

(No Model.)

J. HANKIN.  
COLLAR FOR SHAFTING.

No. 553,525.

Patented Jan. 28, 1896.

Fig. 1.

Fig. 2.

Fig. 3.

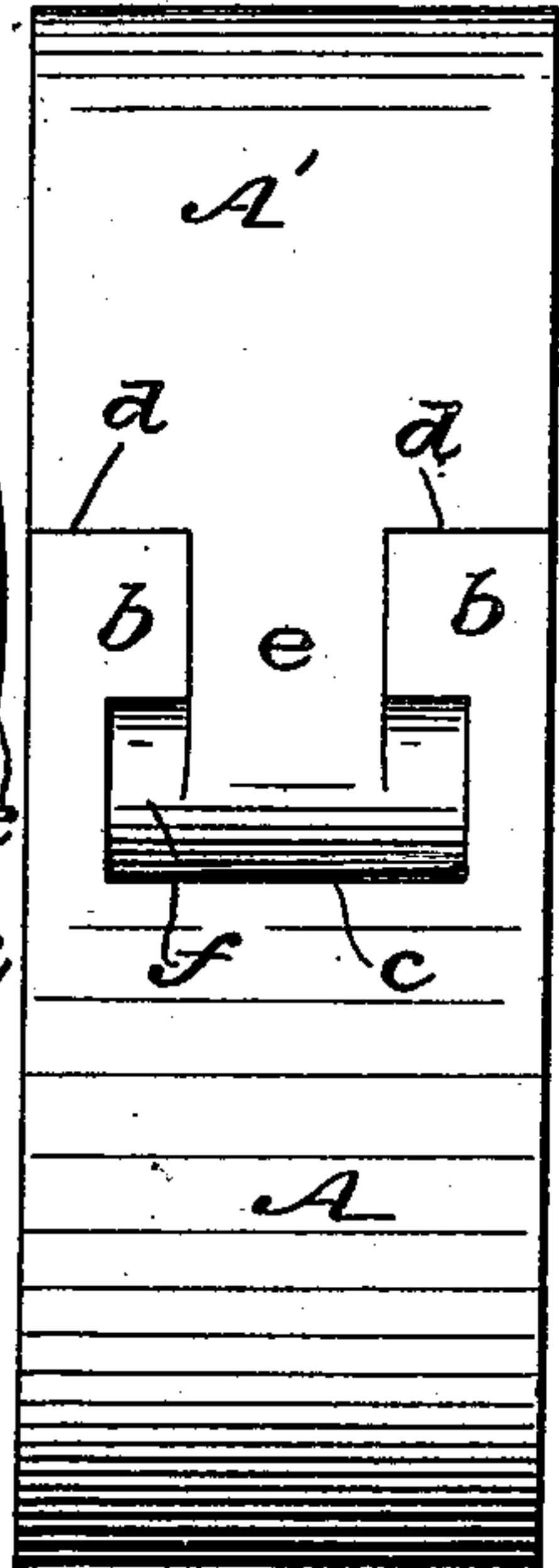
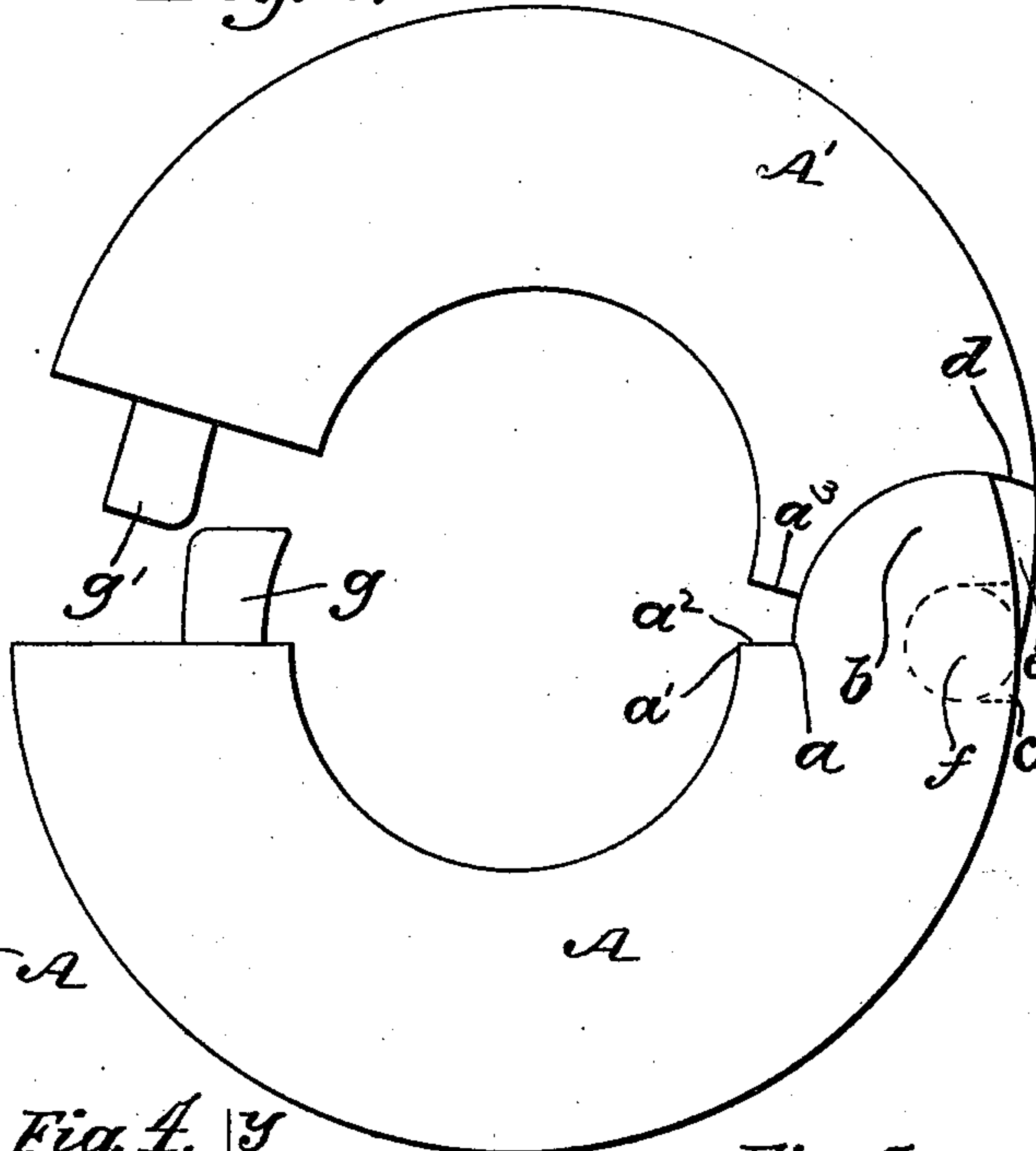
