

(Model.)

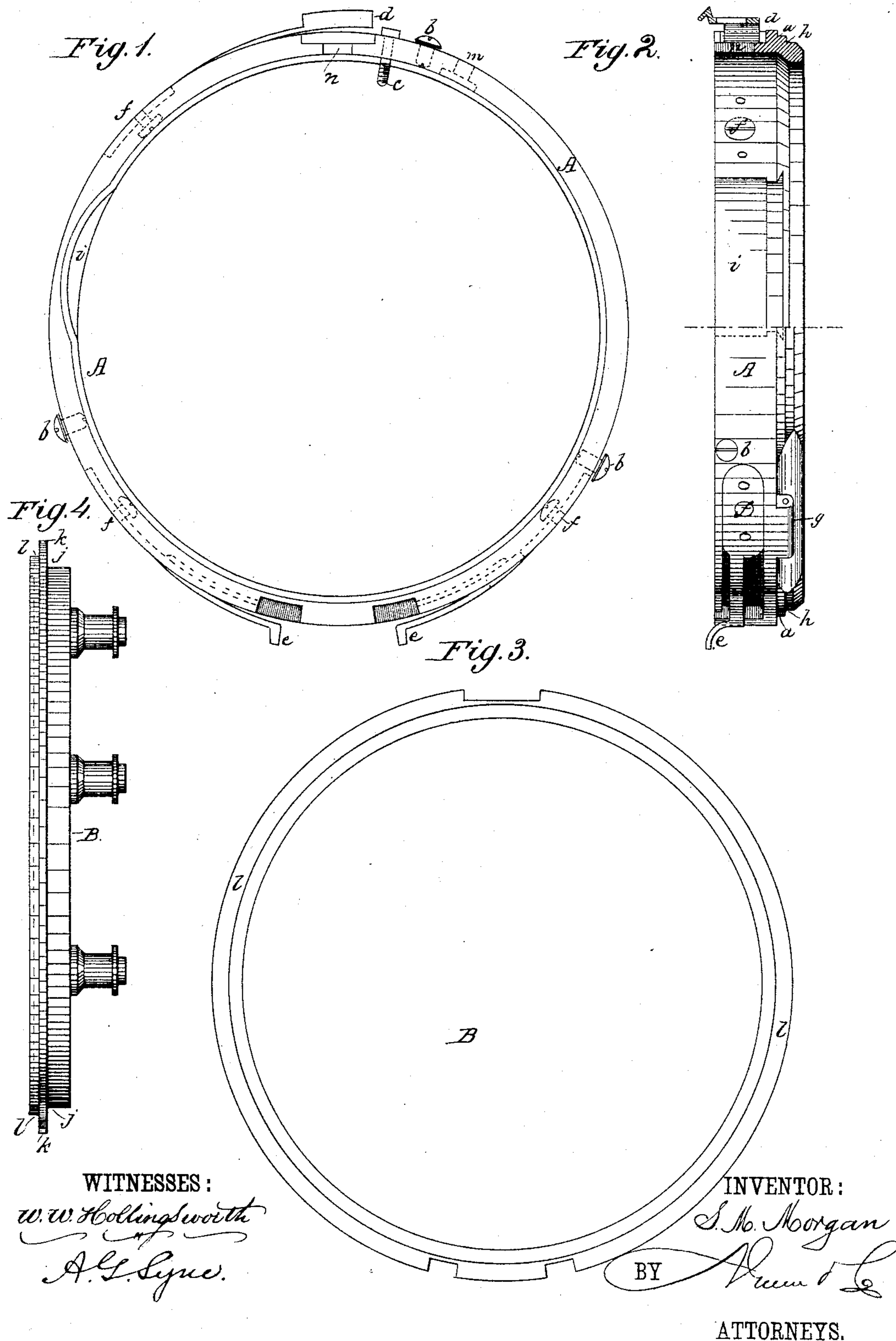
2 Sheets—Sheet 1.

S. M. MORGAN.

DUST RING FOR WATCHES.

