

No. 612,541.

Patented Oct. 18, 1898.

C. M. BROWN.
COMBINED DOOR KNOB AND INDICATOR.

(Application filed Dec. 3, 1897.)

(No Model.)

2 Sheets—Sheet 1.

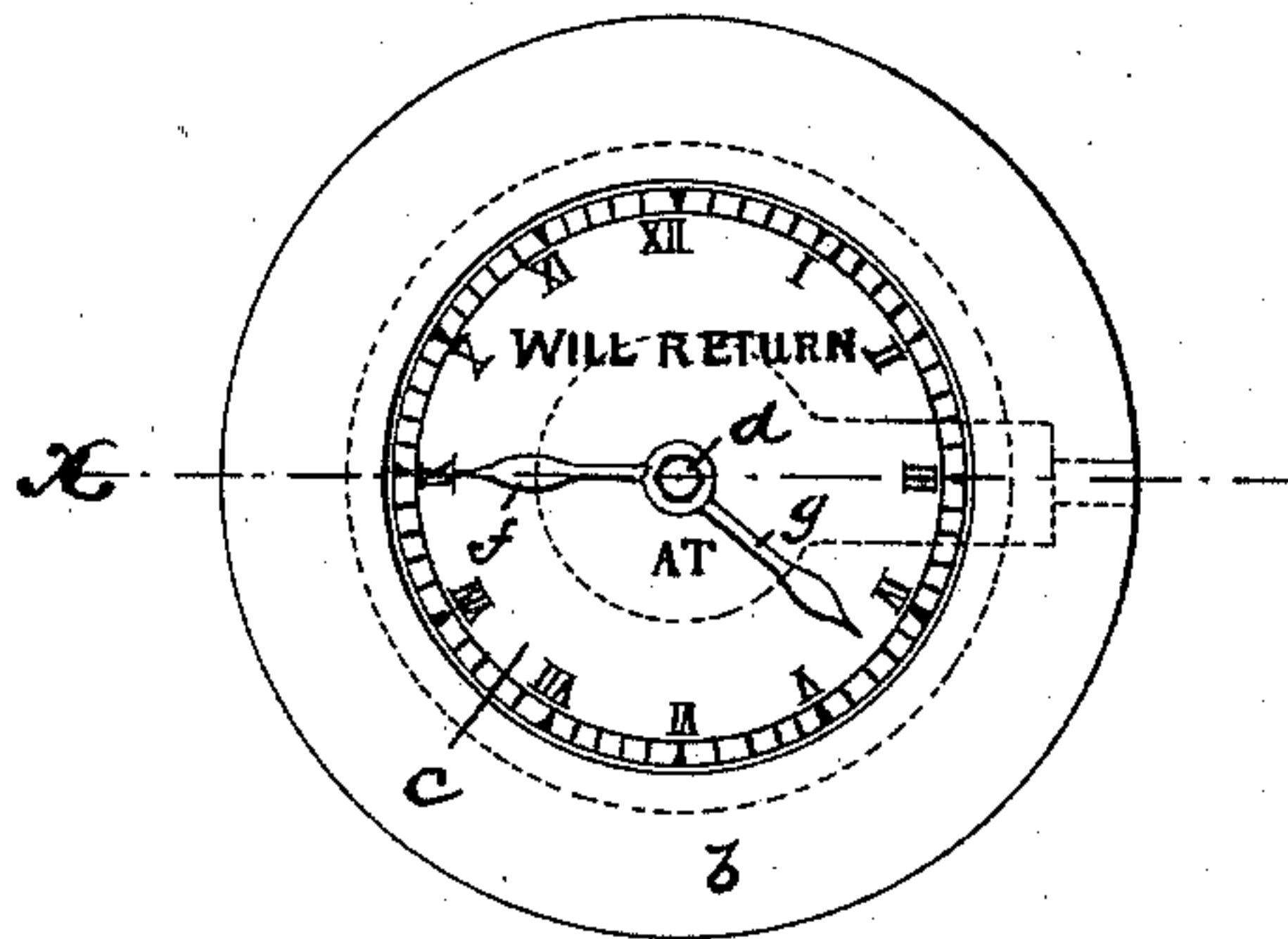


Fig. 1.

