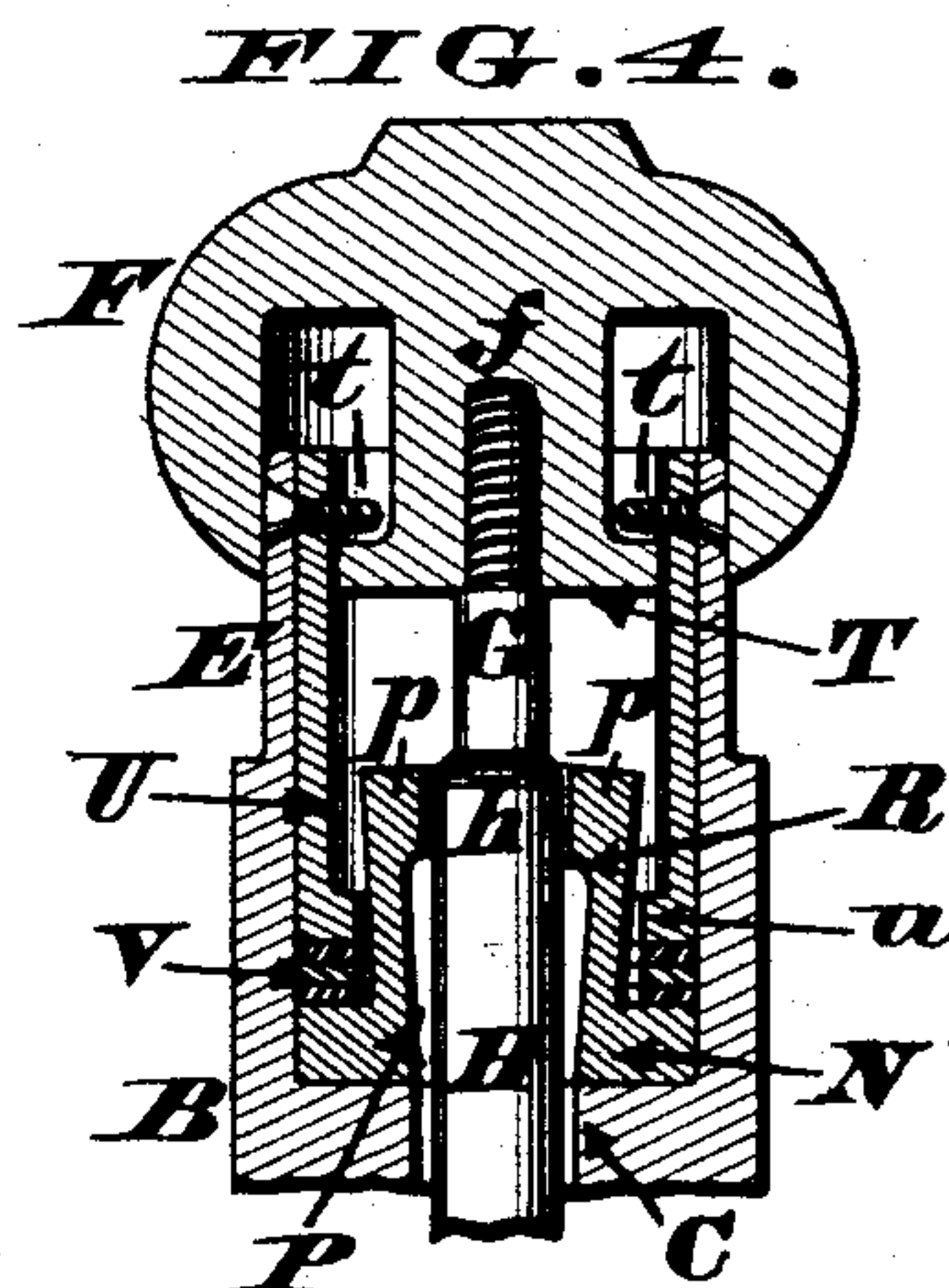
