

(No Model.)

C. SCHUETZ.
WATCH CASE.

No. 312,907.

Patented Feb. 24, 1885.

Fig. 1.

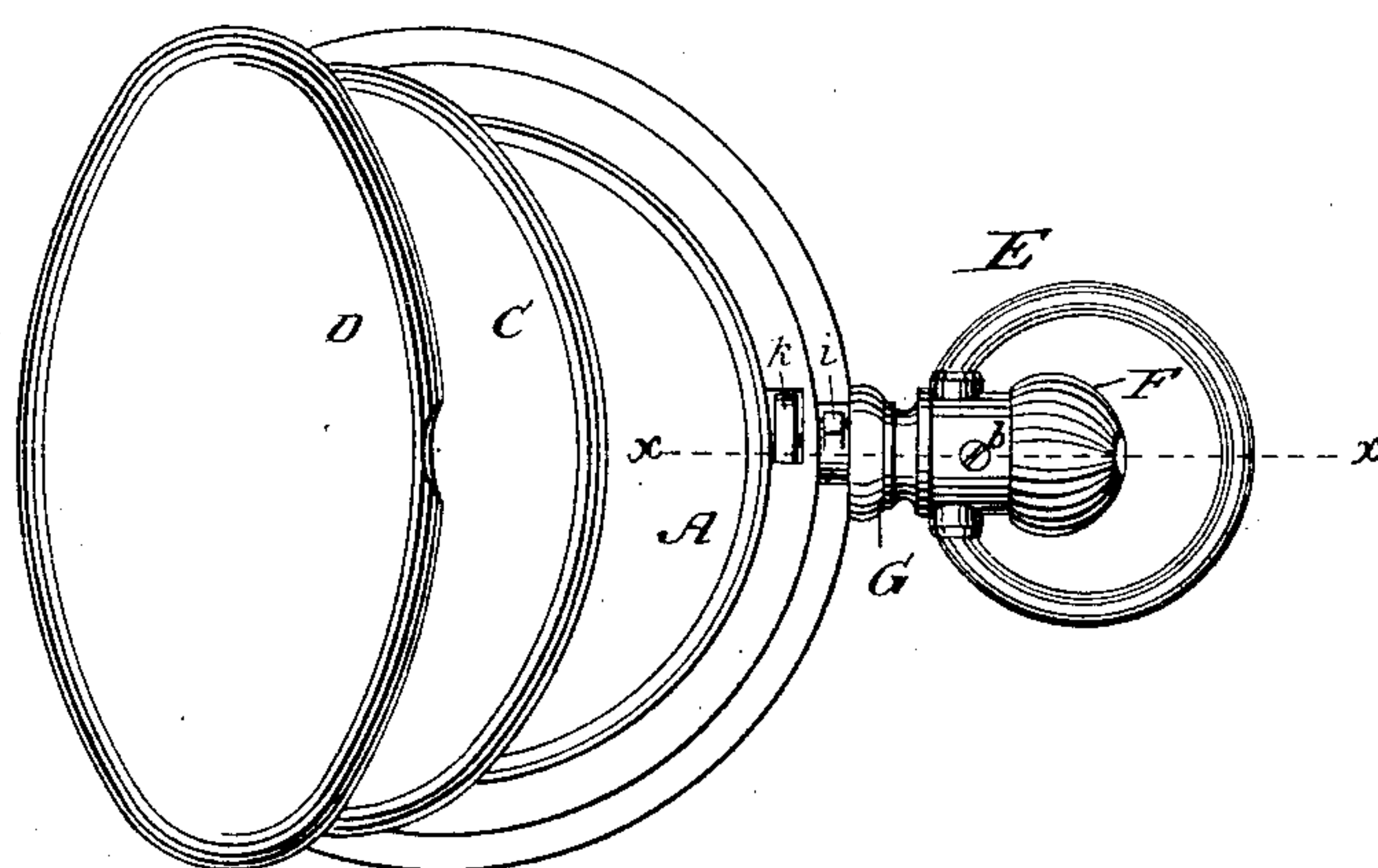


Fig. 2.