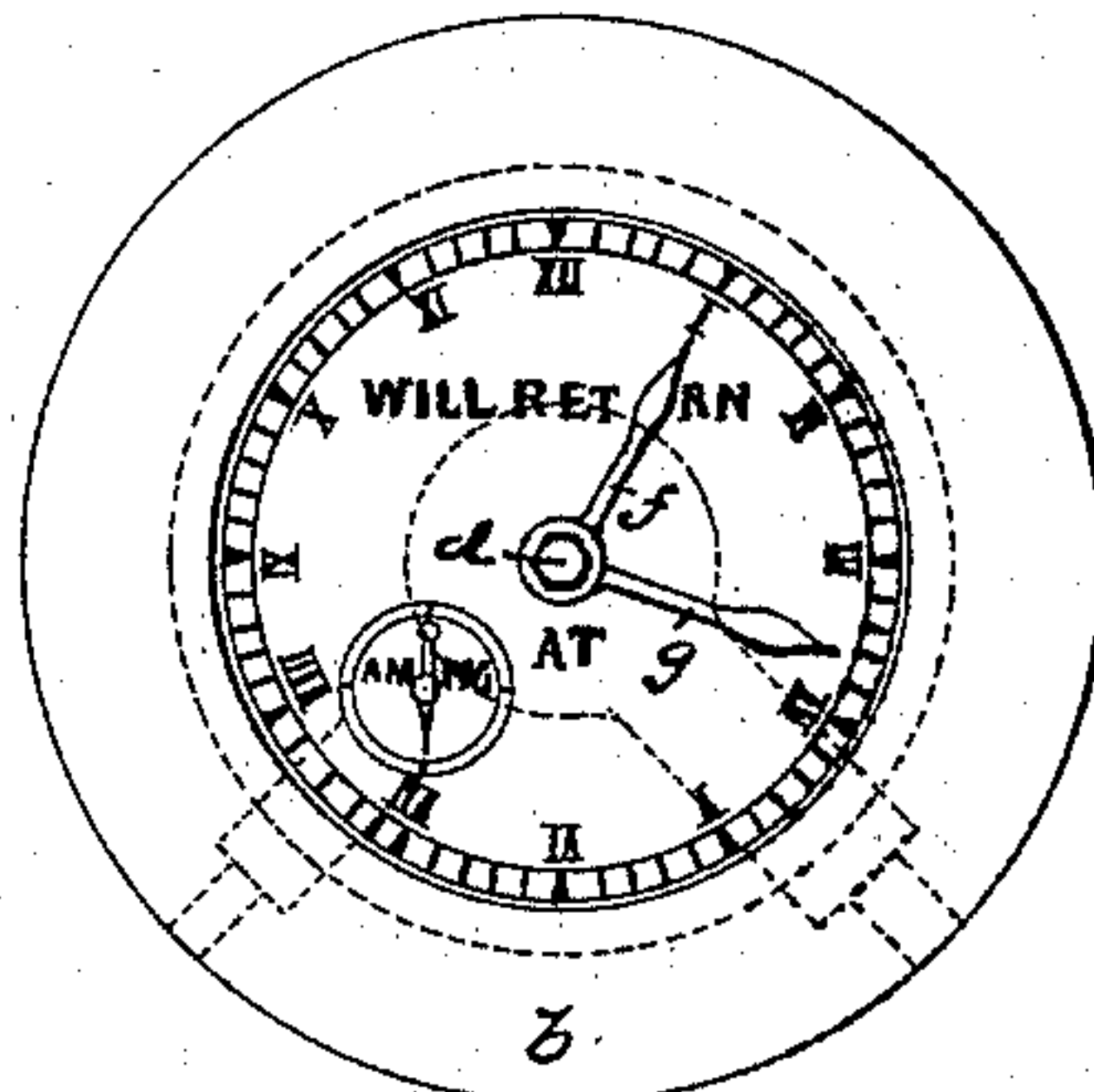


Fig. 2.

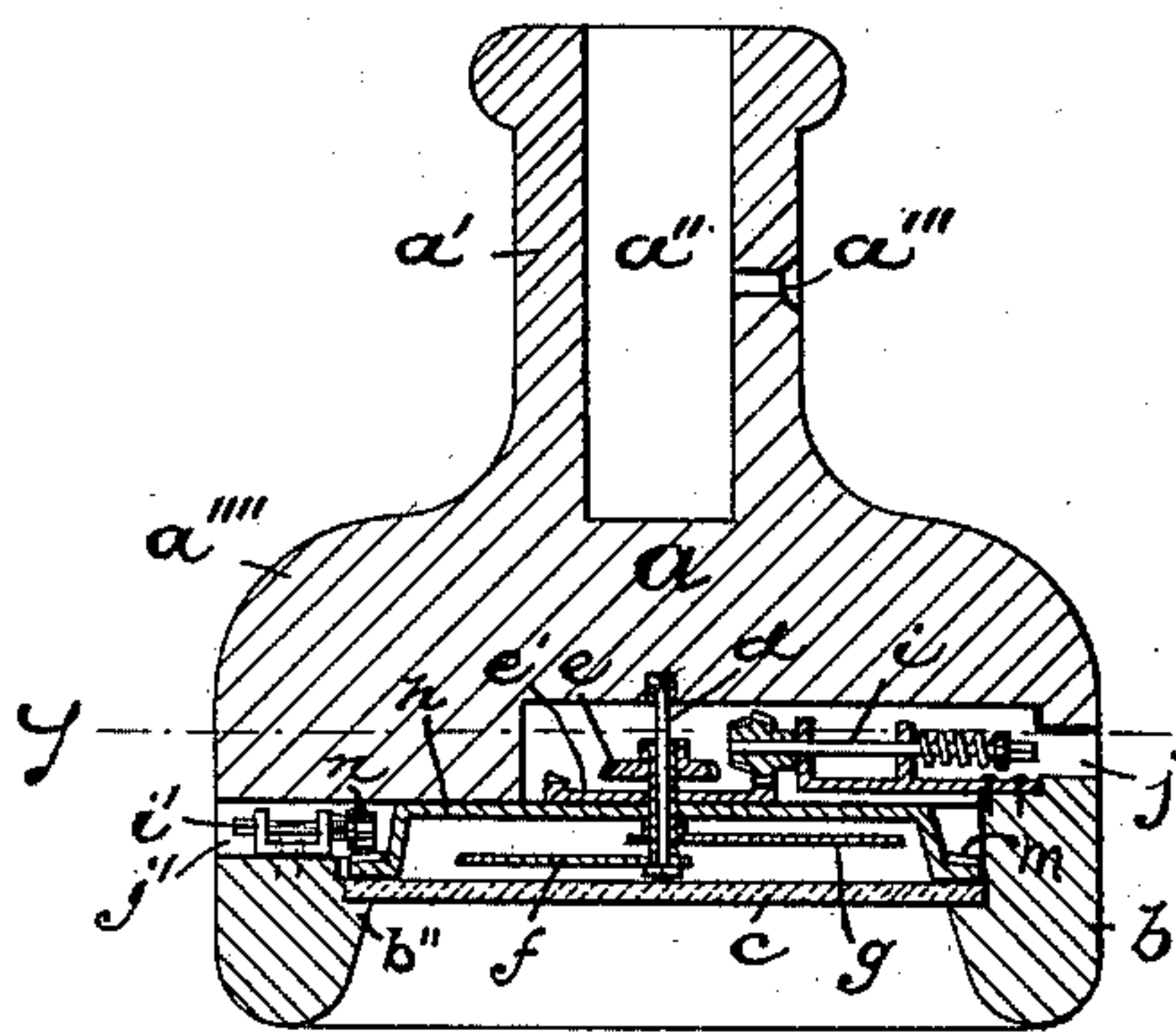


Fig. 3.

