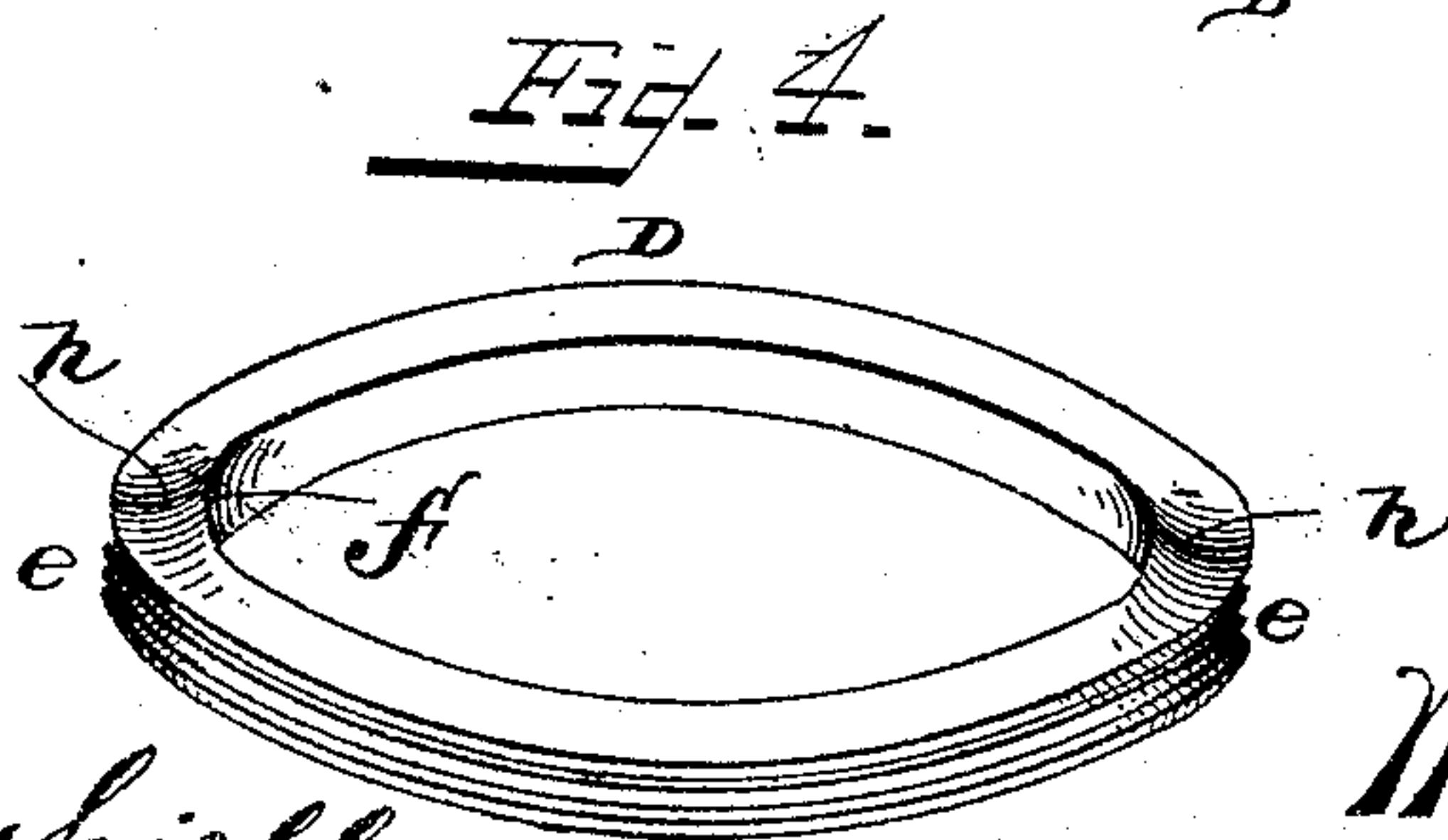