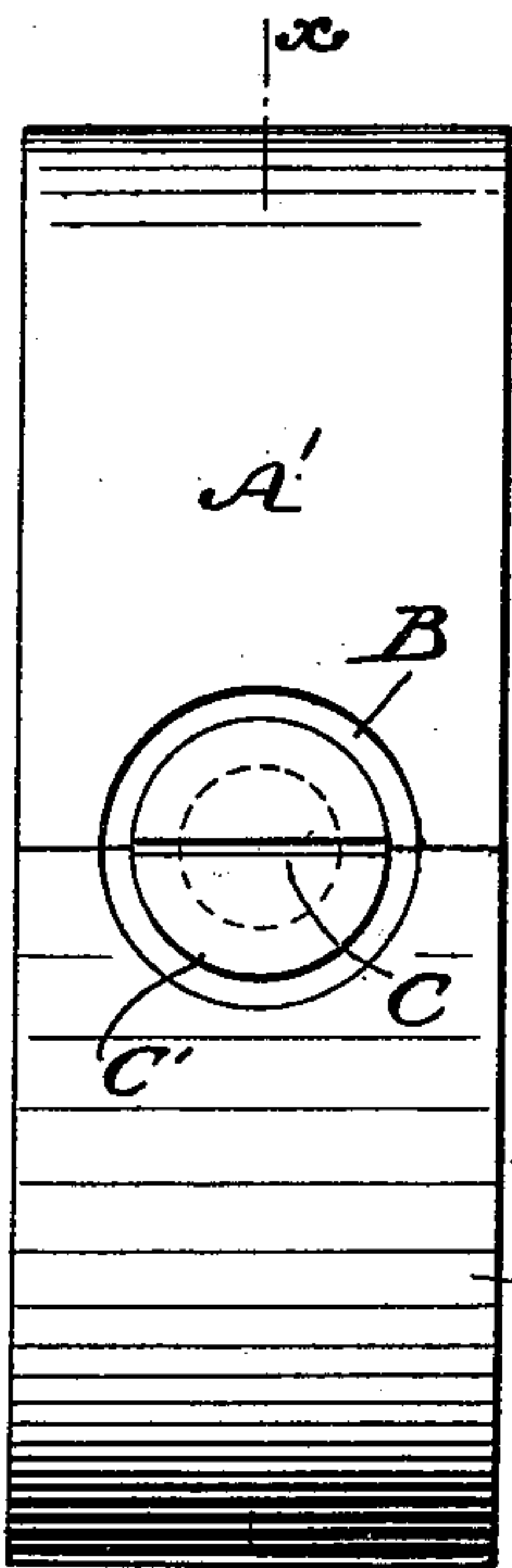
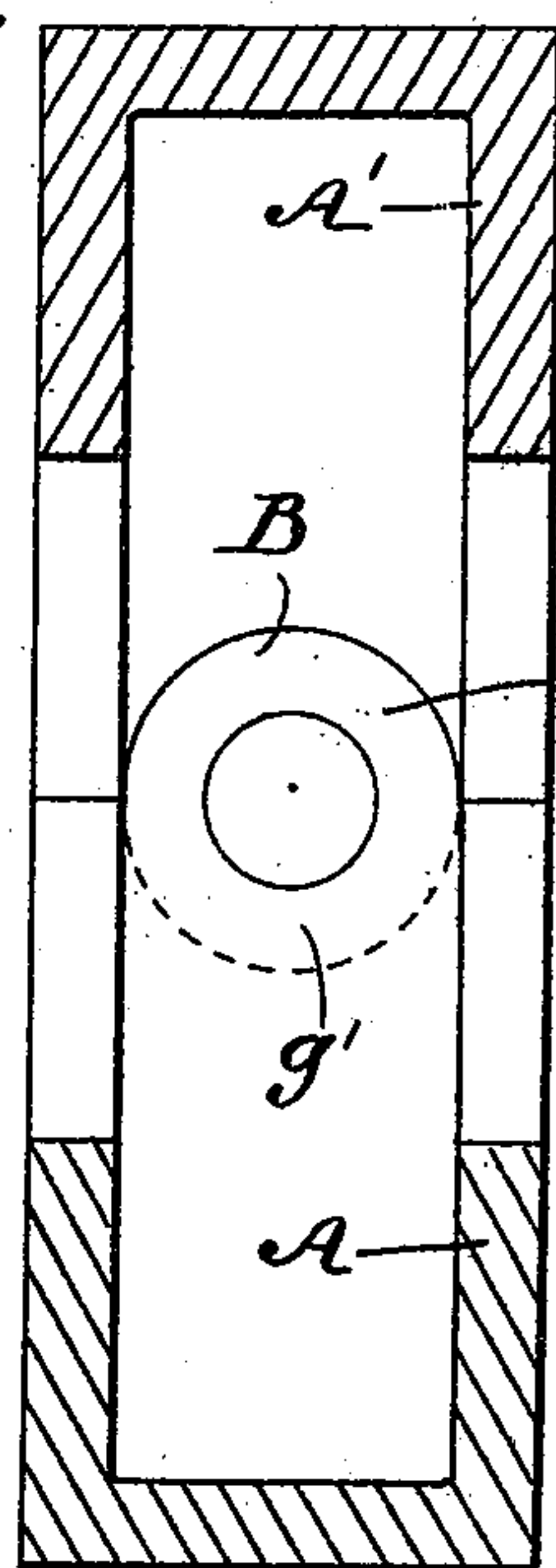
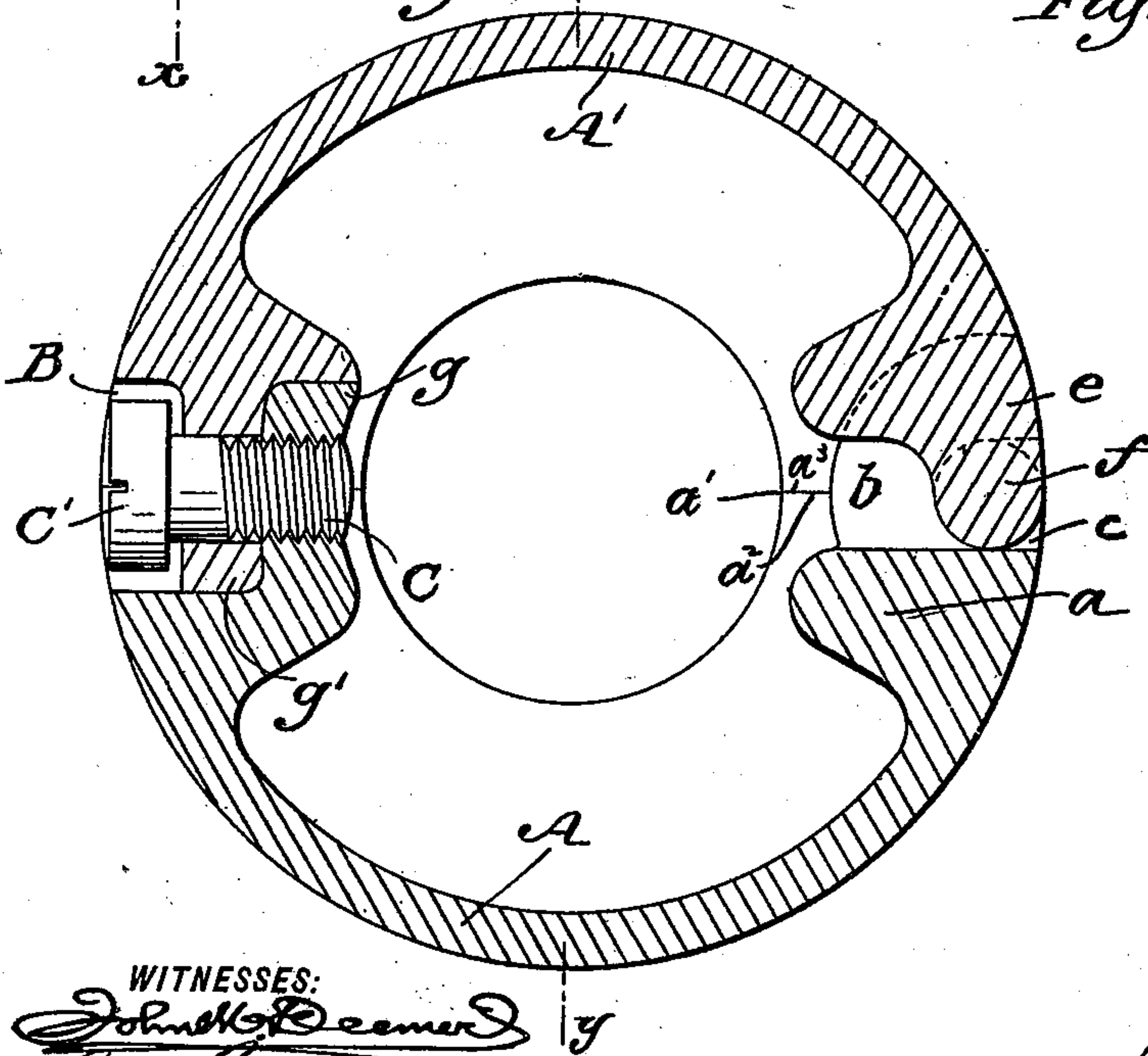


