(No Model.)

J. E. SEARING.

WATCH CASE SPRING.

No. 450,638. Patented Apr. 21, 1891.

Fig. 1.

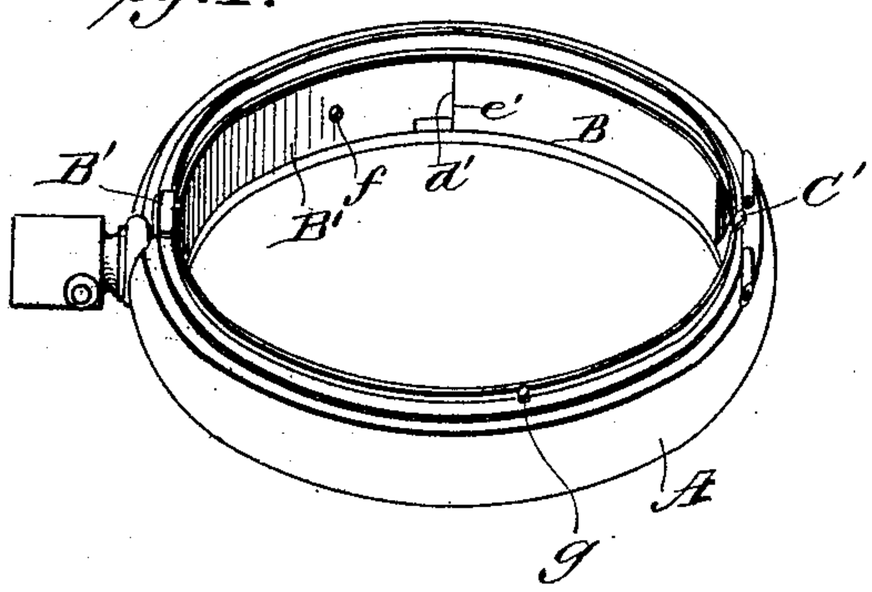


Fig. 2.

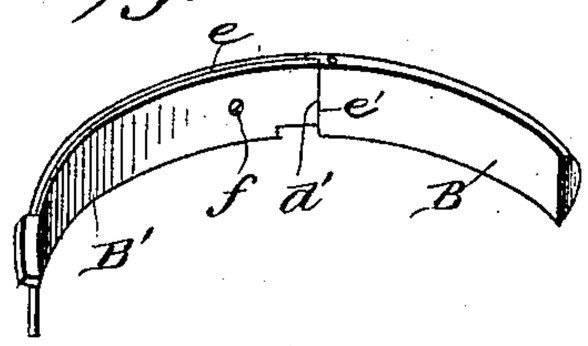


Fig. 3.

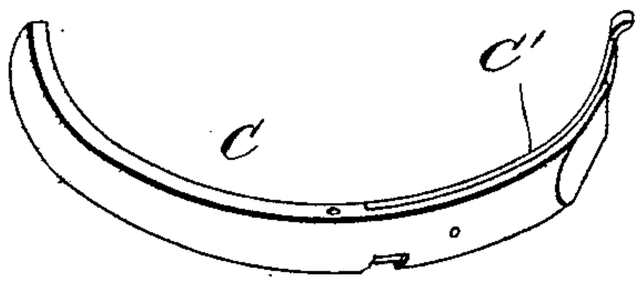


Fig. 4.

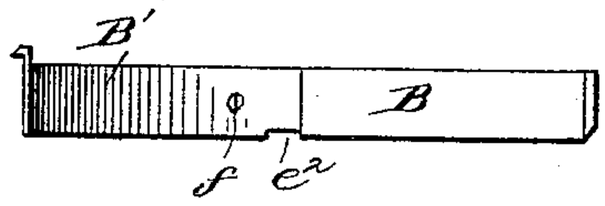


Fig. 6.

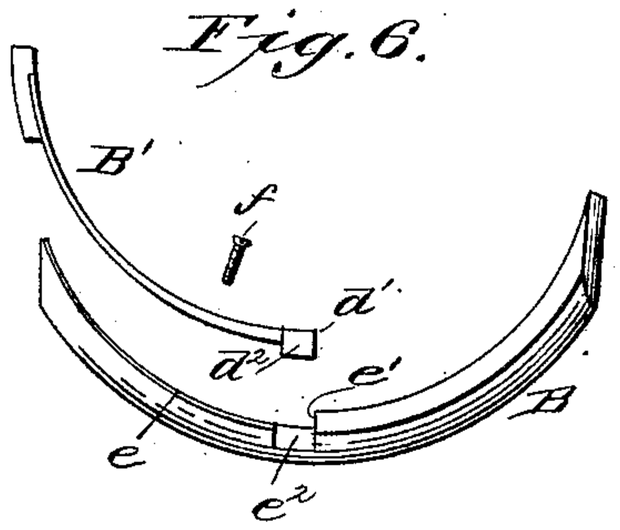


Fig. 5.