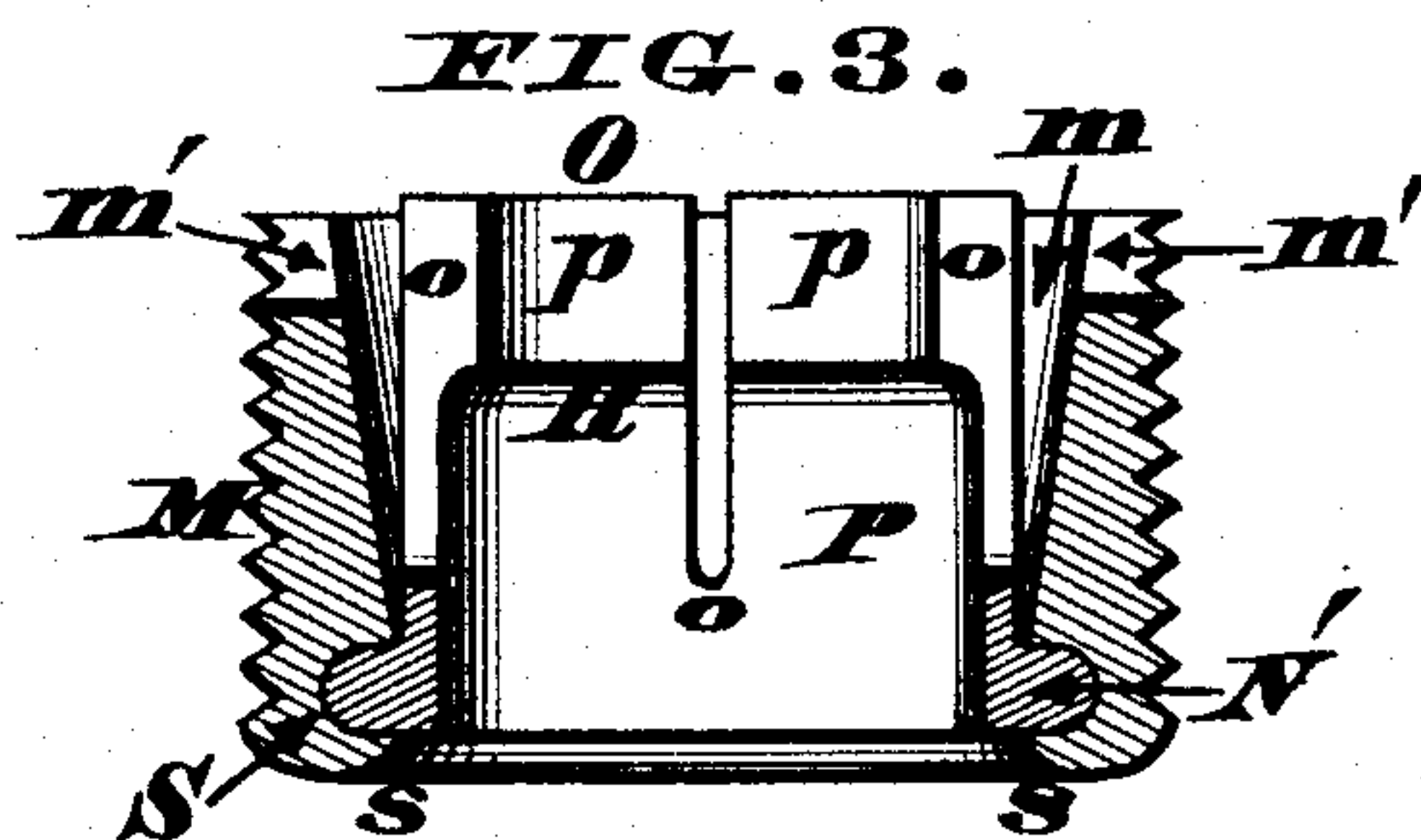
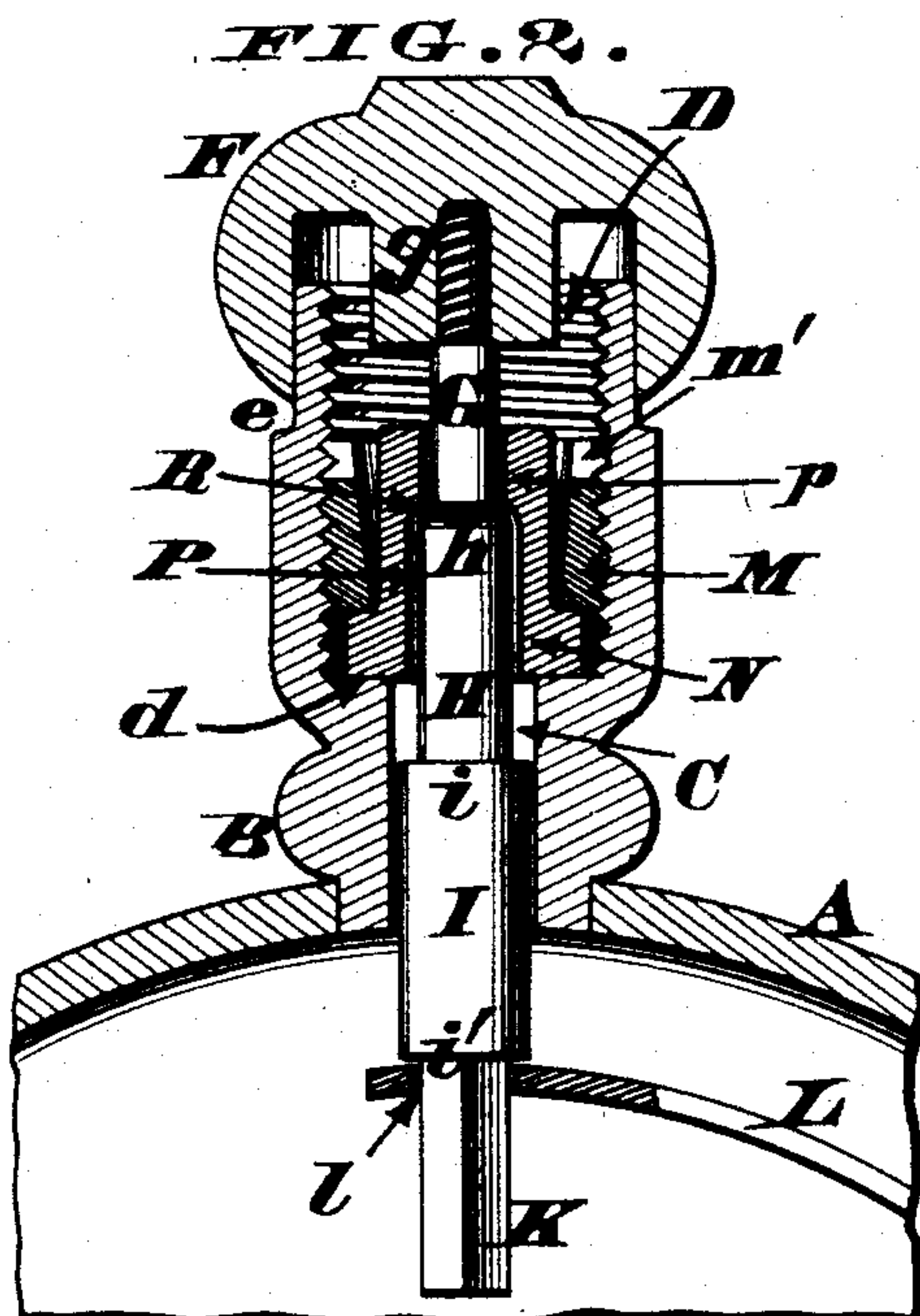