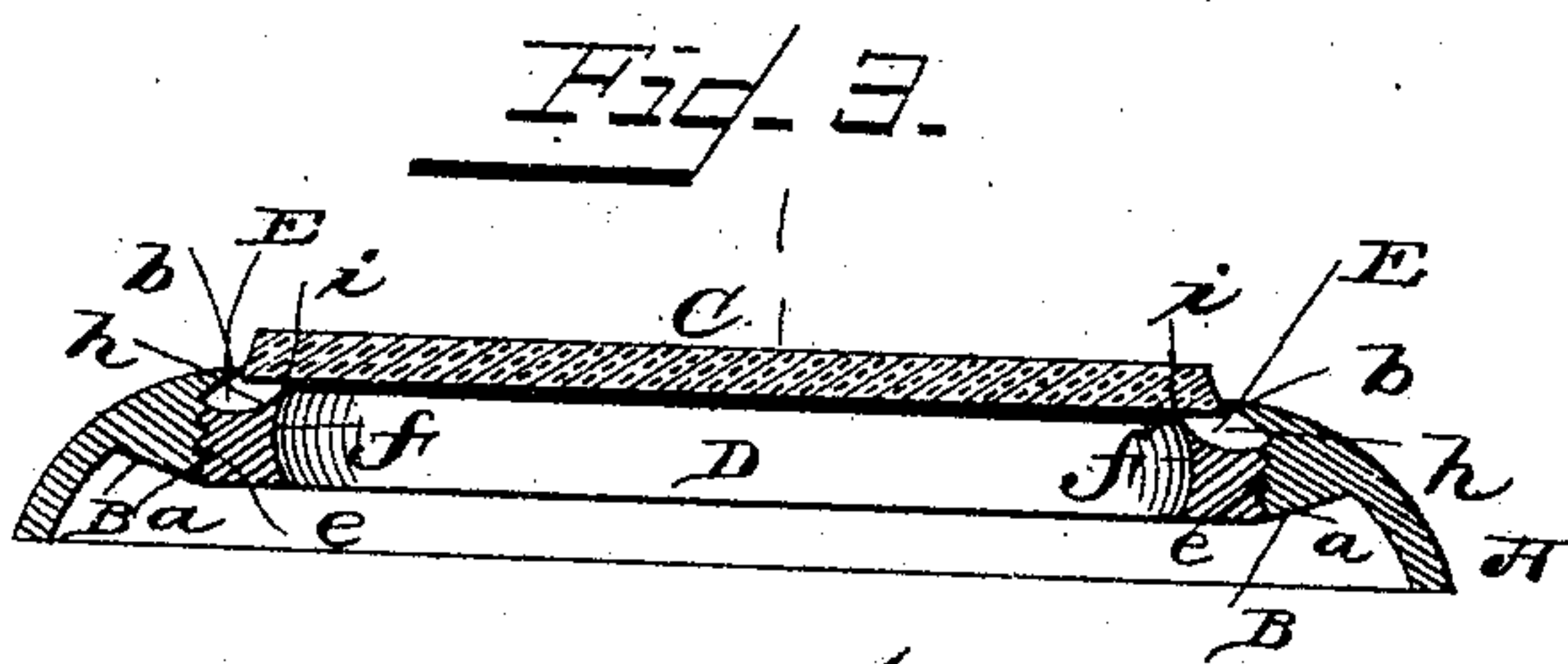
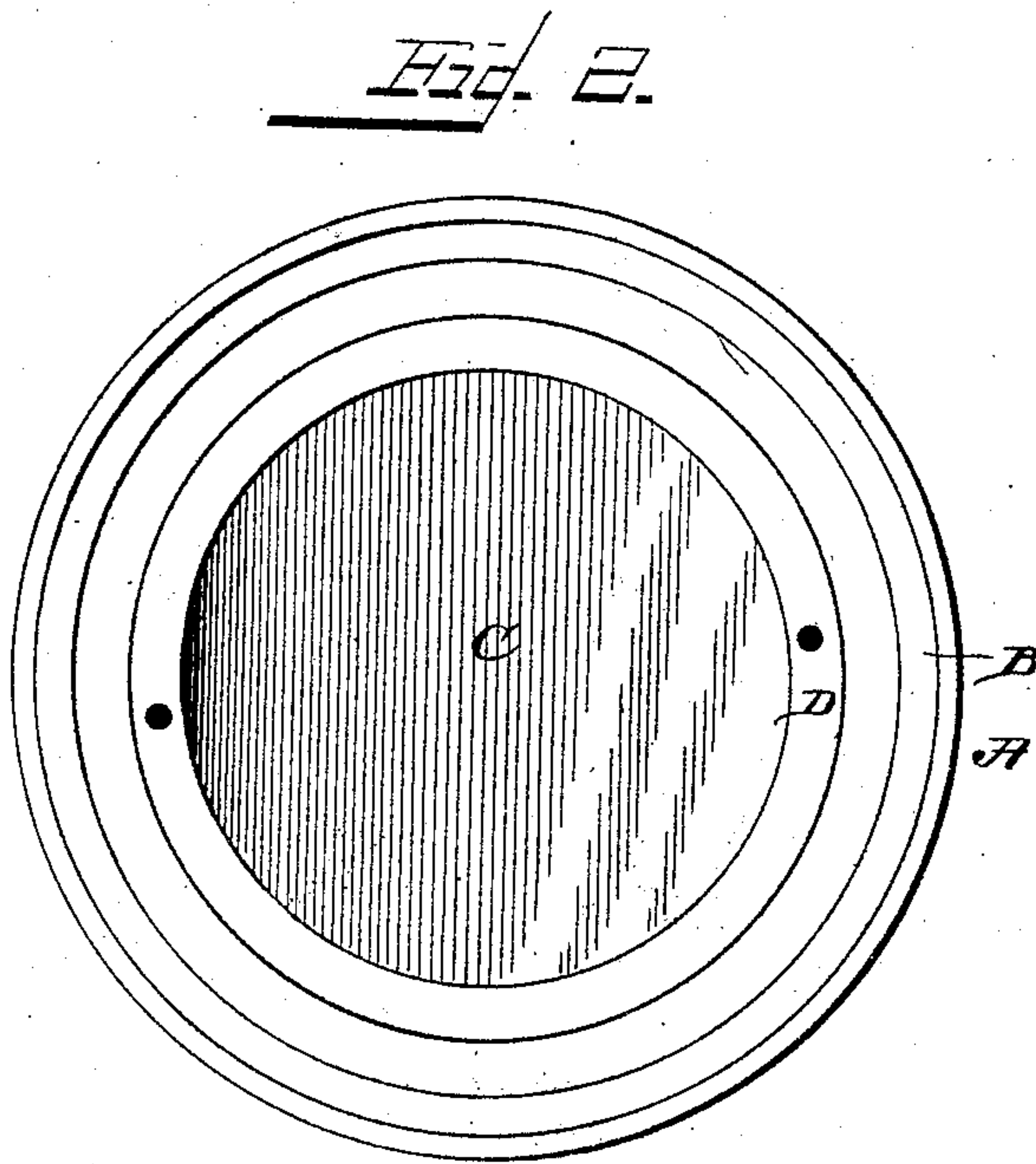