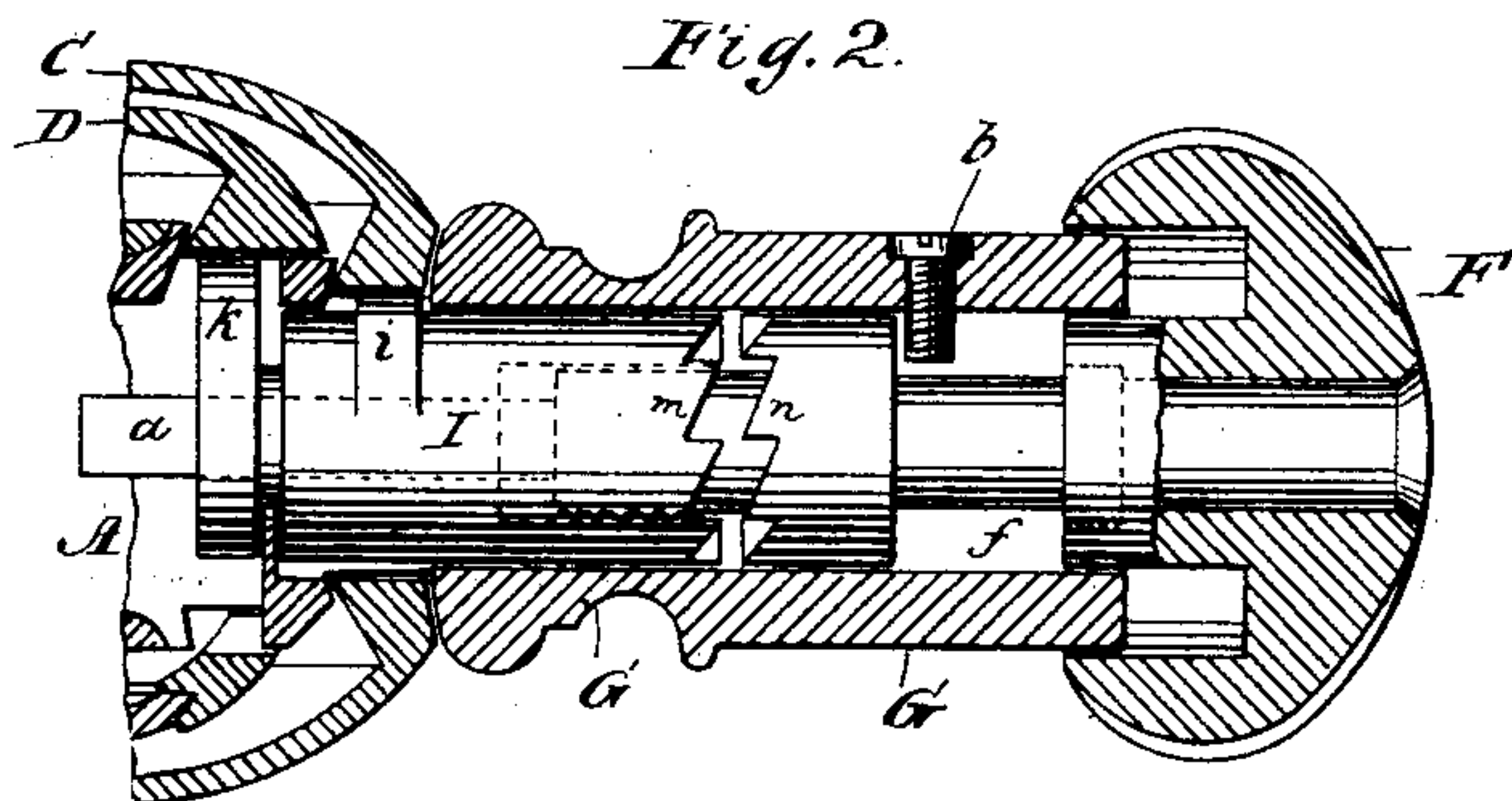


Fig. 3.