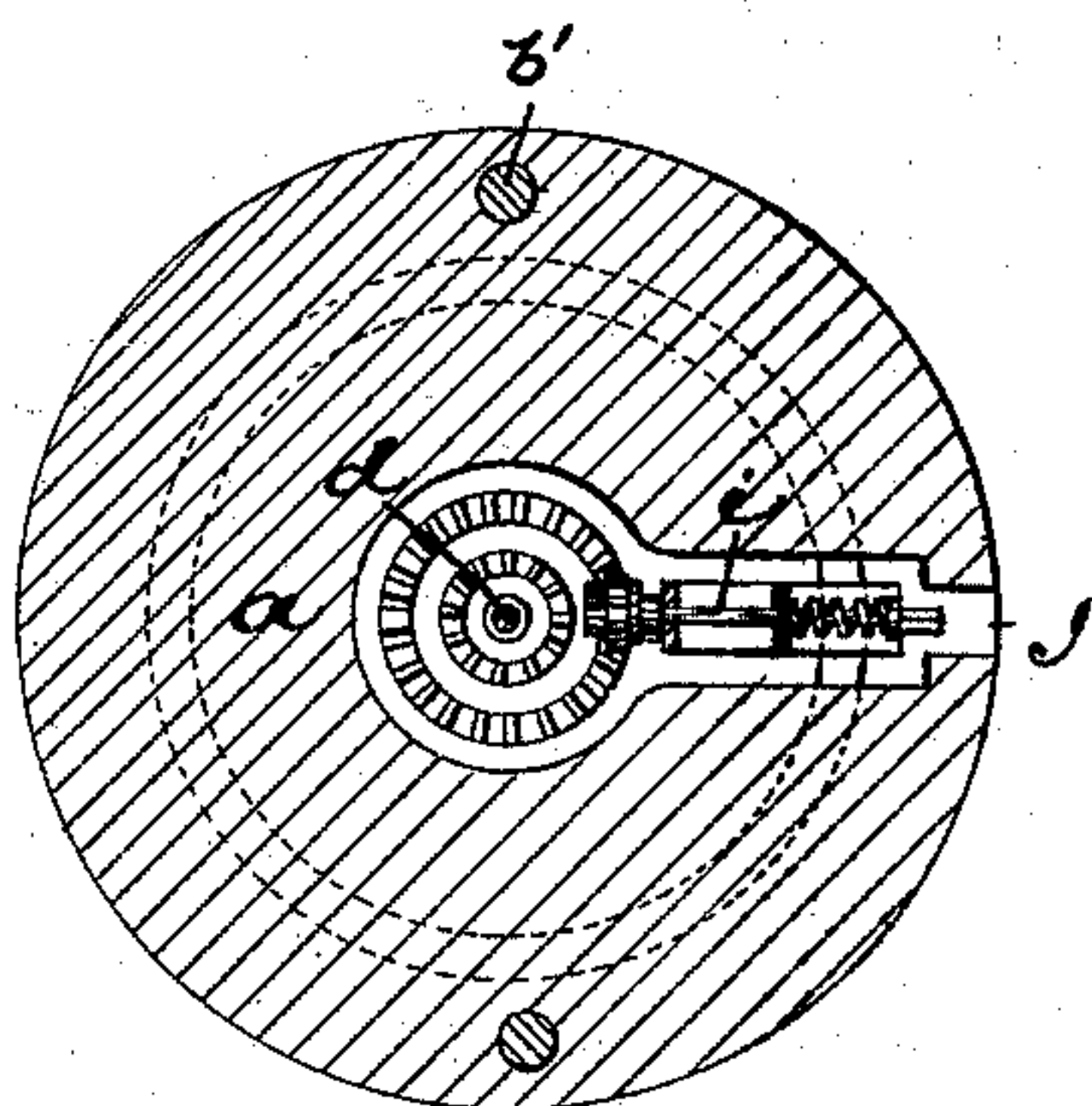


Fig. 4.

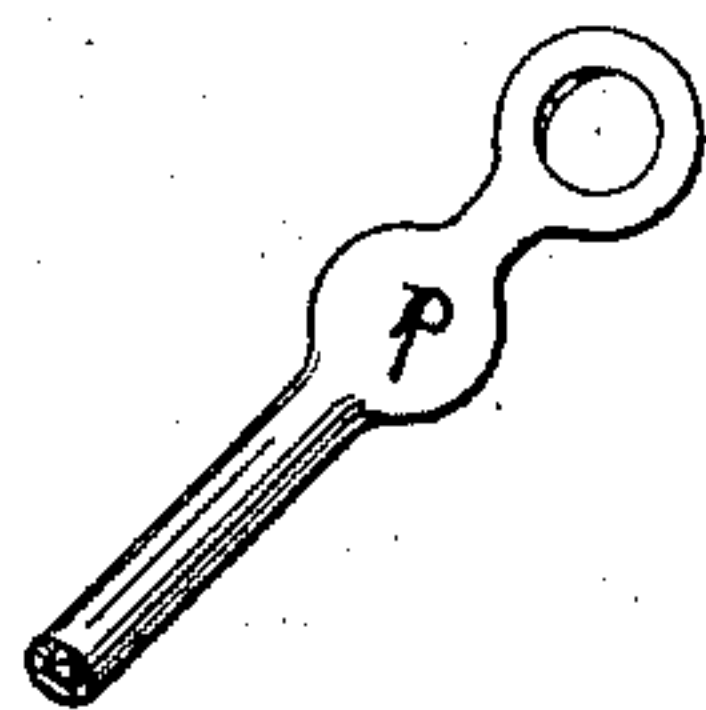


Fig. 5.