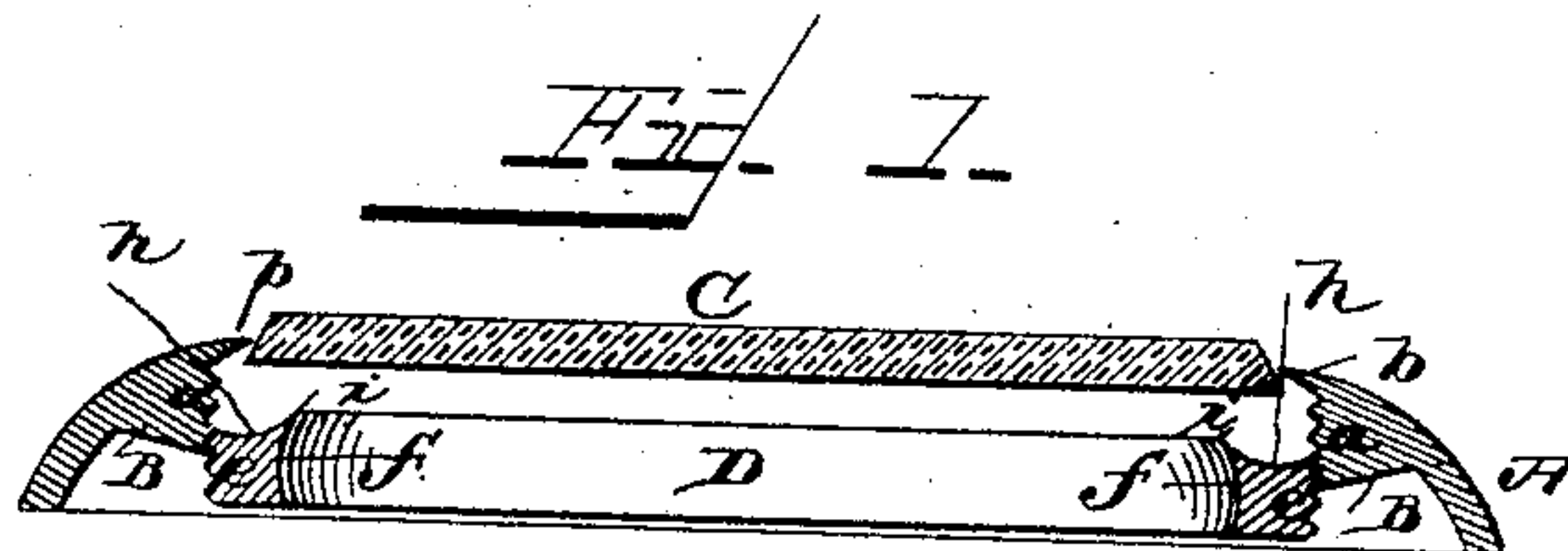


