V. C. TAYLOR.

CLOCK SPRING RELEASER AND WINDER.

APPLICATION FILED APR. 13, 1908.

920,098. **Patented Apr. 27, 1909.**

Fig. 1.

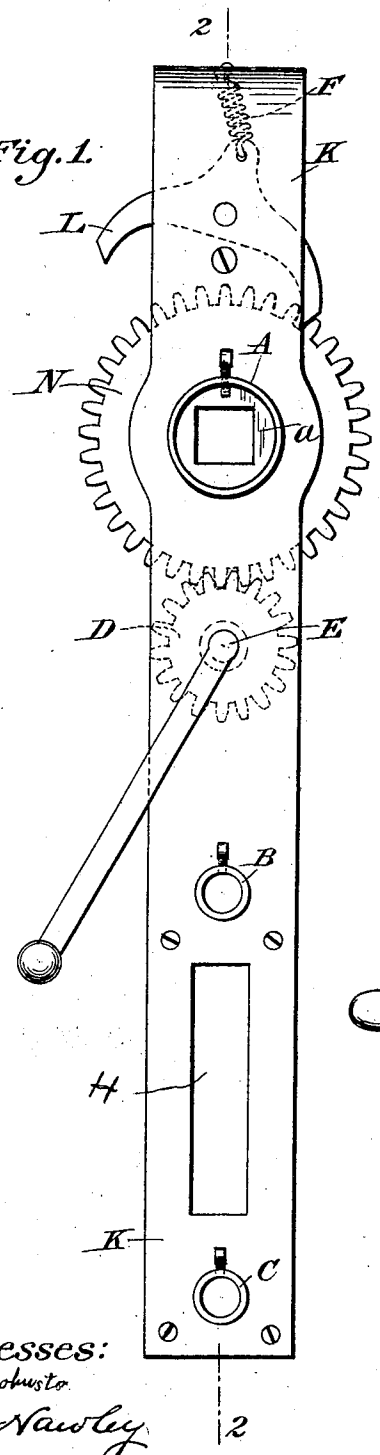


Fig. 2.

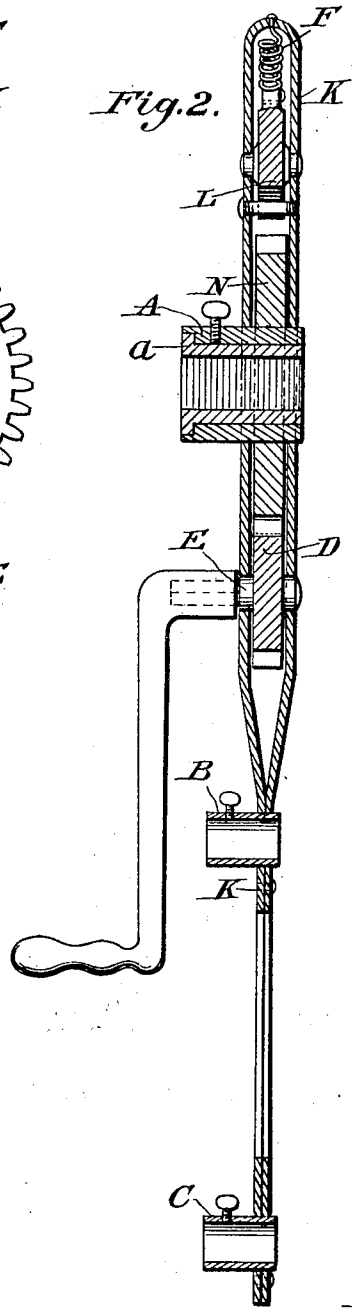
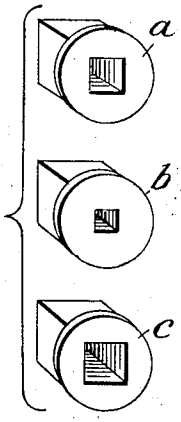


Fig. 3.



