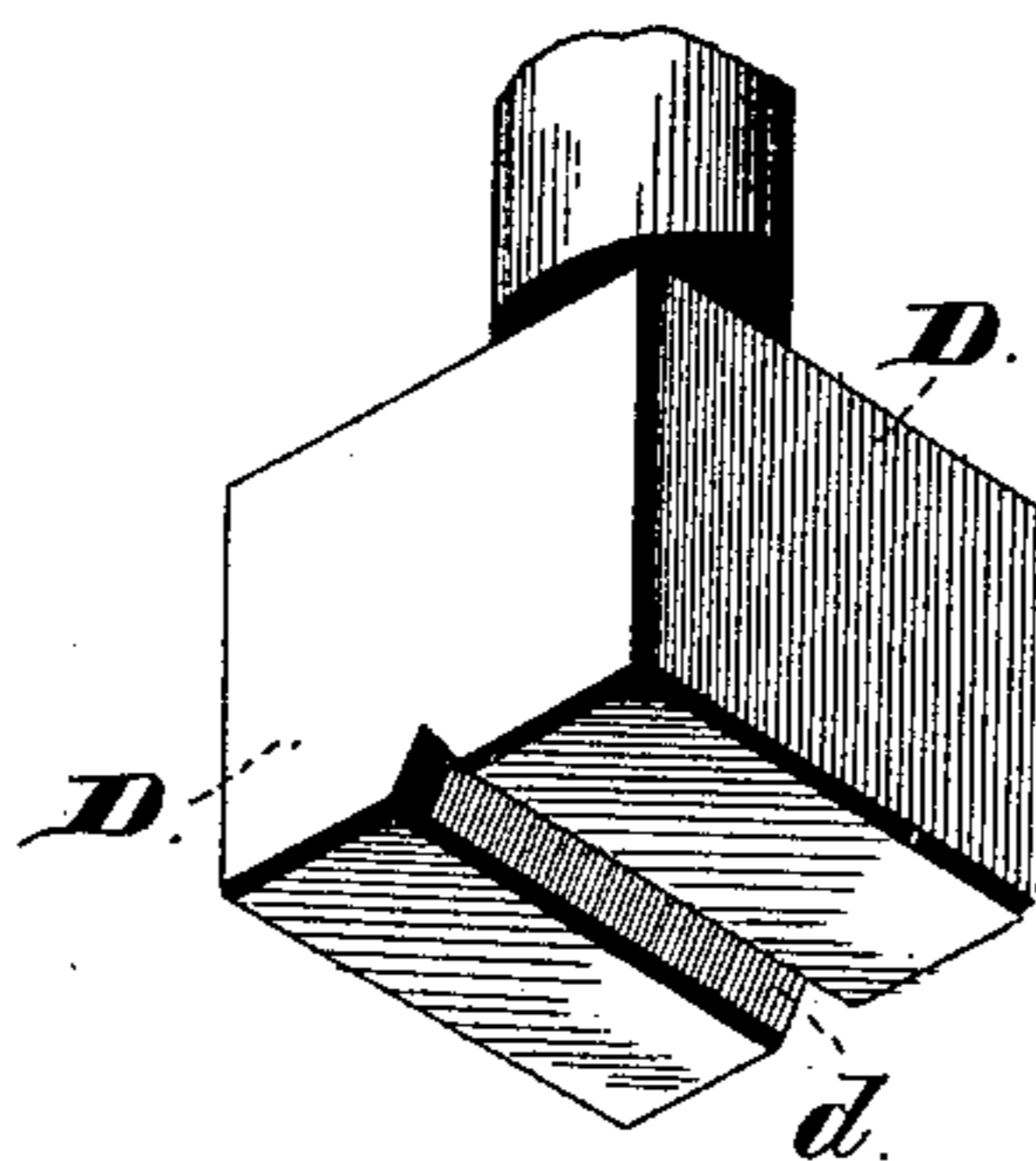


Fig. 5.