(Model.)

W. BURNS, Jr.
WATCH CASE BEZEL.

No. 321,886.

Patented July 7, 1885.



WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM BURNS, JR., OF COSHOCTON, OHIO.

WATCH-CASE BEZEL.

SPECIFICATION forming part of Letters Patent No. 321,836, dated July 7, 1885.

Application filed January 29, 1885. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM BURNS, Jr., of Coshocton, in the county of Coshocton and State of Ohio, have invented a certain new and useful Improvement in Watch-Case Bezels, of which the following is a specification.

My invention relates to an improved mode of securing glasses or crystals to watch-case bezels, so as to prevent dust and moisture from entering open-faced watches and watch-movements while in use.

The nature of my invention consists in the peculiar novel construction of the parts, as will be hereinafter set forth and claimed.

In the accompanying drawings, Figure 1 is a sectional view of a watch-case bezel with my improvement applied thereto, the follower being shown in position for insertion. Fig. 2 is a view of the inner side of the watch-case bezel, the parts being fitted in place. Fig. 3 is an enlarged sectional elevation, showing the glass or crystal fitted in place and the follower screwed down so as to come flush with the shoulder on the inner side of the bezel. Fig. 4 is a detail view of the follower.

Like letters refer to corresponding parts in the several figures.

Referring to the drawings, A designates the body or main portion of the watch-case bezel, having an annular shoulder, B, formed on its inner side, which shoulder serves the purpose of a strengthening-ring for the bezel. The outer edge of the shoulder is cut perpendicular, and formed with a series of screw-threads, *a*. The inner edge of the bezel at the outer end is beveled off, as at *b*, to a less angle than that described by the peripheral edge of the watch glass or crystal C, for the purpose hereinafter more fully explained.

D designates the clamping-ring or follower, made circular in form and having its outer peripheral edge cut with a series of threads, *e*, (preferably three,) which screw into the threads *a* provided on the perpendicular outer edge of the strengthening-ring or shoulder B. The inner side or face of this ring or follower D is concaved, as at *f*, to a point, *i*, while the outer edge of this ring is similarly cut or concaved, but at a greater angle, as at *h*, beginning at the point where the threads *e* terminate, and ending at the point *i*.

