

E. Sandoz,

Watch Pinion.

NO. 97,123.

Patented Nov. 23. 1869.

Fig. 1

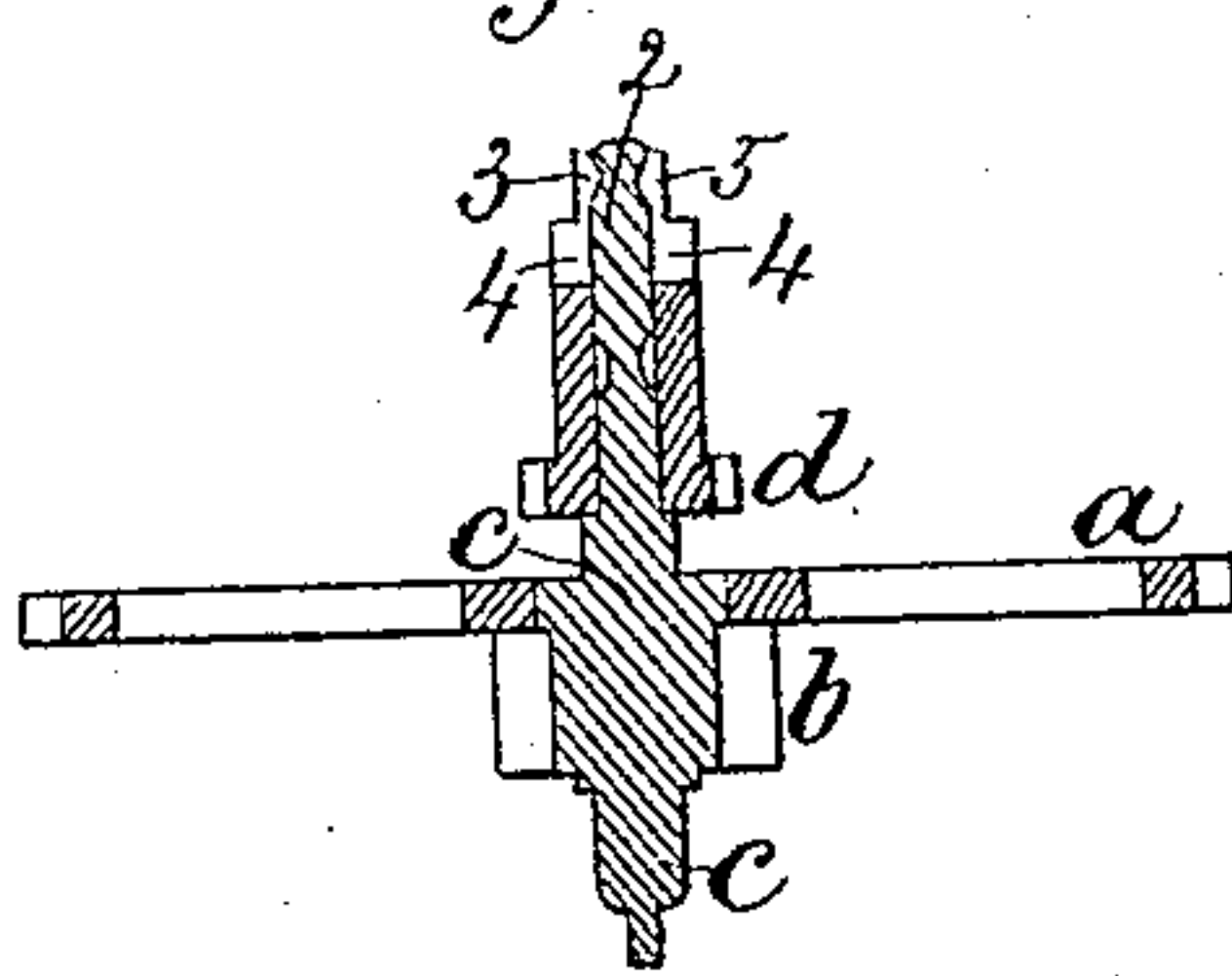
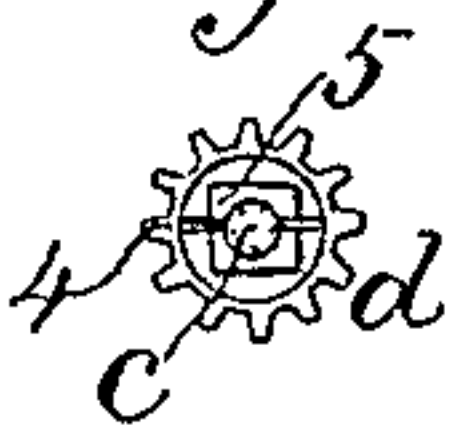


Fig. 2



Witnesses
Geo. A. Walburn
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ERNEST SANDOZ, OF HUDSON CITY, NEW JERSEY.

Letters Patent No. 97,123, dated November 23, 1869; antedated November 15, 1869.

IMPROVEMENT IN SECURING THE CANNON-PINIONS OF WATCHES.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, ERNEST SANDOZ, of Hudson City, in the county of Bergen, and State of New Jersey, have invented and made a new and useful Improvement in Cannon-Pinions for Watches; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a vertical section of the cannon-pinion and centre-wheel and pinion, and

Figure 2 is an end view of said cannon-pinion.

These views are in enlarged size, and similar letters denote the same parts.

The cannon-pinion of watches frequently becomes too loose on the arbor of the centre-wheel, and turns thereon by the leverage of the hands; if the watch is suddenly shaken; and, when the face has been taken off, this pinion is liable to drop, and be lost. Sometimes this pinion is fitted too tightly upon the arbor, and cannot be removed, in consequence of the length of the bearing-surface.

My invention overcomes the aforesaid difficulty, and consists in a spring-clasp to the cannon-pinion, consisting in a neck in the arbor of said pinion, a divided or split end to the tube of said pinion, and a collar within said tube grasping the said neck.

By this construction, the necessary friction is obtained between the neck and collar, and the other part of the tube can fit the arbor loosely. The pinion cannot fall off accidentally, but can either be drawn off or pressed on with facility, the split end of the tube springing open: and, when the hand is upon the

square of the tube, the friction can be increased or lessened by pressing on or partially lifting the square socket of the hand upon the pinion tube.

This invention is especially useful in watches that are wound and set by the stem, as it gives the proper friction to prevent the hands being moved too suddenly.

In the drawing—

a is the centre-wheel;

b, the centre-pinion;

c, the arbor; and

d, the cannon-pinion.

2 is a neck turned in the arbor *c*;

3 is a collar left on the inside of the tube of the cannon-pinion *d*, near the end thereof; and

4 is a longitudinal incision, that allows the end of said tube to spring in passing the collar 3 out of or into the said neck 2, for the purposes aforesaid.

5 is the square at the end of the tube for receiving the minute-hand.

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

The arbor *c*, with a neck, 2, in combination with the spring-tube of the cannon-pinion *d*, formed with the internal collar 3, substantially as and for the purposes set forth.

In witness whereof, I have hereunto set my signature, this 11th day of March, A. D. 1869.

ERNEST SANDOZ.

Witnesses:

CHAS. H. SMITH,

GEO. T. PINCKNEY.