Witnesses:

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VICTOR CARL TAYLOR, OF OSSIAN, INDIANA, ASSIGNOR OF ONE-HALF TO JOHN H. HOOVER, OF OSSIAN, INDIANA.

CLOCK-SPRING RELEASER AND WINDER.

No. 920,098. Specification of Letters Patent. Patented April 27, 1909.

Application filed April 13, 1908. Serial No. 426,663.

To all whom it may concern:

Be it known that I, VICTOR CARL TAYLOR, a citizen of the United States, residing at Ossian, in the county of Wells and State of Indiana, have invented a new and useful device known as a Clock-Spring Releaser and Winder to be Used by Clock Makers and Repairers, of which the following is a specification.

My invention relates to that kind of clock spring releaser and winder, that has one large and one small cog wheel geared together with reversible pawl and spring, all working together between two plates, with crank attached to the shaft of the small wheel; and a hollow hub or pinion to receive a square bushing to fit the post of a clock, all working together in such position that one can release the ratchet on the clock and have perfect control over the clock spring, which is the object of my invention.

I attain this object by the mechanism illustrated in the accompanying drawing, in which—

Figure 1 is a top view of the entire device; Fig. 2 is a sectional view of the machine showing the edge or side cut lengthwise through the center of plates, pinions, wheels and pawl, at lines 2; Fig. 3 shows different sizes of bushing (*a*, *b*, *c*) used in sleeve A on Fig. 1.

Similar letters refer to similar parts throughout the several views.

Plates K constitute the framework of the machine. Wheel N, wheel D, pawl L, spring F, and crank E, are the working parts. Wheel N has a large hub (A), or pinion fastened solidly to the wheel N. Hub A has bearings in both plates K. The square hole in hub A extends through the hub and is for the purpose of receiving square bushings (*a*, *b*, *c*). Wheel D is geared into the wheel N. Crank shaft E extends through the wheel D, and is fastened solidly thereto. Shaft E has bearings in both plates K. Pawl L is reversible and has laterally projecting therefrom, about centrally, pivotal trunnion-like studs bearing in plates K. Sleeves B and C are for attachment not shown.

To use the device or machine for clock spring releaser, place the bushing that fits the post of the clock in the hub or pinion A of the wheel N, tighten the set screw on the hub A, place the machine over the clock with the spring post of the clock through the bushing in hub A and slot H over the opposite post of the clock, turn the crank, release the click on the clock, and unwind.

To use a main spring winder, when the ratchet or click is broken, use the same as for a releaser, with reversed pawl for right or left.

I claim:

1. A device of the character described, comprising supporting means, post-engaging means carried by said supporting means, intermeshed gearing also carried by said supporting means, means for actuating said gearing, a bushing whose bore is angular in cross section, one of the members of said gearing having a tubular axis adapted to receive said bushing, and means for the retention of said bushing in said tubular axis in effective position, and means for holding said gearing against reverse movement.

2. A device of the character described, comprising a supporting frame, post-engaging means carried by said frame, intermeshed gearing also carried by said frame, means for actuating said gearing, a bushing whose bore is angular in cross section, one of the members of said gearing having a tubular axis adapted to receive said bushing, a holding screw threaded in said tubular axis and engaging said bushing, and means for holding said gearing against reverse movement.

3. A device of the character described, comprising a supporting frame, provided with post-engaging means, intermeshed gearing arranged upon said frame, means for actuating said gearing, a bushing whose bore is angular in cross section, one of the members of said gearing having a tubular axis receiving said bushing, means for actuating said gearing, means for the retention of said bushing in effective position in said tubular axis, and a resiliently held pawl for engagement with said gearing member.

4. A device of the character described, comprising a supporting frame, provided with post-engaging sleeves, intermeshed

gearing carried by said supporting frame, means for actuating said gearing, a bushing whose bore is angular in cross section, one of the members of said gearing having a tubular axis adapted to receive said bushing, means for holding said bushing in said tubular axis in effective position, and a resiliently-held double acting pawl for engagement with said gearing-member.

VICTOR CARL TAYLOR.

Witnesses:
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