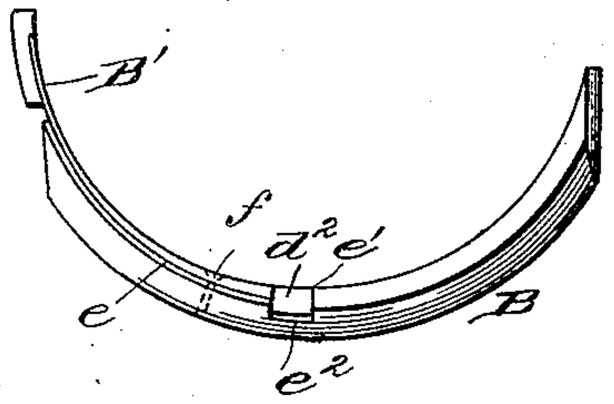
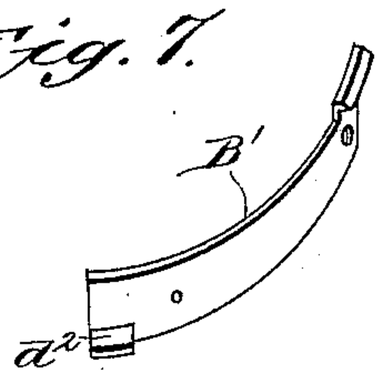


Fig. 7.



WITNESSES:

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JAMES E. SEARING, OF MOUNT VERNON, NEW YORK.

WATCH-CASE SPRING.

SPECIFICATION forming part of Letters Patent No. 450,638, dated April 21, 1891.

Application filed December 10, 1890. Serial No. 374,226. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. SEARING, of Mount Vernon, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Watch-Case Springs; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

My invention relates to that class of watch-case springs in which there is a curved body portion that fits within the recess or groove of the watch-case center, and an elastic springy portion constituting the spring proper that is adapted to be connected to and supported by such curved body portion; and it consists in the improved construction of the elastic springy portion and its novel combination with the curved body portion, whereby the device is enabled to be manufactured cheaply, and a firm and positive connection of the parts is secured, all as will be hereinafter more fully set forth.

Referring to the accompanying drawings, Figure 1 is a perspective view of a watch-case center, showing the application of my improved case-springs thereto. Fig. 2 is a perspective view of the catch-spring detached. Fig. 3 is a similar view of the fly-spring. Fig. 4 is a view of the catch-spring as it appears from the inside. Fig. 5 is a plan view of the same. Fig. 6 is a similar view with the parts of the spring separated. Fig. 7 is a perspective view of the elastic portion of the spring.

Similar letters of reference in the several figures indicate the same parts.

The letter A represents the watch-case center in which the springs are contained.

B and B′ represent, respectively, the curved body portion and the elastic springy portion of the catch-spring; C and C′, the similar portions of the fly-spring. Each of the springy or elastic portions is preferably formed from a single piece of sheet-steel by pressure in dies or otherwise, and is adapted to rest upon a seat *e*, formed on the curved body portion, as shown in Fig. 5. Its inner end is squared off, as shown at *d′*, so as to fit against a shoulder *e′* on the curved body portion, and at one edge it has a turned-down portion or ear d^2, which is adapted to accurately fit a corresponding recess or depression e^2, formed in the edge of the body portion. The connection between the parts is completed by a single screw *f*, passed through both, as shown in said Fig. 5, though more than one screw may be employed, if desired. When the screw *f* is in place, the squared end *d′* and ear d^2 prevent the springy or elastic portion from turning in the slightest degree.

In applying the springs to the watch-case center their curved body portions are first placed in position and secured by screws *g*, as usual, after which the elastic springy portions are inserted and held and secured by the screws *f*. Should one of the elastic or springy portions become broken or worn, it can be readily replaced by another.

I am aware that watch-case springs have been made in two parts fitted to each other and held together by a single screw, and such construction I do not, therefore, broadly claim.

What I do claim is—

1. The combination of the curved body portion having the seat *e*, shoulder *e′*, and recess or depression e^2 with the elastic or springy portion provided with the squared shoulder *d′* and the turned-down ear d^2, and with the screw *f*, substantially as described.

2. As an article of manufacture, the elastic or springy portion provided with the squared end, the perforation for the passage of the securing-screw, and the turned-down ear, substantially as described.

JAMES E. SEARING.

Witnesses:
C. L. BLEECKER,
W. E. TAYLOR.