No. 287,152.

Patented Oct. 23, 1883.



WITNESSES:
W. W. Hollingsworth
A. G. Lyne.

INVENTOR:
S. M. Morgan
BY *[Signature]*
ATTORNEYS.

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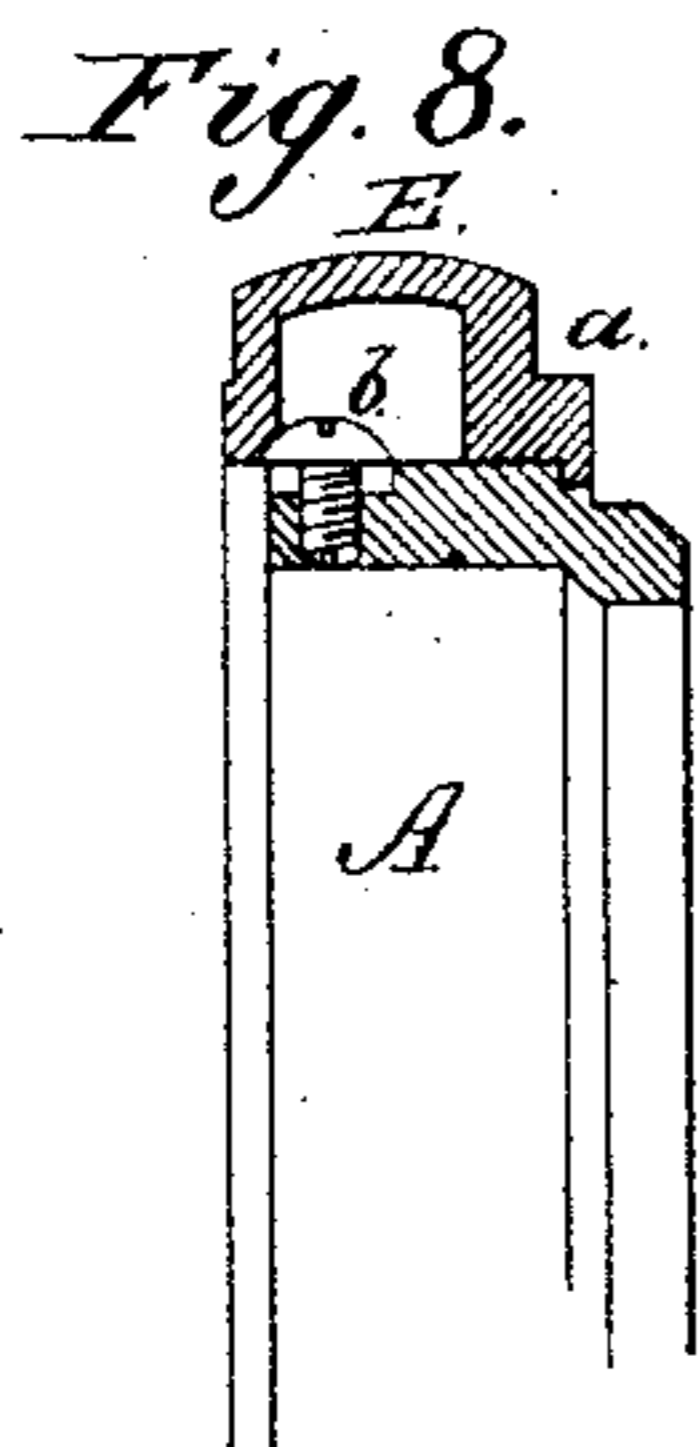