WITNESSES:

A. R. Krouse.
Russell M. Everett.

INVENTOR:

Cornelius M. Brown,

BY

W. A. K. G.

ATTORNEYS.

No. 612,541.

Patented Oct. 18, 1898.

C. M. BROWN.
COMBINED DOOR KNOB AND INDICATOR.

(Application filed Dec. 3, 1897.)

(No Model.)

2 Sheets—Sheet 2.

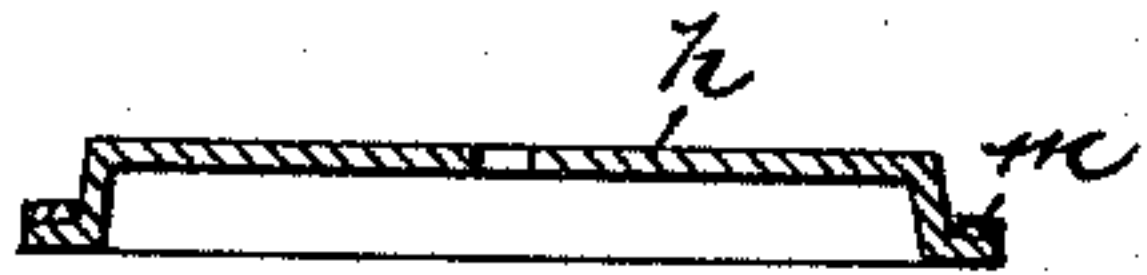


Fig. 6.

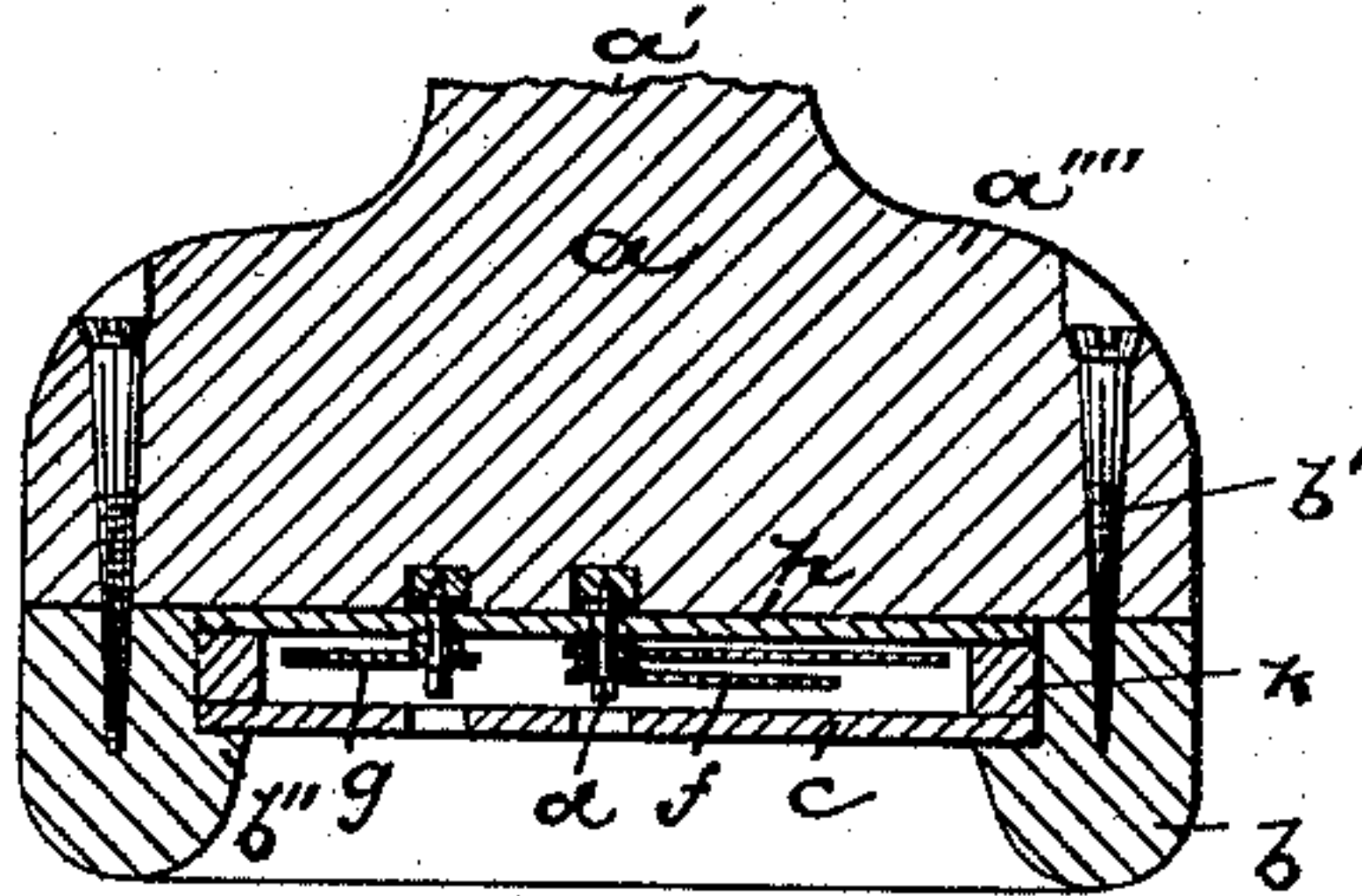


Fig. 7.

