

(No Model.)

R. L. STUFFT.  
WATCH CASE SPRING.

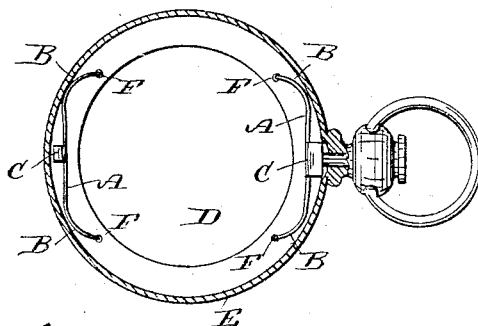
No. 345,192.

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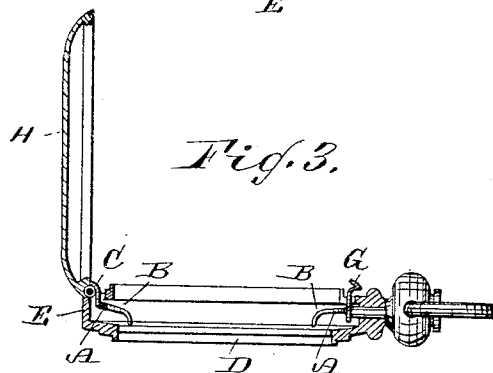
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

ROBERT L. STUFFT, OF SCOTTDALÉ, PENNSYLVANIA.

## WATCH-CASE SPRING.

SPECIFICATION forming part of Letters Patent No. 345,192, dated July 6, 1886.

Application filed September 2, 1885. Serial No. 175,995. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT L. STUFFT, of Scottdale, in the county of Westmoreland and State of Pennsylvania, have invented new and useful Improvements in Watch-Case Springs, of which the following is a full, clear, and exact description.

This invention relates to certain new and useful improvements in the springs used for throwing and locking the hinged back of a watch-case.

The object of my invention is to prevent the rapid breaking of and to reduce the price of said springs.

The invention consists in the construction and arrangement of parts, as will be hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of my improved watch-case spring. Fig. 2 is a sectional view of a watch-case provided with my improved spring. Fig. 3 is a cross-sectional view of a watch-case provided with my improved spring.

The spring-strip A has its ends B bent down on a quadrant or similar lines to form the two curved end prongs, B. From the center of one edge of the spring A a lug, C, projects, the said lug and the prongs B being curved in opposite directions, as is shown in Fig. 3.

The watch-case D has a hollow ring, E, of the usual construction, and in said ring the spring A is placed, the ends of the prongs B resting in recesses F in the inner surface of the ring for the purpose of preventing slipping of the spring. The lug C of one spring is shaped to form a notch, G, as shown in Fig. 3, for the purpose of engaging and holding the hinged cap H. The lug C of the other spring A rests against the hinged back H directly above the spring, and thus when the cap is released the spring A can throw it.

My improved spring can be secured in the watch-cases very easily and rapidly, as it requires no screws or other fastening device. The spring can be filed, annealed, and polished by the manufacturers, and need not be trimmed and fixed by the watch-case maker, as has been necessary with the springs in use heretofore.

My improved spring is very much lighter

than ordinary watch-case springs, and it requires less material than the usual springs. In fitting it the watch-maker or case-maker need only provide the recesses or apertures F in the inner side of the ring E for receiving the ends of the prongs.

In stem-winding watches the spring has an aperture, through which the winding stem can be passed.

Either one or two of my improved springs can be used in a watch-case, as may be desired.

As the spring has a support at each end, and the operating-lug C is between said supports, it has great elasticity.

The curvature of the spring can be adjusted to have ample space in the narrowest centerings of cases now made. The pressure is divided equally over the entire spring. The first action, when the lid is partly closed, rather twists the spring. The lid being further closed, the spring expands at the outer curve, and is carried without increase of strain by hinge action at extreme points, thereby affording a desirable compensation, making the pressure the same when the lid is closed as when partly or wholly open, and with less liability to damage the hinge or lid of the case. The elastic action of the catch-spring will have little effect on wearing the catch on soft-metal lid or cap of case, which is the great trouble with springs now generally used.

The spring can be made of any desired metal, and can be used in any case.

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

1. The watch-spring herein shown and described, formed of the spring-strip, having its ends curved inward and downward to form prongs, and provided with the lug C, projecting upward and outward from the upper edge, substantially as set forth.

2. The combination, in a watch-case, with the ring E, having the recesses or apertures F, of the spring A, having its ends curved inward and downward to form prongs, the points of which engage said recesses or apertures, and the lug C projecting upward and outward from the upper-edge spring, substantially as set forth.

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Witnesses:

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