

J. V. MATHIVET.

Watch Pinion.

No. 107,273.

Patented Sept. 13, 1870.

Fig. 1.

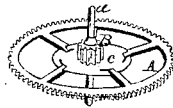


Fig. 2.

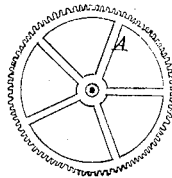
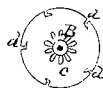


Fig. 3.



Witnesses
Geo. W. Tibbitts
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JEAN V. MATHIVET, OF CLEVELAND, OHIO.

Letters Patent No. 107,273, dated September 13, 1870.

IMPROVEMENT IN REVERSIBLE CENTER-PINION FOR 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, JEAN V. MATHIVET, of Cleveland, in the county of Cuyaboga and State of Ohio, have invented a new and useful Improved Reversible Center-Pinion for Watches; and I do hereby declare the following to be a full, clear, and exact description thereof, sufficient to enable those skilled in the art to which my invention appertains to fully understand and to make and use the same, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a perspective view.

Figure 2 is a detached view of the wheel.

Figure 3 is a detached view of the pinion and ratchet-plate.

Like letters of reference indicate like parts in the several figures.

My invention consists in the provision of the loose pinion with a ratchet-plate, having teeth formed on its periphery, in such a manner that said teeth shall project downward, and come in contact with the arms of the wheel, to hold the plate from turning in one direction; but, when turned in the opposite direction, the teeth will slip by the arms, and permit the pinion to turn.

The object of this invention is to provide against the dangers of injury to the wheel or other portions of the works in watches in case the main-spring should break.

Referring to the drawing—

A represents a center-wheel, having a fixed shaft,

a.

B is a hollow pinion, to the lower side of which is firmly attached, by riveting or other suitable means, a disk, *c*, of metal or its equivalent, the periphery of which is formed into any suitable number of ratchet-teeth by cutting slits, *d d*, in the edge of the disk, from the outside toward the center far enough to allow the metal to be bent or turned down on the same side of each slit, to form the ratchet-teeth, which teeth, when the pinion is secured in its place on the shaft of the wheel A, strike against the arms of the wheel, and prevent its turning forward; but the elasticity of the teeth and disk allow the pinion a free movement in the reverse direction by rising up and passing over the arms of the wheel.

By the use of this improvement, the teeth are sure to hold against the arms of the wheel, while, if the main-spring becomes loose by unhooking or by breaking, the pinion will have a free reverse motion.

Having thus described my invention,

What I desire to secure by Letters Patent is—

The ratchet-plate *c*, when formed with teeth *d*, in the manner described, and attached to the pinion B, as and for the purpose specified.

JEAN V. MATHIVET.

Witnesses:

GEO. W. TIBBITTS,

GEO. A. KOLBE.