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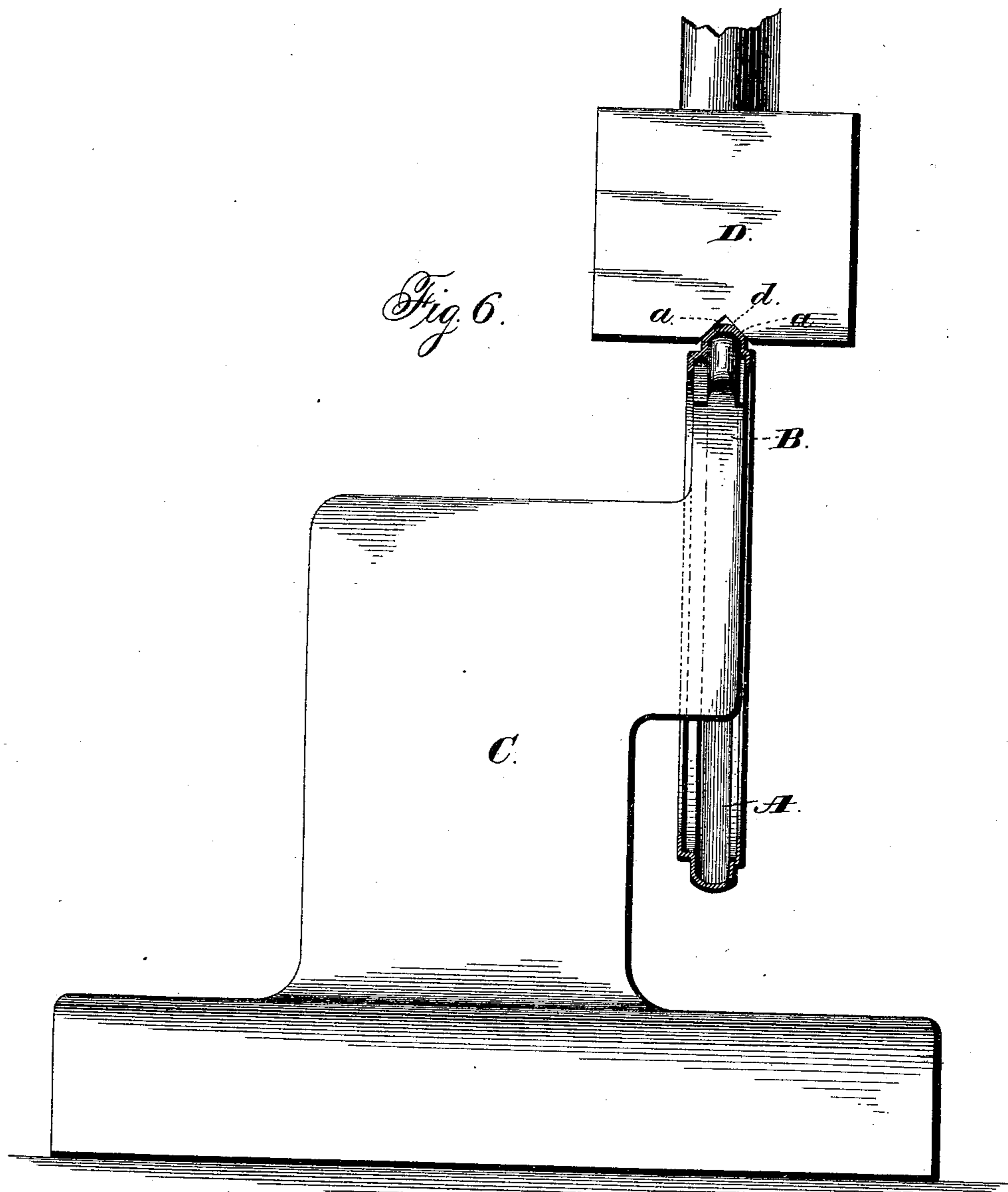
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UNITED STATES PATENT OFFICE.

WALTER H. FITZ GERALD, OF BROOKLYN, NEW YORK.

MANUFACTURE OF WATCH-CASE CENTERS.

SPECIFICATION forming part of Letters Patent No. 353,930, dated December 7, 1886.

Application filed May 20, 1886. Serial No. 202,756. (No model.)

To all whom it may concern:

Be it known that I, WALTER H. FITZ GERALD, of Brooklyn, in the county of Kings and in the State of New York, have invented certain new and useful Improvements in the Manufacture of Watch Case Centers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

10 Figure 1 is a perspective view of my case-center before being provided with hinge-rabbets. Fig. 2 is a like view of the same after being provided with the hinge-rabbets and operated upon by the beveling-dies. Fig. 3 is a
15 perspective view of said part after the hinges are in place. Fig. 4 is a like view of the holder or lower die for said case-center. Fig. 5 is a perspective view of the beveling-die, and Fig. 6 is a side elevation of said holder and die
20 and a vertical cross section of said case-center in position between the same.

