

S. D. JOHNSON.

BARRELS FOR WATCH-SPRINGS.

No. 178,371.

Patented June 6, 1876.

Fig: 1.

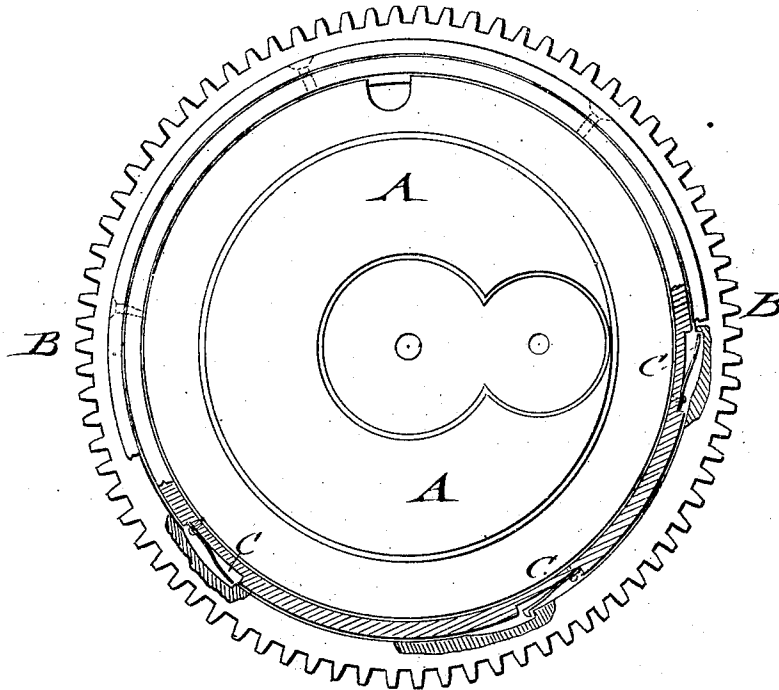
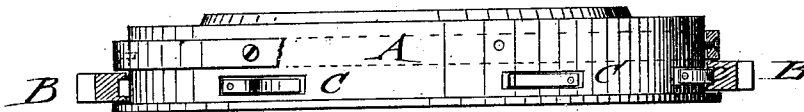


Fig: 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

SHERMAN D. JOHNSON, OF EAST HADDAM, CONNECTICUT.

IMPROVEMENT IN BARRELS FOR WATCH-SPRINGS.

Specification forming part of Letters Patent No. **178,371**, dated June 6, 1876; application filed April 25, 1876.

To all whom it may concern:

Be it known that I, SHERMAN D. JOHNSON, of East Haddam, in the county of Middlesex and State of Connecticut, have invented a new and Improved Barrel for Watch-Springs, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a sectional top view, and Fig. 2 a side view, of my improved barrel for watch-springs.

Similar letters of reference indicate corresponding parts.

The object of my invention is to so improve the barrel or cylinder of mainsprings of watches that the train cannot be injured on the breaking of the watch-spring, and thereby the injury to the teeth of barrel and center pinion, and to the pivot and jewel of the third wheel, be avoided, the object being accomplished by an easy, simple, and reliable mechanism.

The invention consists of the combination of the mainspring-barrel by suitable pawls or catches with a separate toothed wheel or rim around the barrel, that is capable of motion independent of the rim on the breaking of the spring.

In the drawing, A represents the barrel or cylinder of the mainspring of a watch, and B an encircling gear-wheel or toothed rim that is guided between a stationary and a detachable collar of the barrel. The barrel is connected with the outer gear-wheel B by pivot or spring-pawls, clicks, or catches C, set into

recesses at the circumference of the barrels. The pawls or catches C project into recesses of the outer wheel B, and either push or pull the same according as plain pawls or hook-shaped catches are employed, as shown in Fig. 1.

The barrel may be readily turned independently of the wheel or rim in opposite direction to that in which it is turned by the action of the spring as the pawls or catches are forced back into the recesses of the barrel, but are thrown instantly into use when the spring is in action.

The independent motion of the barrel in backward direction protects the parts of the watch that have hitherto been exposed to injury by the breaking of the mainspring, and saves not only (by a simple device) the heavy expense for repairing the damage done to the work, but prevents, in perfectly reliable manner, the occurrence of such injury.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with barrel A, of the encircling wheel B, guided between collars of the former, and connected therewith by spring-pawls, substantially as and for the purpose specified.

SHERMAN D. JOHNSON.

Witnesses:

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