Fig. 4.

Fig. 5.



WITNESSES:  
*John H. Deemer*  
*C. Gerst*

INVENTOR  
*John Hankin*  
BY  
*Edgar Tate & Co.*  
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# UNITED STATES PATENT OFFICE.

JOHN HANKIN, OF RUTHERFORD, NEW JERSEY.

## COLLAR FOR SHAFTING.

SPECIFICATION forming part of Letters Patent No. 553,525, dated January 28, 1896.

Application filed February 2, 1895. Serial No. 537,056. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN HANKIN, a citizen of the United States, and a resident of Rutherford, county of Bergen, and State of New Jersey, have invented certain new and useful Improvements in Collars for Shafting, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts in all the figures.

This invention relates to collars adapted to be secured upon shafting and readily removed therefrom without interference with the shaft. These have usually been formed of sections locked together at either end by bolts or the like, or flanged and slotted sections which engage at either end, which, however, do not lock.

The object of my invention is to provide such a device as will be locked at one side without auxiliary fastenings, and the opposite side of which may be locked by the usual set-screw which secures the collar upon the shaft.

To these ends the invention consists in the novel construction and arrangement of parts, whereby the above-mentioned and other desirable results are attained, and hereinafter fully described.

Referring to the drawings, Figure 1 is a side elevation of a device embodying my invention. Fig. 2 is a front elevation thereof with the sections partially separated. Fig. 3 is a reverse view to Fig. 1. Fig. 4 is a longitudinal section upon the line  $xx$ , Fig. 1. Fig. 5 is a transverse section upon the line  $yy$ , Fig. 4.