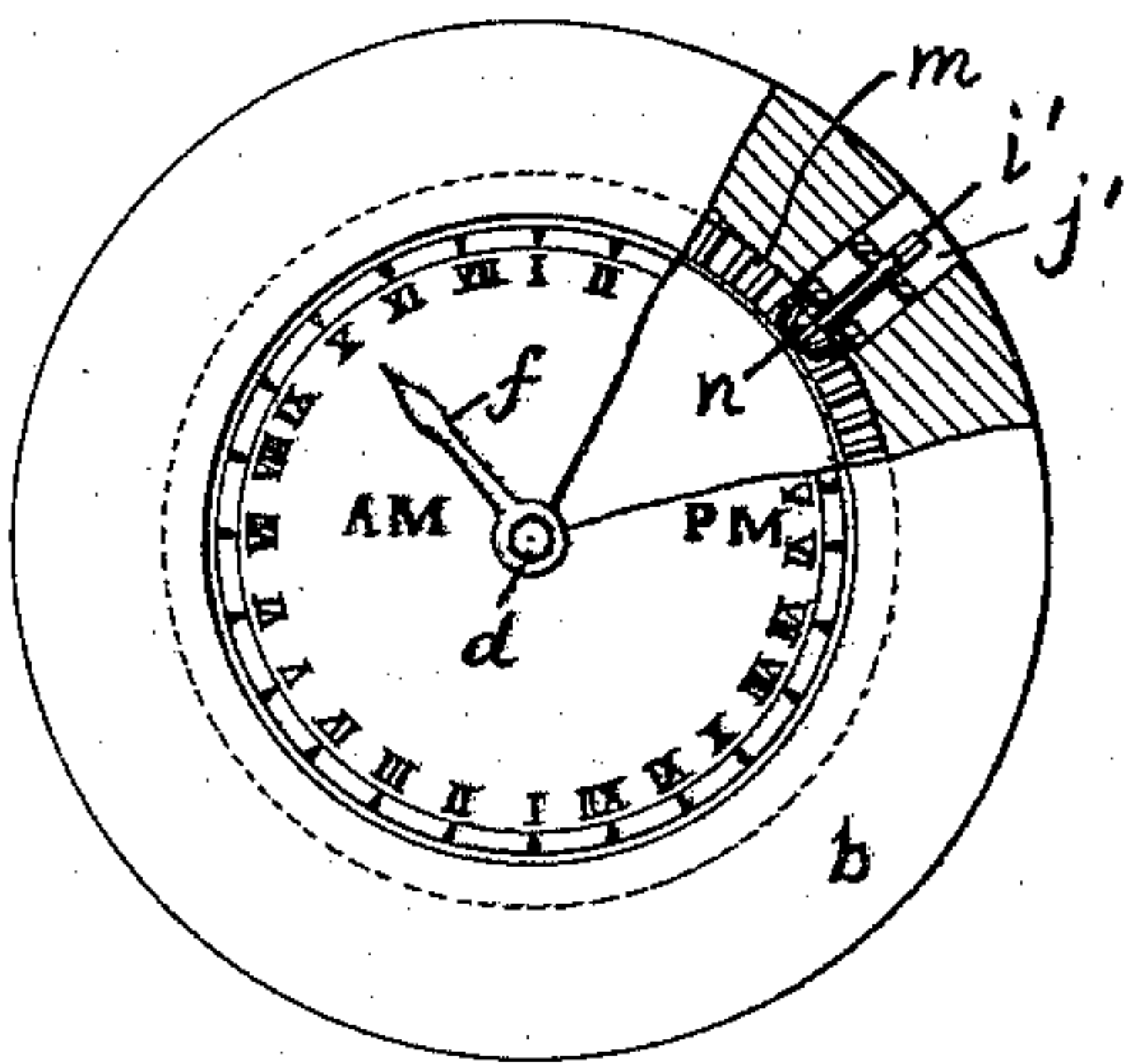


Fig. 8.

