

(No Model.)

C. NOBS, Jr.
WATCHCASE SPRING.

No. 569,297.

Patented Oct. 13, 1896.

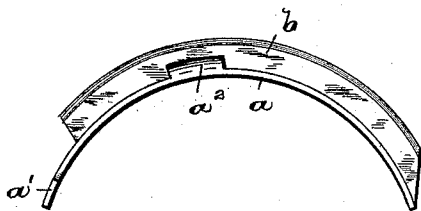


FIG. 1

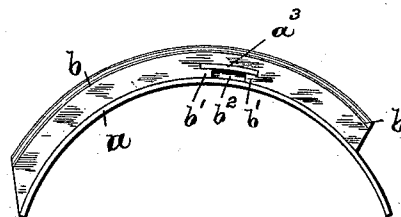


FIG. 2

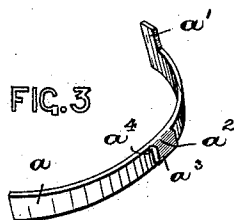


FIG. 3

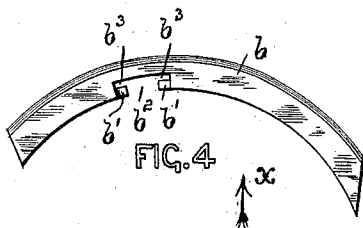


FIG. 4

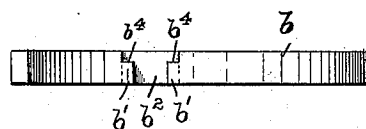


FIG. 5

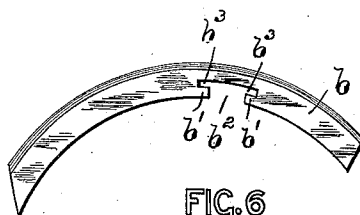


FIG. 6

WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES NOBS, JR., OF NEWARK, NEW JERSEY,

WATCHCASE-SPRING.

SPECIFICATION forming part of Letters Patent No. 569,297, dated October 13, 1896.

Application filed May 28, 1896. Serial No. 593,378. (No model.)

To all whom it may concern:

Be it known that I, CHARLES NOBS, JR., a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Watchcase-Springs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention has reference to improvements in watchcase-springs, and has for its primary object to secure greater durability of the spring, simplicity of construction, and also ease of adjustment.

A further and essential object of this invention is to provide a watchcase-spring, either a lift-spring or a release-spring, which, when arranged in a watchcase-center, will firmly set therein, being securely held in the backing to which it is secured in such a manner that the spring cannot drop out or be accidentally pulled from its operative position, and must be sprung into a T-shaped slot or opening in the said backing, in which it is held in locked engagement.

The invention therefore consists in the novel arrangements and combinations of parts, such as will be hereinafter fully described, and finally embodied in the claim.

The invention is illustrated in the accompanying drawings, in which similar letters of reference are employed to indicate corresponding parts in the several views.

In said drawings, Figures 1 and 2 are a top and bottom view, respectively, of the spring in position in its backing. Fig. 3 is a perspective view of the spring. Fig. 4 is a top view of the backing. Fig. 5 is a face view of the same when looking in the direction of arrow x in Fig. 4, and Fig. 6 is a bottom view of said backing.

In said views a indicates the spring, and b the backing. The spring a is curved to conform with the curvature of the backing b , and the latter is curved to correspond with the inner curvature of the case-center. Said spring a is provided with the usual form of

spur or finger a' , and at any suitable point, preferably near the middle, with a short ear or lip a^2 , which is bent over at an angle, as at a^3 , on the outer or convex side of the spring a , substantially as illustrated in Fig. 3.

As will be seen from Figs. 4, 5, and 6, the backing b is provided on its inner or convex surface with two oppositely-arranged fingers or projections b' , having the opening b^2 between them and the longitudinally-arranged slot or opening b^3 behind them. Each projection b' is cut away, as at b^4 , (see Fig. 5,) whereby a seat is formed on the top of each projection b' for the outwardly-extending portion a^4 of the lip or tongue a^2 , when the bent-over part a^3 is forced down into the slot b^3 , as will be clearly evident.

To secure the spring a in its locked position against the concave side of the backing b , the two free ends of the spring are placed between the thumb and first finger, the spring being slightly compressed by pressure exerted in this manner upon the said ends of the spring, and the bent-over part a^3 of the lip or tongue a^2 on said spring can be easily inserted in place in the longitudinal slot b^3 in the backing b . The outwardly-extending portion a^4 of the lip or tongue a^2 is then firmly pressed down upon the two fingers or projections b' , whereby said lip or tongue a^2 of the spring a is hugged on all sides by the slotted parts of said backing b , and the spring a is thereby securely locked in place against the said backing b and cannot drop out of place or be accidentally pulled from its position in the curved portion of the said backing b when once placed in the watchcase-center. By means of this novel arrangement and combination of parts I obtain many advantages, of which the following are the most essential: first, perfect elasticity of the spring throughout its entire length; secondly, simplicity of construction, and, thirdly, a perfect and secure bearing against the inner and concave surface of the backing, and, owing to the arrangement of the T-shaped slot or opening in the said backing, forming a lock which prevents the spring from dropping out of place or from being accidentally pulled out of place.

Having thus described my invention, what I claim is—

A watchcase-spring a , provided with a lip

or tongue a^2 , having an outwardly-extending
part a^1 and a downwardly-projecting portion
 a^3 , in combination, with a backing b , having
oppositely-arranged fingers or projections b' ,
5 with an opening b^2 between them, a longitu-
dinally-arranged slot or opening b^3 , into which
said downwardly-projecting portion a^3 is
adapted to be fitted, and said fingers b' being
cut away, as at b^4 , forming seats for said out-
10 wardly-extending part a^1 of said lip or tongue

a^2 , all arranged, substantially as and for the
purposes set forth.

In testimony that I claim the invention set
forth above I have hereunto set my hand this
26th day of May, 1896.

CHARLES NOBS, JR.

Witnesses:

FREDK. C. FRAENTZEL,

WM. H. CAMFIELD, Jr.