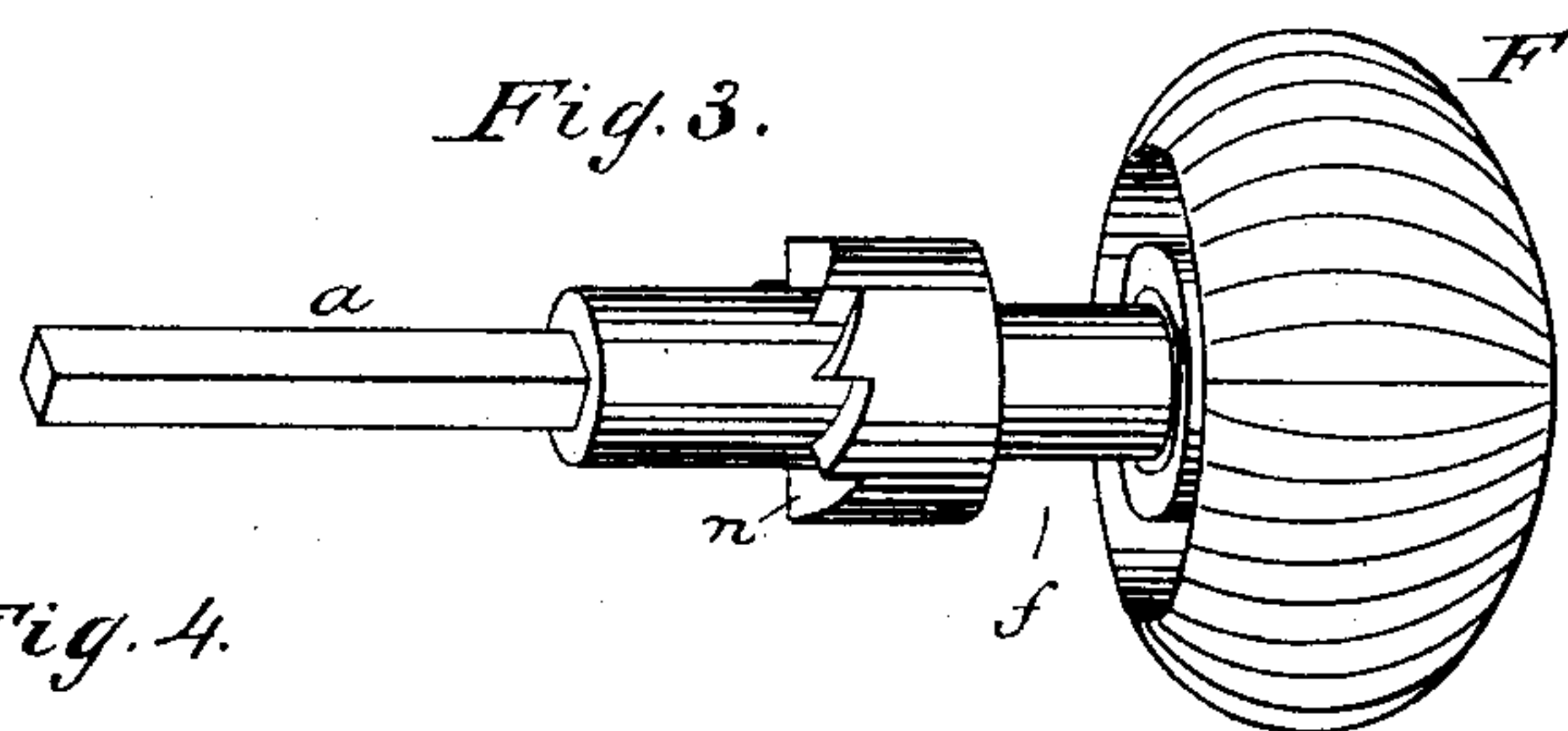
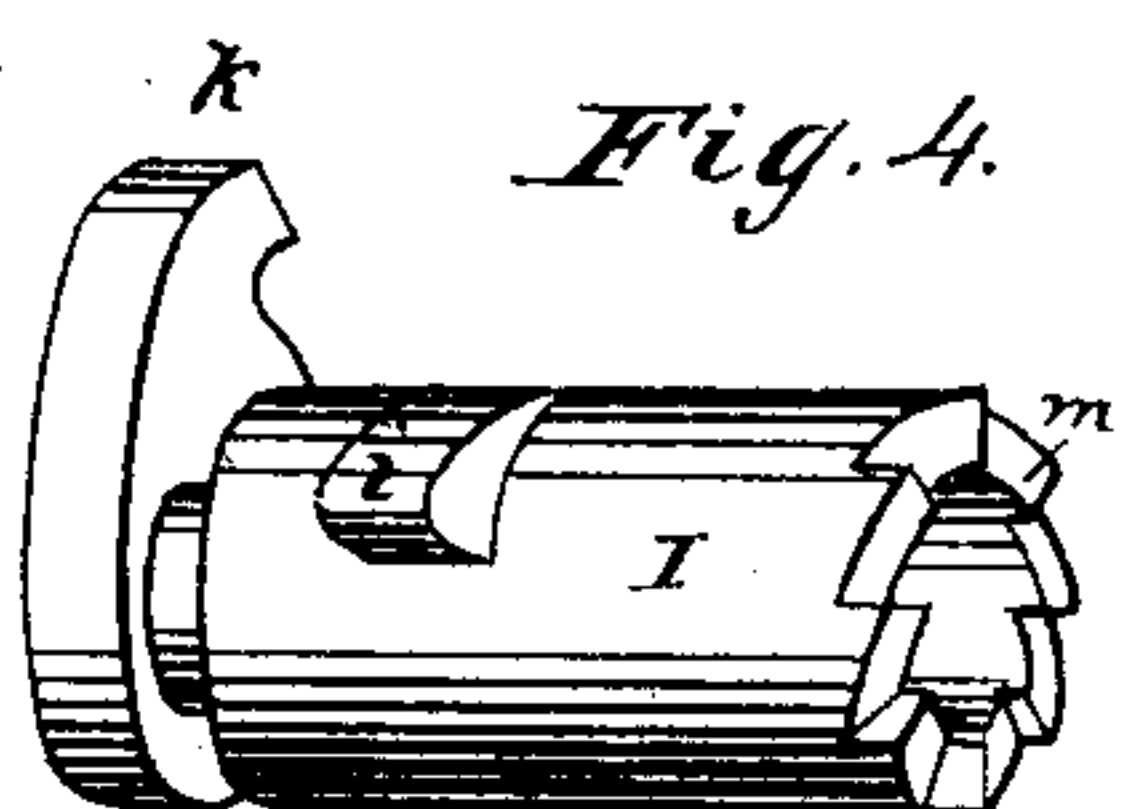