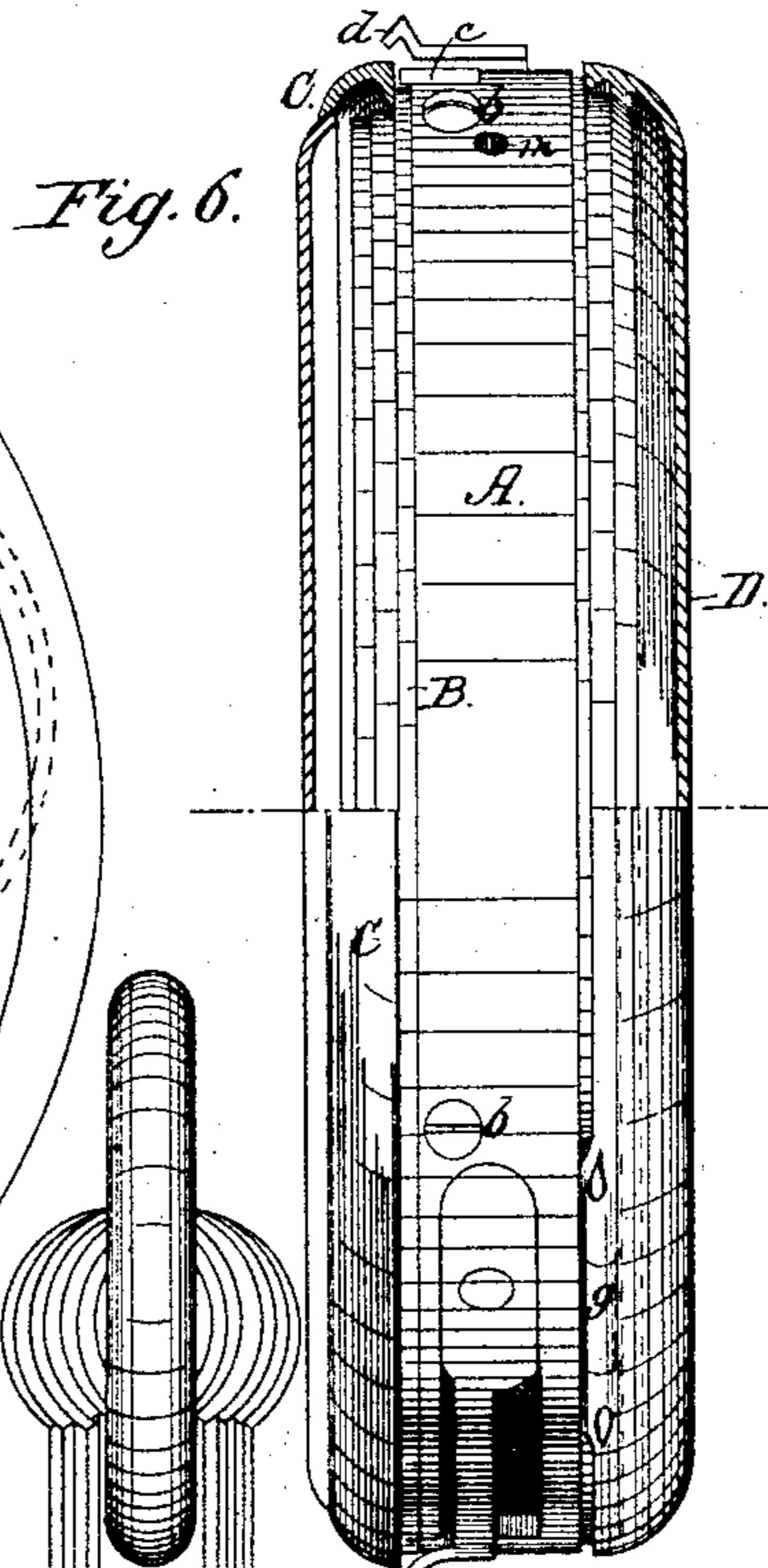
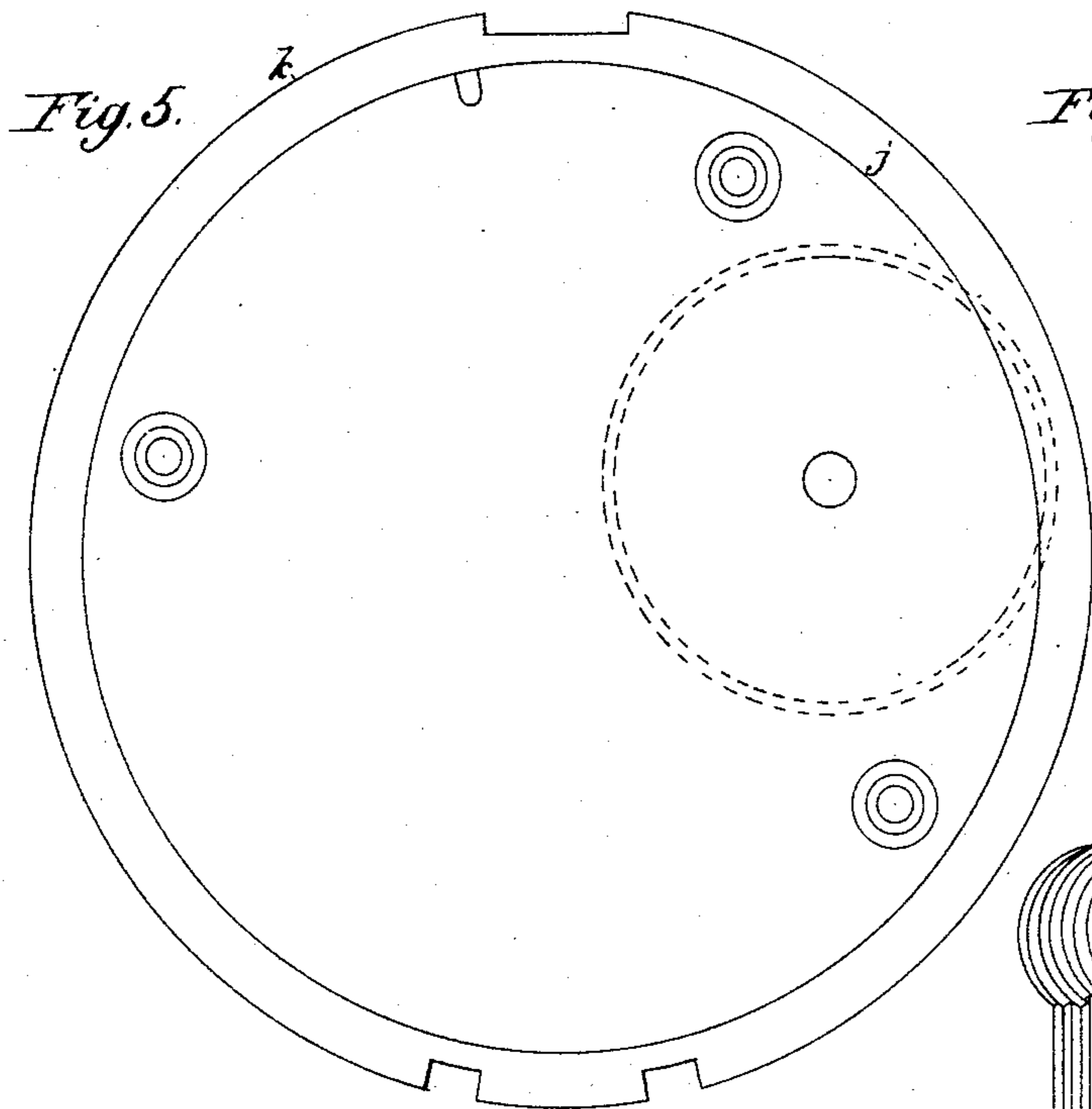
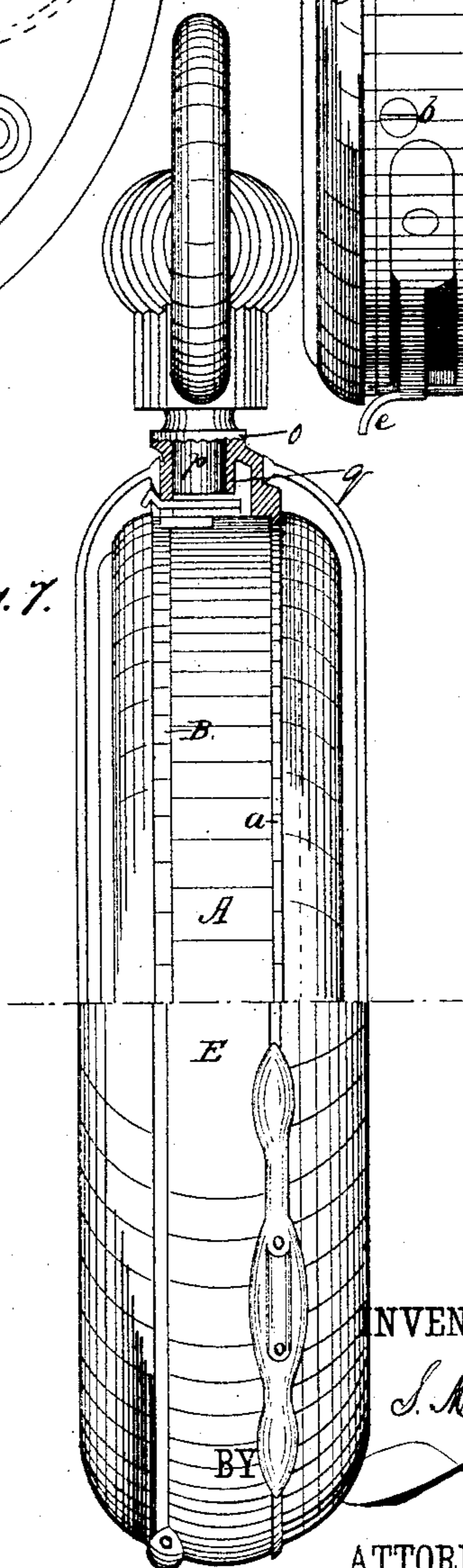