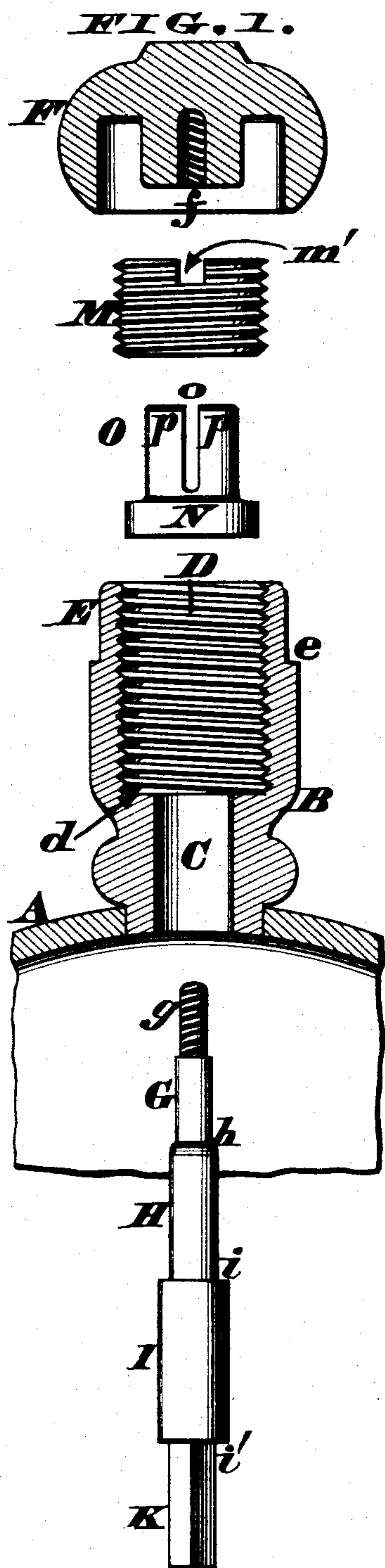


