E. JEANJAQUET.

Safety-Wheel for Watches.

Patented June 8, 1875.

No. 164,092.

*Fig. 1.*

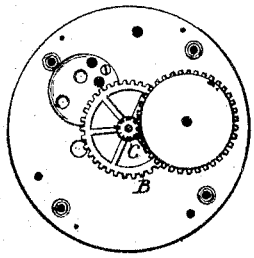



*Fig. 4.*

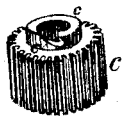



*Fig. 2.*

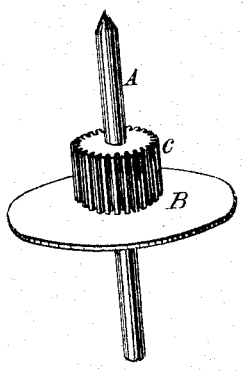



*Fig. 3.*

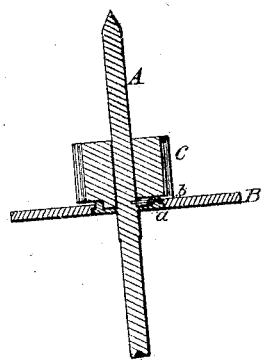
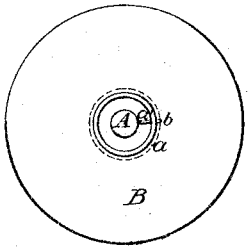



*Fig. 5.*




Witnesses:
Chas. Thurnau.
R. A. Dyer

Inventor:
Eugene Jeanjaquet
by Geo. W. Dyer & Co
Attys

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

# UNITED STATES PATENT OFFICE.

EUGÈNE JEANJAQUET, OF SPRINGFIELD, ILLINOIS.

## IMPROVEMENT IN SAFETY-WHEELS FOR WATCHES.

Specification forming part of Letters Patent No. **164,092**, dated June 8, 1875; application filed December 18, 1874.

*To all whom it may concern:*

Be it known that I, EUGÈNE JEANJAQUET, of Springfield, in the county of Sangamon and State of Illinois, have invented a new and useful Improvement in the Center-Staff, Center-Wheel, and Pinion to a Watch; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of my invention is to so construct the center-staff and center-pinion of a watch that in case the mainspring should break and recoil the center-pinion would disengage itself from the center-staff, and turn independently of said staff without injury to the other parts of the works; and my invention therein consists, first, in providing the center-staff with a flange, on which the center-wheel is secured, and forming a chamber for the reception of the small end of the pinion; second, in the pinion sleeved on the center-staff, and provided with a raised part to enter the chamber, and a notch to engage with the pin in said chamber; third, in the construction and combination of the several parts, as more fully hereinafter described.

To enable others skilled in the art to manufacture and use my invention, I proceed to describe the same in connection with the drawings, in which—

Figure 1 represents a top view of the center-staff, center-wheel, pinion, and barrel to a watch. Fig. 2 represents an enlarged view of the center-staff, center-wheel, and pinion; Fig. 3, a vertical section of the same; Fig. 4, an enlarged view of the pinion; Fig. 5, a plan of the center-staff and center-wheel.

Similar letters denote like parts in each figure.

A represents the center-staff of a watch, which is provided with a flange, *a*, forming a chamber, *a'*, which is crossed by a pin, *b*. B represents the center-wheel, which is secured on the flange *a*, and prevented from turning by the pin *b*, projecting outside of the flange, and entering a notch in said wheel. C represents the pinion, sleeved on the staff A, and meshing with the cog-teeth on the periphery of the barrel. The lower end of the pinion is made with a raised part, *c*, small enough to enter the chamber *a*. In the part *c* is cut a hook or notch, *c'*, which engages with the pin *b* when the part *c* enters the chamber. This notch or hook is made so that when the pinion is turned one way it will engage with the pin in the chamber, and turn the center-wheel, but when turned in the opposite direction will pass over the pin without turning said wheel.

The operation of my device is as follows: The watch being wound, the barrel commences to turn, and the pinion, engaging with the pin, turns the center wheel and staff in the right direction. In case the mainspring breaks, it recoils and turns the barrel in the opposite direction. The pinion would rise nearly out of the chamber when the bevel of the notch strikes the pin, and, although turning itself, would not turn the center staff and wheel.

When the pinion is rigidly secured the recoil of the mainspring nearly always causes some injury to the parts of the watch, which would turn also in an opposite direction.

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

1. The combination, with the center-staff A, having the flange *a* and chamber *a'*, of the wheel B, secured to said flange, as set forth.

2. The pinion C, sleeved on the staff A, and provided with the raised part *c* and notch *c'*, as set forth.

3. The combination, with the staff A, having the flange *a* and pin *b*, of the pinion C, having the raised part *c* and notch *c'*, as set forth.

This specification signed and witnessed this 10th day of December, 1874.

EUGÈNE JEANJAQUET.

Witnesses:
SAML. D. SCHOLES,
T. C. MATHER.