Fig. 7.



WITNESSES:

W. W. Hollingsworth
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INVENTOR:

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UNITED STATES PATENT OFFICE.

SAMUEL M. MORGAN, OF KINGSLAND, COUNTY OF MIDDLESEX, ENGLAND.

DUST-RING FOR WATCHES.

SPECIFICATION forming part of Letters Patent No. 287,152, dated October 23, 1887.

Application filed December 22, 1881. (Model.) Patented in England October 23, 1881, No. 4,653.

To all whom it may concern:

Be it known that I, SAMUEL MALCOLM MORGAN, of Kingsland, in the county of Middlesex, England, have invented a new and useful Improvement in the Construction of Watches; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to improvements in watches; and it consists in the peculiar construction and arrangement of parts, as hereinafter more fully set forth.

The accompanying drawings illustrate my invention, on an enlarged scale, as applied to a keyless hunting-watch.

Figure 1 is a face view of the ring. Fig. 2 is an edge view of the ring, partly in section. Fig. 3 shows the dial side of the pillar-plate. Fig. 4 is an edge view of the same, and Fig. 5 shows the movement side of the plate. Fig. 6 shows an edge view of the box formed by the glass and bezel, the ring, and the dome in which the movement is entirely inclosed, the bezel and dome being partly in section. Fig. 7 shows an edge view of the watch, the outer case being partly in section. Fig. 8 is a section across the band of the case, near one of the screws by which the ring is secured within it.

The same letters of reference indicate the same parts in all the figures.

A is the ring. B is the pillar-plate, (or the plate in the watch in which the arbors are mounted in cocks.) C is the bezel; D, the dome; E, the band of the case.