It will be observed that the threaded peripheral edge *e* of the ring D is made straight or perpendicular, to correspond with the outer threaded edge of the ring or shoulder B.

When the ring or follower D is screwed down into position, as in Fig. 3, the point *i* bears against the inner face of the glass or crystal, and the cut out or concaved outer portion, *h*, forms an inclosed chamber, E, between the glass and the shoulder B, which chamber serves to catch the dust or moisture, and thus prevent the latter from having access to the interior of the watch.

It will be observed that my improvement can be applied to any ordinary watch-case, which generally have the strengthening-ring or shoulder B employed to hold in shape and prevent springing of the bezel-seat. This shoulder, for the purpose of giving a finish to the dial, is placed at an angle of about forty-five degrees to bed-line in the usual construction of watch-cases. I change this shoulder so as to throw it perpendicular to the bed-line and form a wall for the threads. By this means I am not put to the necessity of specially constructing the watch-case to apply my improvement, but can fit the latter to old watches, as may be desired.

The operation of my invention will be readily understood from the foregoing description, taken in connection with the annexed drawings.

The glass or crystal is applied from the inside of the watch-case bezel, and has its peripheral edge received by the sharp edge of the beveled inner portion, *b*, and since the angle at which the portion *b* is cut is less than that of the edge of the glass, the latter will not bind when adjusting it in position, but will be allowed to conform itself to any irregularities in the edge thereof.

The ring or follower is provided with holes or openings *m m* to receive the projecting studs of a "spanner" or wrench in turning the ring on or off. When the ring is turned on, the threads *a* screw into the threads *e* of the shoulder or ring B, and since said ring has its point *i* projecting forward, this point will come against the inner side or face of the glass or crystal and press the same outward against the edge of the beveled portion *b*. It

will thus be seen that the glass or crystal is held while in position by the pressure of the point *i* against its inner face, in connection with the beveled portion *b*, fitting around the peripheral edge of the glass. Normally, the ring or follower fits flush with the bed-line of the shoulder B, and thus a neat connection of the parts is made, which will be proof against accidental displacement.

The chamber E, formed by the concaved outer portion, *h*, of the ring or follower, when the latter is screwed down, provides for the accumulation of dust or moisture, which, however, cannot pass beyond into the interior of the watch-case, as the shoulder B and the ring D form an effectual guard.

It will also be seen that by providing a series of threads on the ring or follower, to screw into corresponding threads of the shoulder on the watch-case bezel, the said ring or follower cannot be placed in position in any other manner than perfectly horizontal or parallel with the base of the glass; and thus, when the ring or follower is screwed down, equal pressure is brought upon all points of the glass.

The point *i* of the ring or follower is sufficiently elastic, so as to have a spring action when brought to bear upon the glass, and thus it is made to conform to any irregularities in the construction of the glass or crystal.

Having described my invention, I claim—

1. In a watch-case bezel, the main portion A, having an annular ring or shoulder, B, formed with a perpendicular outer face, which is threaded, as shown, and a beveled inner edge, *b*, at the outer edge of the portion A, in combination with the glass having its outer edge beveled at a greater angle than the edge *b*, and the ring or follower D, having its outer edge or periphery provided with a series of threads to screw into the threaded wall of the shoulder B, the concaved or beveled inner face, *f*, of the ring, and the concaved outer edge or face, *h*, meeting the inner face at the point *i*, for the purpose set forth.

2. In a watch-case bezel, the main portion A and the threaded ring or shoulder B, in combination with the clamping - ring or follower D, provided with a threaded periphery to screw into the shoulder and beveled or concaved to a pointed edge forward of the threads, whereby said edge will bear against the inner face of the glass and form a chamber for the accumulation of foreign matter between the shoulder and the glass, as set forth.

WM. BURNS, JR.

Witnesses:

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