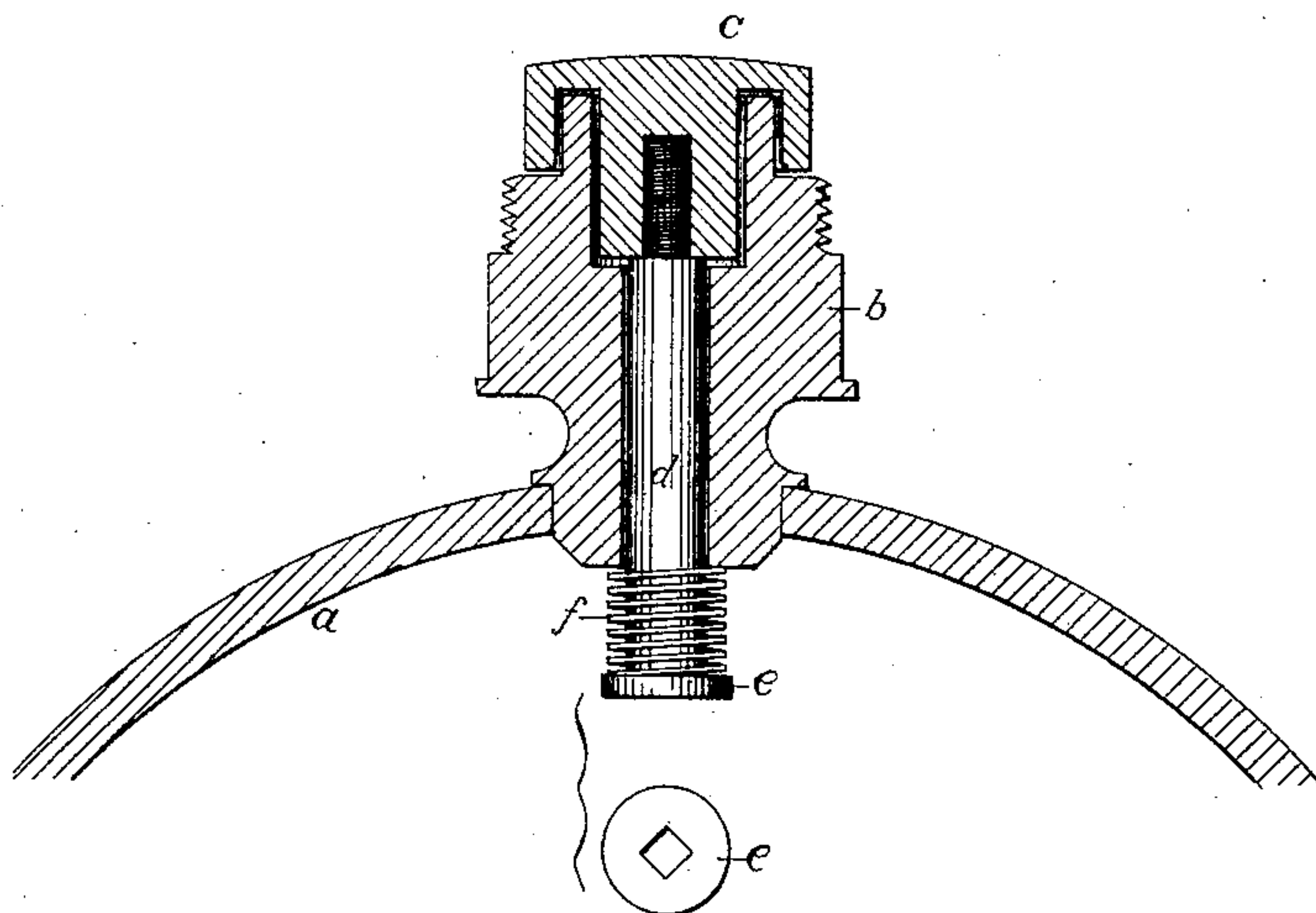


E. C. FITCH.
Stem-Winding Watch-Key.

No. 220,916.

Patented Oct. 28, 1879.



Attest.

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UNITED STATES PATENT OFFICE.

EZRA C. FITCH, OF NEW YORK, N. Y.

IMPROVEMENT IN STEM-WINDING WATCH-KEYS.

Specification forming part of Letters Patent No. **220,916**, dated October 28, 1879; application filed August 16, 1879.

To all whom it may concern:

Be it known that I, EZRA C. FITCH, of New York city, have invented certain new and useful Improvements in Stem-Winding Watch-Keys, of which the following is a specification.

My invention relates to that class of stem-winding keys or crown-pushes capable of an outward play in the stem, to disengage the key from the winding-stud of the movement when it is required to remove the latter from the case, but which are normally drawn in by a spring to hold the key in engagement and prevent the rattle of the parts.

My invention aims to cheapen and simplify the construction of the key and its attachment in the stem, at the same time rendering it fully efficient, as hereinafter set forth.

The figure in the annexed drawing represents a fragment of a watch-case, showing the stem, &c., in section, with my improved key in position therein, which appears in elevation.

As illustrated, *a* indicates a fragment of the watch-case, and *b* the stem thereof; *c*, the winding knob or crown, and *d* the winding-key.

The winding-key is arranged, as shown, in the bore of the stem, its outer end being formed with a short threaded shank, which is tightly screwed into the knob or crown *c*, in the usual manner, as illustrated, while its inner end projects into the hollow of the case, and is adapted to engage with the winding-stud of the movement, as usual, its inner end being provided either with a square bore or with a projecting square pin, according to the relative form of the winding-stud of the movement, as will be readily understood.

Now, according to my invention, I construct the key *d* of preferably uniform diameter from the end of the knob *c* to the inner extremity of the key, where it terminates with a shoulder or short head, *e*, as illustrated, and I arrange the spring *f* upon the inner end of the key, directly between this shoulder and the root or base of the stem on the interior of the case, as shown, thus, as will be readily observed, providing a construction which fulfills all the desired ends, while at the same time being much simpler and cheaper than the usual device.

In the usual construction the upper part of the key is reduced in diameter, forming a shoulder about midway of the key, and the spring is arranged on this reduced part of the key within the bore of the stem, with the lower end of the spring bearing upon the said shoulder, while its upper end bears upon the end of a sleeve or thimble inserted in the top of the stem, and there held by a radial screw; which construction is not only much more elaborate and expensive than my device, but is much more liable to derangement.

What I claim as my invention is—

The stem-winding key *d*, formed with the head or shoulder *e* at its inner extremity, in combination with the spring *f*, arranged between the said head and the root of the stem, or inner periphery of the case, substantially as herein shown and described.

EZRA C. FITCH.

Witnesses:

D. F. APPLETON,
A. M. CROMMELIN.