Fig. 4.



Witnesses:

E. Wolff.
George Hebner

Inventor:

Charles Schuetz

UNITED STATES PATENT OFFICE.

CHARLES SCHUETZ, OF NEWARK, NEW JERSEY.

WATCH-CASE.

SPECIFICATION forming part of Letters Patent No. 312,907, dated February 24, 1885.

Application filed April 19, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES SCHUETZ, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented new and useful Improvements in Watch-Cases, of which the following is a specification.

My invention has reference to the manufacture of watch-cases; and it consists in an improvement upon Letters Patent No. 296,631, dated April 8, 1884, but more especially in the means for operating the cam-cylinder by the knob attached to the shank, the shank being free to move longitudinally within certain limits, and provided with ratchet-teeth engaging corresponding ratchet-teeth on the cam-cylinder, so that by pressing the knob in and turning in one direction the cam-cylinder is turned so as to open the lids, while by turning the knob in the opposite direction the shank is disengaged from the cam-cylinder and moved longitudinally, so as to throw the winding device into gear.

Figure 1 is a plan of the back of the watch-case with the lids open; Fig. 2, a section through the stem and body of the case; Fig. 3, a perspective view of the winding shank and knob. Fig. 4 is a perspective view of the cam-cylinder.

Similar letters refer to similar parts throughout the several views.

A is the body or center of the watch-case; C and D, the back lids; G, the hollow stem; E, the ring attached to the stem G; F, the knob; *a*, the shank attached to the knob; I, the hollow cam-cylinder; *i* and *k*, the cams.

The shank *a* has an annular recess, *f*, into which recess projects the inner end of a screw, *b*, which is screwed into the stem G. As shown in Fig. 2, the recess *f* and the screw *b* allow the stem some longitudinal motion.

The cam-cylinder I has at its outer end ratchet-teeth *m*, and the shank *a* is provided with corresponding ratchet-teeth, *n*. These ratchet-teeth are so formed that when the knob

is pressed slightly toward the case the cylinder I is revolved by turning the knob in the proper direction, and thereby the cams are caused to act upon the rims of the lids so as to open the same. When the knob is turned in an opposite direction, the ratchet-teeth *m* and *n* become disengaged, the shank being forced out. When in this latter position, the watch can be wound up. The longitudinal motion of the stem also admits the use of setting-gear as well as of winding-gear.

As shown in my Patent No. 296,631, the front lid may be opened in the usual way by pressing the knob in, so that the cylinder acts upon the snap-spring. Like the invention shown and described in my Patent No. 296,631, the present device combines with a watch-case a pendant, a cylinder arranged to rotate within said pendant, and having at its inner extremity a cam or cams; but the means of rotating the cylinder from the exterior of the pendant differ from what is shown and described in said Patent No. 296,631; and by these new means it becomes possible in a stem-winder to use the knob for winding, setting, and for opening the lids, thereby avoiding the use of a movable pendant.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with the watch-case, of the attached tubular stem G, the cylinder I, arranged to rotate in this said pendant, having at its inner extremity a cam or cams, and being provided with ratchet-teeth *m*, and a shank, *a*, extending through the cylinder I and carrying the knob or ball F, the shank *a* being provided with ratchet-teeth *n*, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CHARLES SCHUETZ.

Witnesses:

A. FABER DU FAUR,
GEORGE WEBNER.