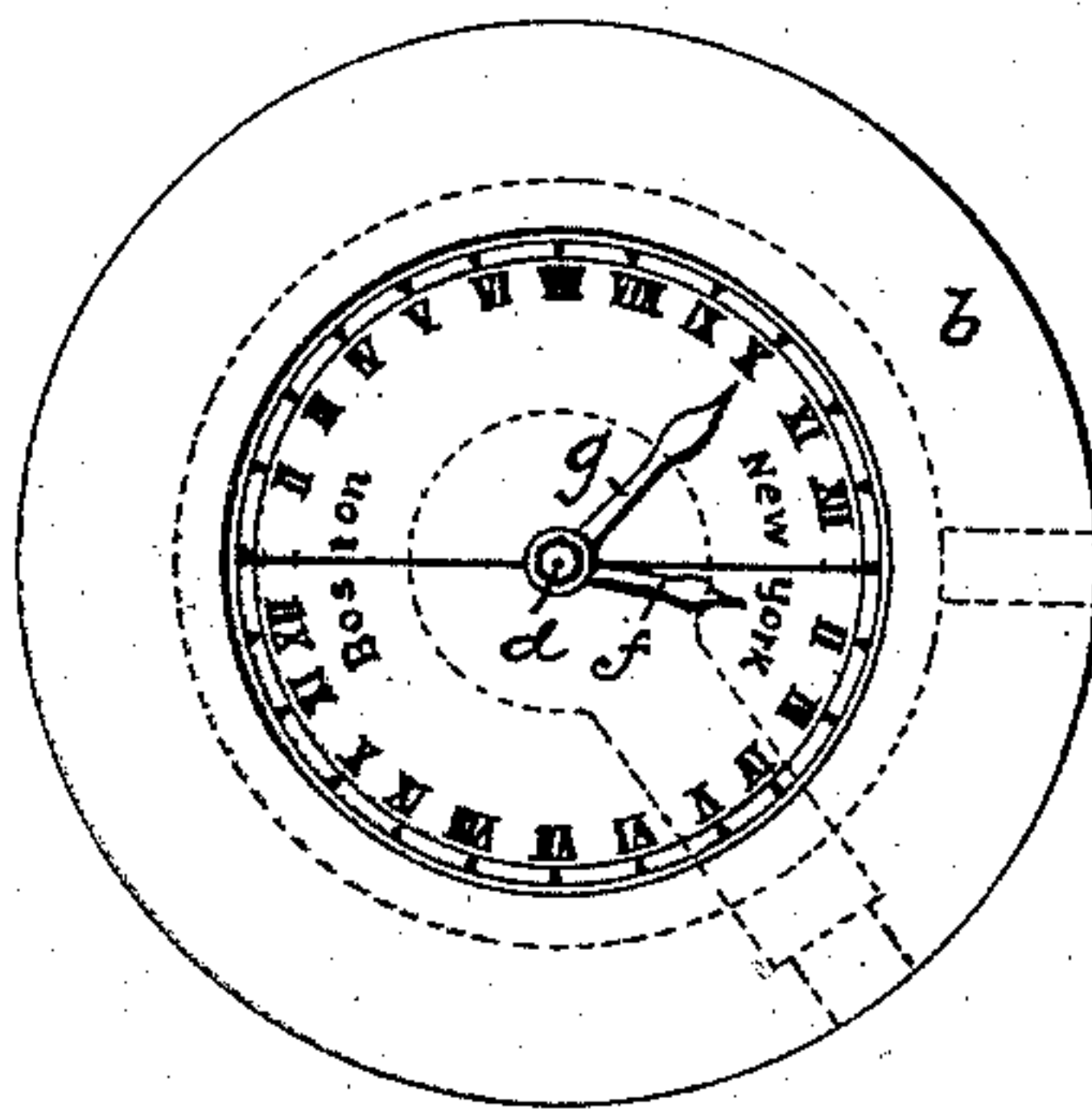


Fig. 9.

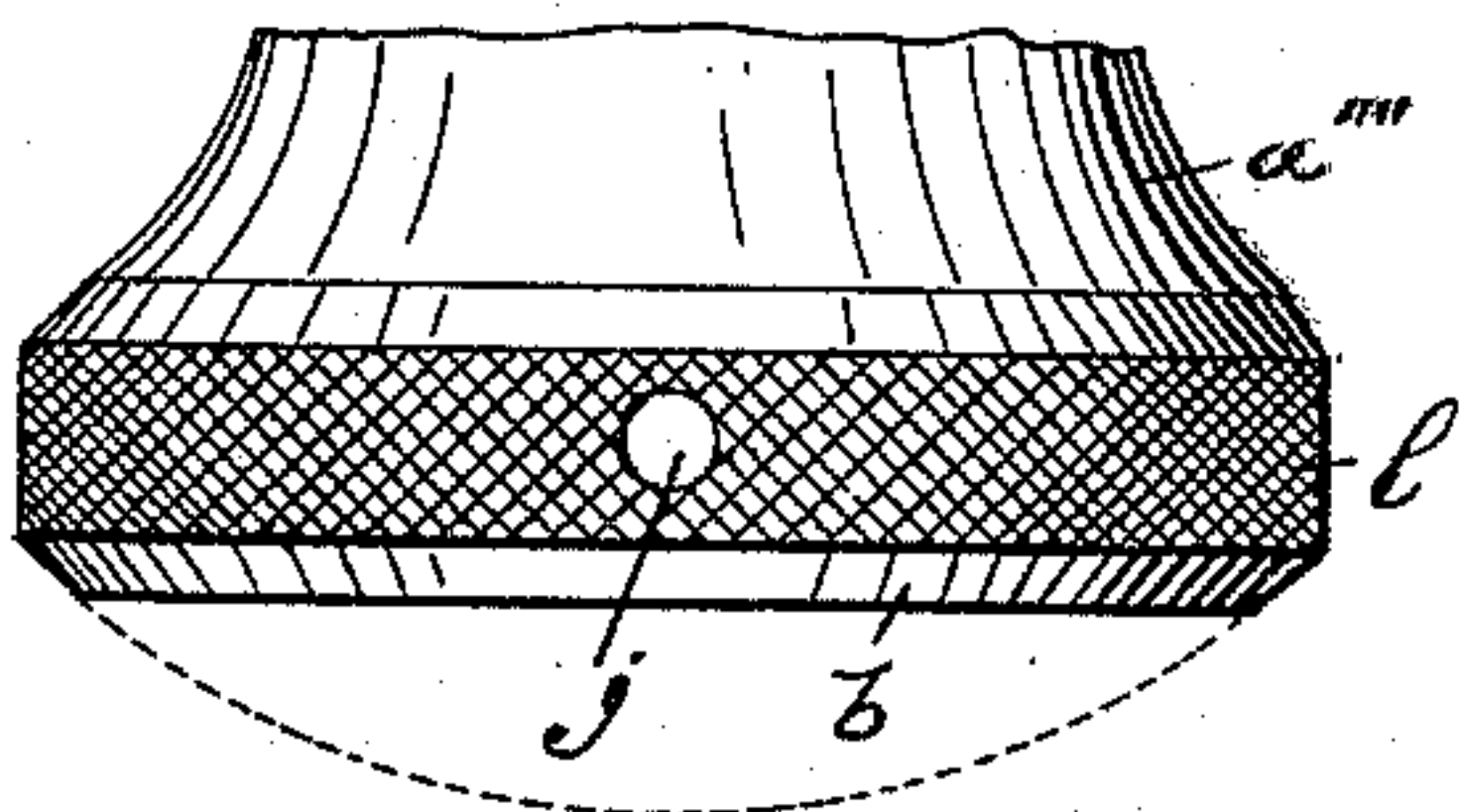


Fig. 10.