(No Model.)

W. W. BRADLEY.  
WATCH CASE PENDANT.

No. 411,420.

Patented Sept. 24, 1889.



*Attest*  
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William W. Bradley.  
By James H. Layman.  
Atty.



# UNITED STATES PATENT OFFICE.

WILLIAM W. BRADLEY, OF NEWPORT, KENTUCKY, ASSIGNOR TO JOHN C. DUEBER, OF SAME PLACE.

## WATCH-CASE PENDANT.

SPECIFICATION forming part of Letters Patent No. 411,420, dated September 24, 1889.

Application filed May 6, 1889. Serial No. 309,671. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM W. BRADLEY, a citizen of the United States, residing at Newport, in the county of Campbell and State of Kentucky, have invented certain new and useful Improvements in Watch-Case Pendants; 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.

My invention consists in providing a watch-case pendant with a peculiar combination of devices that enables the push-pin or stem to perform the threefold purpose of winding the watch, setting the hands of the same, and operating the case-spring, the details of said devices being hereinafter more fully described, and then pointed out in the claims.

In the annexed drawings, Figure 1 is an enlarged sectional elevation showing the various members of my watch-case pendant separated from each other. Fig. 2 is an axial section showing said parts fitted within the pendant and the push-pin held in its normal position by the action of the case-spring. Fig. 3 is an enlarged axial section of the spring-clutch and a modified form of the keeper. Fig. 4 is a section of another modification of my invention.

A represents a portion of the "center" of a hunting-case watch, and B is a pendant attached thereto, said pendant having at its inner end a smooth bore C, opening into a screw-threaded chamber D, of somewhat larger diameter than said bore, thus forming an annular bearing *d* in said pendant. The opposite or outer end of said chamber is open, and this end of the pendant is reduced in diameter, so as to form a neck E and an annular shoulder *e*, said neck having the hollow crown or knob F fitted around it, which knob is screw-threaded internally, as at *f*, to admit the screw *g* at the outer end of the shank G of the push-pin or stem.

*h* is a rounded or inclined shoulder formed at the junction of said shank with the spindle H of push-pin I, the latter having a shoulder *i* at its upper end and a similar shoulder *i'* at its lower end, which latter shoulder *i'* is

formed where said pin or stem I joins the square arbor K. This arbor traverses a circular eye *l* in the free end of the case-spring L, and is arranged to operate either the winding or setting mechanism in the usual manner.

Engaged with the screw-threaded chamber D is a hollow nut or keeper M, whose bore *m* is somewhat larger in diameter at top than at bottom, as more clearly seen in Fig. 3, and the upper end of this nut is nicked or slotted at *m' m'* to admit a suitable turning implement. This nut may either bear against the spring-clutch, or it may be coupled thereto; but as seen in Fig. 2 said nut is screwed down until it comes in contact with an annular collar N at the inner end of said clutch O, the latter having a series of longitudinal slots *o* extending from its upper end almost to said collar. Furthermore the inner portion of this clutch is chambered out at P, thereby affording an annular shoulder R between said chamber and the spring-prongs *p*. (See Fig. 3.)

