C. D. P. GIBSON. Attaching Watch Springs.

No. 99,428.

Patented Feb. 1, 1870.



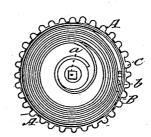


Fig.2

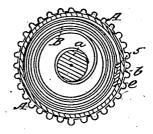


Fig.3 c



Witnesses: PEdeschemacher W. J. Cambridge Inventor: ØSPGibson

United States Patent Office.

CHARLES D. P. GIBSON, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 99,428, dated February 1, 1870.

IMPROVEMENT IN ATTACHING THE MAIN-SPRING OF WATCHES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it man concern:

Be it known that I, CHARLES D. P. GIBSON, of Boston, in the county of Suffolk, and State of Massachusetts, have invented an Improvement in Watches, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which-

Figure 1 is a plan (enlarged) of the "going-barrel" of a watch, its head being removed, to show the main-

spring within.

Figure 2 is a horizontal section through the same. Figure 3 is a perspective view (enlarged) of the connecting-piece, by which the outer end of the main-spring is secured to the barrel.

The outer end of the main-spring of a watch has been secured in place by riveting it to a connectingpiece, pivoted to the head and bottom of the "goingbarrel," to allow it to swing, and accommodate itself to the motion of the spring. When, however, the spring is so riveted, in the event of the breakage of the spring, it becomes necessary to punch out the rivet, which operation, especially in the hands of an unskilful workman, frequently results in the fracture of the connecting-piece.

My invention has for its object to overcome this difficulty, and consists in providing the connectingpiece with a hook or projection, for holding the end of the spring, by which means the attaching and detach-

ing of the latter are greatly facilitated.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings-

A represents the "going-barrel" of a watch, within which is placed the main-spring B, the inner end of which is secured in the ordinary manner to the winding-arbor a.

b, fig. 3, is the connecting-piece, which is provided at one end with pivots c d, which fit into small holes in the head and bottom of the barrel, whereby it is secured thereto, and, at the same time, allowed to swing freely out from the side of the barrel, to accommodate itself to the movement of the outer end of the spring, which is provided with a slot or opening, to admit of its being caught over a hook or projection, e, on the connecting-piece b.

The outer end of the spring is rounded, and fits against or close to a shoulder, 5, of corresponding form, the spring lying flush with the surface of the in-

ner end of the connecting-piece.

By thus providing the connecting-piece with a hook or projection, e, as described, the spring may be attached thereto in such manner as to allow of its free and independent motion in the required direction, so that in the event of the connecting-piece being thrown ont of its true position, the spring will, nevertheless, lie flat within the barrel, and all liability of its bearing against the bottom or head thereof, which causes friction and variation in the rate, is thus avoided, while the attaching and detaching of the spring are greatly facilitated, and the danger of breaking the connectingpiece entirely avoided.

Claim.

What I claim as my invention, and desire to secure by Letters Patent, is-

The detached connecting-piece b, when constructed with a hook or projection, e, substantially as and for the purpose described.

C. D. P. GIBSON.

Witnesses:

P. E. TESCHEMACHER, W. J. CAMBRIDGE.