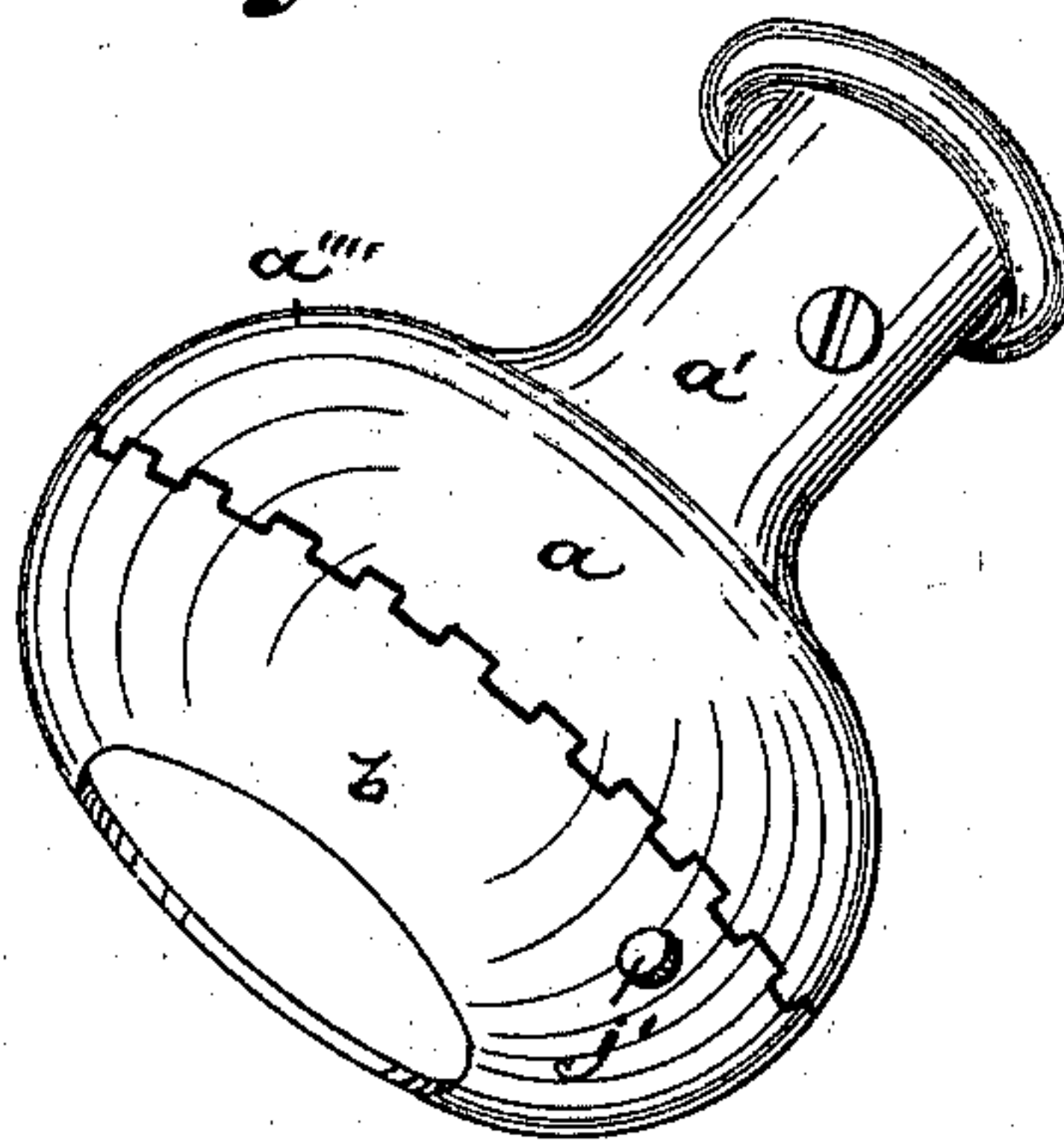


Fig. 11.

WITNESSES:

A. R. Krousse.

Russell M. Everett.

INVENTOR:

Cornelius M. Brown,

BY

W. H. R. Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

CORNELIUS M. BROWN, OF NEWARK, NEW JERSEY, ASSIGNOR OF ONE-HALF TO GEORGE WATTS, OF PLAINFIELD, NEW JERSEY.

COMBINED DOOR-KNOB AND INDICATOR.

SPECIFICATION forming part of Letters Patent No. 612,541, dated October 18, 1898.

Application filed December 3, 1897. Serial No. 660,572. (No model.)

To all whom it may concern:

Be it known that I, CORNELIUS M. BROWN, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Door-Knobs, Bell-Pulls, &c.; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in that class of knobs shown and described in my prior applications filed April 7, 1897, Serial No. 631,073, and November 10, 1897, Serial No. 657,995, the objects of the present improvements being to provide a door-knob which will on its face provide means for indicating the time of return or departure of the occupant of the room at the entrance of which the door-knob is stationed or will make other indications with reference to the said occupant whereby the employment of independent indicating appliances for the doorway is dispensed with and the door or entrance way thus rendered more neat in appearance; to provide such door-knob with the time-indicating hands in such a manner that the same will be entirely inclosed; to prevent said hands from being manipulated excepting by the party interested, and to secure other advantages and results, some of which may be referred to hereinafter in connection with the description of the working parts.