The ring A is of brass or other metal. It is about equal in width to the height of the movement, and is of such external diameter that the band of the case fits closely around it. The ring A is fixed in the watch-case by a rabbet, *a*, turned around it, fitting within and against a corresponding rabbet in the rear flange of the band E, as shown in Figs. 7 and 8, and by screws *b*, three or more in number, screwing through holes tapped in the ring A, and having conical or rounded heads, which bear against the inside edge of the other flange of the band E, as shown in Fig. 8. These screws are inserted from the outside, and their heads are received in countersinks on the ring, to permit them to

be flush with the same when the ring is to be inserted or removed from the case. The inner ends of the screws are nicked, to enable them to be screwed outward from within the ring, to cause their heads to project from the surface of the same into the groove of the band E, and thereby firmly secure the ring in the said band.

c is a screw-stud passing through and projecting from the outer and inner periphery of the ring, and to be received in corresponding recesses in the band E and plate B, to hold the parts in their proper respective positions. The ring has recesses in its outer periphery, to receive the locking-spring *d* and the fly-springs *e* for the outer case, the springs being fixed therein by screws *f* and two steady-pins.

The dome D is hinged to the ring at *g*, and fits upon another rabbet, *h*, turned around the rear edge of the ring. The internal diameter of the ring is also reduced at this point, and fits close around the top or three-quarter plate.

i is a recess cut in the inner side of the ring, to afford room for the barrel which projects beyond the edge of the rabbet, *j*, as shown by dotted lines in Fig. 5. Another similar recess may be made for the balance-wheel, if it is so large as to require one. This recess does not extend quite through the ring, and it is covered by the pillar-plate.

The pillar-plate B has a rabbet, *j*, on the movement side, which fits within the ring A, this side of the plate being of the same diameter as that of the same side of a plate of an ordinary watch. The plate has the usual recesses and holes for the wheels and arbors of the movement, which are not shown. The part *k* of the plate is larger than usual, and preferably of the same diameter as the outside diameter of the ring A, so as to entirely cover the front edge of this ring and the cavity *i*, as shown in Fig. 1.

l is a rabbet turned on the dial side of the plate, leaving the plate on the side about the same diameter as the dial, upon which rabbet the bezel C fits, as shown.

The part *k* of the plate fits within the band E and lies flush therewith, and the bezel C projects just beyond the edge of the plate, so as to cover the joint and entirely conceal the plate B. Similarly, the dome D projects beyond and covers the joint between the ring

A and the flange of the band E, and entirely conceals the ring.

n is a hole in the ring A for the winding-stem O, which fits accurately therein, the stem being, for convenience, divided at this point, and the two parts connected by a squared end, *p*, the upper part fitting in a socket, *q*, in the lower part, which socket is on the pillar-plate, as shown in Fig. 7.

m is a hole in the ring, through which the hands' push-piece passes.

In fitting the movement in the case the ring A is placed in the case first and secured therein by the screws *b*, after which the movement is fitted into the ring. The ring does not afterward require to be removed, the movement alone being taken out for cleaning, leaving the ring permanently fixed in the case.

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

1. In a watch, the combination, with the band of the case, of an inner ring detachably fitted therein, and of fly and locking springs mounted in recesses in the external periphery of said ring, substantially as shown and described.

2. In a watch, the combination, with the band of the case, of an inner ring rabbeted therein, and of screws having rounded or conical heads bearing against the inside of the edge of the band, substantially as shown and described.

3. In a watch, the combination of the band of the case, an inner ring detachably fitted therein and encircling the movement, the pillar-plate and the dome, both fitted to said ring, the fly and locking springs, and the screws, all substantially as and for the purpose set forth.

4. The combination, with the pillar-plate B, carrying the watch-movement, and provided with the circular flange *k*, of the ring A, having a recess or recesses for the reception of the projecting parts of the watch-movement, the flange *k* projecting over the front edge of the ring A, covering its recess or recesses and protecting the movement from dust, substantially as shown and described.

5. The combination, with the removable ring A, of the pillar-plate B, fitting in the ring A, and provided with the rabbets *j* *l*, and bezel C, fitting upon rabbet *l*, substantially as shown and described.

The above specification of my invention signed by me this 8th day of November, 1881.

SAMUEL MALCOLM MORGAN.

Witnesses:

AUGUST GEORGE,
A. M. CLARK.