Letters of like name and kind refer to like parts in each of the figures.

25 In the construction of filled watch-cases it is customary to cut the hinge-rabbets within the center and to bevel the sides of the contiguous metal after said center has been completed other than the knurling or ornamenting of its periphery, by which means the fine metal
30 of the surface is removed and the base-metal filling exposed, the result being that in the completed case there is at each hinge a part of the center which is not plated or covered by the fine metal and which will quickly tarnish.
35 To remedy this defect the part thus exposed has been afterward plated, but as it is not practicable by such means to exactly match the covering of the other portions of the case, the appearance of the part so treated is but
40 little if any better than when the filling has been left exposed.

The design of my invention is to enable the hinge-bevel to be formed upon a case-center without removing or injuring the previously-
45 formed surface; and to this end said invention consists, principally, in the method of forming the beveled face adjacent to each hinge-rabbit of a watch-case center by compressing the metal at such point between dies, substantially
50 as and for the purpose hereinafter specified.

It consists, further, in the method of adapt-

ing a watch-case center for the reception of a hinge by first forming the beveled faces by compressing the metal at such point between dies and then milling or cutting within one
55 side of the same a rabbet that is adapted to receive and contain the hinge-tube, substantially as and for the purpose hereinafter shown.

It consists, further, in the method of forming watch-case centers by first forming a ring
60 having the desired diameter and having in cross-section a convex exterior; next, in forming thereon beveled faces by compressing the metal between dies, and, lastly, cutting within one side of such ring or case-center a rabbet
65 that is adapted to receive and contain a hinge-tube, substantially as and for the purpose hereinafter set forth.

It consists, finally, in the construction and combination of the dies used, substantially as
70 and for the purpose hereinafter shown and described.

In the carrying of my invention into practice I employ a case-center blank, A, which is preferably constructed by dies from sheet
75 metal, and in cross-section has a convex exterior and a correspondingly-concave interior. The case-center thus shaped is placed upon an anvil or die, B, that substantially conforms in cross-section to the like interior form of said
80 part and circumferentially within the same has a length of about one-half inch. Said die is suitably supported upon a base, C, so as to enable said case-center to be suspended therefrom, as shown. The case-center A being thus
85 in position upon the anvil-die B, a second die, D, having a V-shaped groove, *d*, within its lower face, is caused to impinge upon the upper portion of the convex periphery of said case-center, so as to form upon such portion two in-
90 clined or beveled faces, *a*, one of which is upon each side of said center. The portions of said lower die that are immediately beneath said faces *a* are correspondingly beveled, so as to cause the metal of said case-center to be sol-
95 idly compressed between the same and the sides of the groove *d* and the exact shape desired to be given to said faces *a*. Immediately below each of the beveled faces *a* there is now cut a rabbet, *a'*, for the reception of the hinge-
100 tubes B, which latter are secured in place in the usual manner, after which the periphery

of the case-center is knurled or otherwise ornamented. If desired, such ornamentation may be produced before said rabbets are cut.

The operation of forming the beveled faces in no manner disturbs or displaces the fine-metal covering, and said faces are as fully protected as is any other portion of said case-center.

Having thus described my invention, what I claim is—

1. The method of forming the beveled face adjacent to each hinge-rabbit of a watch-case center, which consists in compressing the metal at such point between dies, substantially as and for the purpose specified.

2. The method of adapting a watch-case center for the reception of a hinge, which consists in first forming the beveled faces by compressing the metal at such point between dies and then milling or cutting within one side of the same a rabbit that is adapted to receive and contain the hinge-tube, substantially as and for the purpose shown.

3. The method of forming watch-case centers, which consists, first, in forming a ring having the desired diameter and having in cross-section a convex exterior; next, in forming thereon beveled faces by compressing the metal between dies; and, lastly, cutting within one side of such ring or case-center a rabbit that is adapted to receive and contain a hinge-tube, substantially as and for the purpose set forth.

4. As an improvement in mechanism for the manufacture of watch-case centers, the anvil-die B, adapted to fit within the interior of the case-center, in combination with the die D, provided with the V-shaped groove *d*, substantially as and for the purpose shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of March, A. D. 1886.

WALTER H. FITZ GERALD.

Witnesses:

JAY WOOD,
J. W. FITZ GERALD.