The invention consists in the improved door or bell knob and in the arrangements and combinations of parts of the same, all substantially as will be hereinafter set forth, and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the several views, Figure 1 is a front elevation of the knob. Fig. 2 is a similar elevation showing an additional feature of construction. Fig. 3 is a longitudinal section of the same, taken on line *x*, Fig. 1. Fig. 4 is a section taken through line *y*

of Fig. 3. Fig. 5 is a perspective view of a key adapted to be employed in setting the indicator. Fig. 6 is a detail section of a certain dial-plate adapted to be turned by a pinion to change its relation to the indicating-hands. Fig. 7 is a section showing a disk or plate, preferably of glass or other transparent material, which is perforated to enable the indicating-hands to be set or adjusted from the front. Figs. 8 and 9 are front views showing modifications of construction. Fig. 10 is a side elevation illustrating another modification of construction which may be employed; and Fig. 11 is a perspective view of a knob, showing a further modification of construction.

In said drawings, *a* indicates the body of the knob. This is preferably in sections, as indicated in Figs. 3, 7, and 11. Of said sections *a'* indicates the shank portion of the knob, which is provided at the axial center with a suitable spindle-aperture *a''* and at right angles to said aperture with a set-screw hole *a'''* to receive a screw by means of which the knob is firmly fastened upon said spindle. At the front of the said shank portion the knob is circumferentially enlarged, as at *a''''*, to enable the said knob to be grasped with convenience and give a proper purchase to the hand, and at the front of said enlarged portion I provide an annular or ring-shaped section *b*, which is fastened to the shank portion by means of screws *b'* or by any other suitable means. At the rear of said annular section *b* the same is provided with a recess formed in the inside and rear walls in such a manner as to form a shoulder *b''*, against which a transparent face-plate *c* has its bearings, thus forming within the knob, when said front plate is applied, an inclosed chamber in which clock mechanisms are arranged, such as the arbors *d*, having pinions *e e'* and hands *f g*.

In the preferred construction I employ in connection with the indicating-hands a dial-plate *h*, on which letters or figures indicating the hours and minutes are marked or applied in any ordinary manner, the dish-shaped disk of Fig. 6, together with the front transparent plate, being held between the members *a b* of the knob, and thus secured in position.

The key-stem i is employed for setting the hands, said stem having an angular extremity lying in a recess or perforation j in the periphery of the knob, so as to be protected from injury and to prevent said stem from being uncomfortable to the hand in turning the knob. p indicates a key which may be employed in turning said key-stem. I may dispense with a key-stem such as shown in Fig. 3 and employ the arbor or arbors of the indicating-hands as such stems, as indicated in Fig. 7, in which event the forward extremities of said arbors are made angular to receive the key, and the front transparent plate is perforated in the line of said arbor to permit the key to be inserted therethrough. In Fig. 7, instead of a dish-shaped dial-plate, the dial is formed flat, and I employ a washer k , which may be of elastic material. This is interposed between said dial and said transparent plate and serves to hold the parts firmly in place.

In Fig. 10 I show that the front plate may be oval in shape. In this figure I also show a band l , similar in some respects to what I have shown in my prior application, Serial No. 657,995, above referred to, the said band being adapted to be turned on the periphery of the knob to close the keyhole, the body of the knob and the said band being each similarly perforated and the perforations being turned out of coincidence when it is desired to close said keyhole to prevent the introduction of dust to the clock-indicating mechanisms; or the perforation in the band may on the opposite side of the knob receive a locking slide or pin, as shown in the said application, Serial No. 657,995.

Fig. 11 shows still another variation, in which the edges of the sections are serrated or provided with series of coinciding teeth and notches, by means of which the sections are held more firmly against turning one on the other. In this case the knob is preferably made of cast metal and forms a large interior chamber in which the time-indicating mechanisms may be arranged.

Instead of turning the hands to secure the desired indication directly by means of a key I may employ means for turning the numbered disks or dial-plate h , as indicated in Figs. 3, 6, and 8, where the said dial-plate h is shown to be provided at its periphery with a cogged flange m , the cogs of which mesh with a beveled or otherwise-gearred pinion n , arranged on a key-stem i' . I may have two sets of hour-indicating hands on the face of the dial, twelve of the numbers of which may refer to the morning or ante-meridian hours, and the other twelve, which may be separated by a line, as in Fig. 9, may indicate the afternoon or post-meridian hours.

I do not wish to be understood as limiting myself to any particular means for setting the hands or changing the relation of the hands to the dial-plate or any particular wording upon said dial-plate.

With reference to the wording I may employ such words as "Will return at," or the initial symbols "A. M." and "P. M.," or such words as "Boston" and "New York," representing different localities; and I do not wish to be understood as limiting the use of the knob to office-doors or bell-pulls, as it may be used in various locations and under numerous and widely-different conditions, all without departing from the scope of the invention.

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

1. The improved knob herein described, comprising the shank recessed to receive the spindle, and an enlarged hand portion in axial line with said shank, the said enlarged portion being in sections and chambered a dial and indicating-hands within said hand portion, and means for operating said hands or changing the relation thereof to the dial-plate, substantially as set forth.

2. The improved knob comprising the shank having a spindle-recess and a hand enlargement having in the front face thereof a dial with numbers thereon and indicating or index hands, substantially as set forth.

3. The combination with the knob having the shank and hand enlargement, the latter being chambered and provided with a transparent front plate, of a dial beneath said front plate, indicating-hands, a train of mechanisms in connection with said hands and a key-spindle, and said key-spindle, all arranged and combined, substantially as set forth.

4. The improved knob, comprising a shank providing means for attachment, and an enlargement in sections, the front section serving as a clamp, a transparent plate and numbered dial or disk, index or indicating hands, a train of gearing leading from said hands to a key-spindle, said key-spindle, and means for holding the sections of the enlarged hand portion together, substantially as set forth.

5. The combination with the chambered knob, of a transparent plate and dish-shaped dial-plate, having a hand-arbor and indicating-hands, a train of gearing behind said dial and key-arbor in connection with said gearing, all substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 29th day of November, 1897.

CORNELIUS M. BROWN.

Witnesses:

R. M. EVERETT,
C. B. PITNEY.