In the practice of my invention I construct the collar of two sections A and A', preferably hollow throughout the main portion of their length and centrally apertured for the reception of the shaft therethrough. Projecting from the edge  $a$  of said collar at one side are flanges  $b$ , corresponding exteriorly to the arc or segment of the collar, and curved upon their inner edges from a point  $a'$  upon the edge  $a$  slightly removed from the inside thereof, whereby a shoulder  $a^2$  is formed upon either face of the collar. At the junction of the flanges  $b$  with the edge  $a$ , I form a transverse recess  $c$ , projecting radially into said flanges

toward the center of the collar throughout about half of its annular diameter, and rounded at the bottom in substantial alignment with the curve of the inside of the flange  $b$ , as indicated by dotted lines in Fig. 4. The adjacent edge of the section A' is cut out upon either face to form recesses  $d$ , conforming to and adapted to receive the flanges  $b$ , with similar shoulders  $a^3$  upon the inside, which when the sections are together abut against the shoulders  $a^2$ . The said edge of the section A' between the recesses  $d$  forms a projection  $e$  fitting between the flanges  $b$ , and having upon the end thereof a transverse cylindrical stud or pintle  $f$ , which fits within the recess  $c$  in the section A.

The opposite edges of the sections A A' are cut out at their junction to form a circular radial recess B, within which the said edges of the sections are provided with integral circular lugs  $g g'$  upon the inside of the section A and the center of the section A', which said circular lugs project beyond the main edges of the sections to fit into the recess B of the opposite section. These circular lugs are internally tapped to permit the insertion through both of the same of the set-screw C, the head C' of which fits wholly within the recess B without or above the lug  $g'$ .

The operation of the device will be readily understood from the foregoing description, taken in connection with the accompanying drawings. The sections are placed upon the shaft by inserting the stud  $f$  into the recess  $c$  and then bringing the sections together, whereby the projection  $e$  fits between the flanges  $b$  and the shoulders  $a^2 a^3$  abut against each other. This portion of the device thus forms a hinge, through the agency of which the section A' may be swung upwardly or opened out to substantial right angles with the edges of the section A working upon the curved faces of said flanges, and after reaching such position may be immediately detached, while when in position upon the shaft the said flanges prevent lateral movement of said section A' in an outward direction, and the stud  $f$  such movement in an inward direction with respect to its pivotal point; and it is furthermore to be noted that each of said sections are formed wholly in one piece, pref-



erably a casting, thereby avoiding the use of auxiliary locking attachments or parts as ordinarily.

The collar is secured together at the opposite end, and at the same time secured in position upon the shaft by means of the set-screw C inserted through the circular lugs *g g'*, which also tend to prevent lateral shifting of the parts before securing, it being a desideratum that the outer periphery of the collar shall be substantially smooth, and any overlapping of either section be prevented, and in this connection it is to be noted that the head C' of the screw is not only concealed within the recess, and therefore beneath or upon an approximate level with the exterior edge of the collar, but, furthermore, the cylindrical stud *f* is likewise upon a substantial level with said edge at the opposite side, and therefore such edge or surface is substantially unbroken. The circular lugs *g g'* are also cast with each section, the whole device therefore comprising but two parts, except for the set-screw C, and this being ordinarily employed independently of the section-securing devices, the present invention substantially does away with any such securing means other than integral projections, while at the same time the parts are in reality locked against both opening and lateral movement.

The advantages resultant from the use of the invention will be manifest to all who are conversant with the general class of devices to which the same appertains.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A collar for shafting comprising two sections, one of which is provided with recessed projecting flanges fitting within the adjacent face of the opposite section, the said adjacent edge of the opposite section fitting between said flanges, and having an integral stud or pintle; said sections having overlapping lugs at the opposite side, and a set screw or bolt

inserted radially through said lugs to secure the sections together and the collar upon the shaft.

2. A collar for shafting comprising two sections, one of which is provided with projecting flanges fitting within the adjacent face of the opposite section, and recessed from the exterior, and the said adjacent edge of the opposite section fitting between said flanges, and having a stud or pintle integrally formed upon the end thereof; and means for securing the opposite ends of the sections together, and for retaining the collar in position upon the shaft.

3. A collar for shafting comprising two sections, one of which is provided at one side with projecting flanges, curved upon their inner faces with shoulders inwardly of the same, and recessed transversely from the exterior inwardly, and the adjacent edge of the opposite section being recessed in each face thereof to receive the curved flanges therein, and provided with an integral projection adapted to fit between said flanges, and having a cylindrical stud or pintle formed upon the end thereof and entering the recess in the flanges, whereby the sections are detachably hinged, the opposite ends of the sections being cut out to form a circular radial recess, integral lugs projecting from the inner face of one section, and centrally from the opposite section to overlap and align, and centrally tapped, and a set-screw inserted through said lugs to secure the sections together, and retain the collar upon the shaft, said set-screw having its head inserted within the recess above the lugs.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 30th day of January, 1895.

JOHN HANKIN.

Witnesses:

C. GERST,  
A. CUSACK.