When the various parts of this pendant are properly fitted together and occupy their normal positions, as seen in Fig. 2, the stress of spring L advances the push-pin I and forces its shoulder *h* against the shoulder R of the clutch, thereby causing the crown F to recede a slight distance from the shoulder *e*, in which position of the push-pin the arbor K is in gear with the winding mechanism; but by pushing against the crown until it strikes the shoulder *e* the spring L will be bent sufficiently to liberate the "front back" of the watch and allow it to fly open, and by properly turning said crown the watch will be wound in the usual manner. This free opening of the case-spring and winding of the watch is due to the fact that the spindle H now occupies the chamber P of the clutch while its prongs *p* surround the shank G, but do not grasp the same. Therefore the opening of the case and winding of the watch can be performed without producing any frictional action of the spring-clutch; but when the hands require setting sufficient force is exerted against the crown F to pull it forward until the shoulder *i* comes in contact with the inner end of collar N, which limits the ad-



vance of the push-pin and brings its arbor K into communication with the setting mechanism. This advance or outward pull of the push-pin or stem causes its rounded shoulder *h* to act as a wedge that gradually opens the clutch-prongs *p* and allows the spindle H to be grasped by them, as seen in Fig. 4. Consequently the clutch has now a frictional hold around said spindle, and when the push-pin is turned either to the right or left said clutch turns in unison therewith, because it is not engaged with the chamber D; neither is it secured tightly within said chamber by the nut or other keeper M. After the hands have been set sufficient pressure is exerted against the crown F to overcome the grasp of the clutch and force the push pin or stem back to its original position, where it again assumes its normal function of opening the case and winding the watch.

In the modification of my invention seen in Fig. 3 the collar N' of the spring-clutch has a rounded edge fitted loosely within an annular groove S of the nut, and said nut is upset or headed at *s* to retain said collar within said groove; but in the other modification (represented in Fig. 4) the inner end of the crown has an annular flange T, adapted to come in contact with one or more screws *t t*, tapped transversely in the pendant-neck E, which screws serve as stops to prevent the push-pin being pulled bodily out of the pendant. These screws serve also to confine a tubular keeper U within the unthreaded chamber of the pendant, said keeper having at its inner end an annular flange *u*, that bears upon a set of washers V, the latter being interposed between said flange and the clutch-collar N.

From the above description it is evident these modifications include the leading features of my invention—that is to say, they show a longitudinally-shiftable push-pin that operates the case-spring and winding and setting mechanism, a spring-clutch which grasps said stem, so as to revolve in unison therewith, but incapable of sliding either in or out,

a keeper that confines said clutch within the pendant-chamber, and a shoulder or other stop that prevents said stem being pulled bodily out of said pendant.

I claim as my invention—

1. A chambered watch-case pendant provided with a longitudinally-shiftable stem that operates the case-spring, said stem having a spindle of reduced diameter and a shank of less diameter than said spindle, in combination with a clutch fitted within said chamber, which clutch is normally inoperative, but grasps said spindle and revolves in unison therewith when the stem is advanced and engaged with the hand-setting mechanism, a keeper that prevents longitudinal sliding of said clutch, and a stop that limits the outward pull of said stem, substantially as herein described.

2. A watch-case pendant, as B, having a screw-threaded chamber D and bearing *d*, in combination with the longitudinally-shiftable stem G H *h* I *i* i' K, clutch N O o P *p* R, and a tubular nut M *m*, that screws into said chamber and holds said clutch against said bearing *d*, as herein described.

3. In a watch-case pendant, the slotted spring-clutch N' O o P *p* R, having its collar N' fitted loosely within the annular groove S of the tubular nut M *m*, and secured therein by upsetting said nut at *s*, for the purpose described.

4. The combination of an interiorly-threaded watch-case pendant, a nut engaged with said thread and having an upwardly-flaring bore, a spring-clutch held in place by said nut, so as to be free to revolve, but incapable of longitudinal shifting, and a shouldered stem that slides within said spring-clutch, for the purpose herein described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM W. BRADLEY.

Witnesses:

JAMES H. LAYMAN,  
SAML. S. CARPENTER.