

(No Model.)

P. MUHR.
WATCH CASE SPRING.

No. 423,174.

Patented Mar. 11, 1890.

Fig. 1.

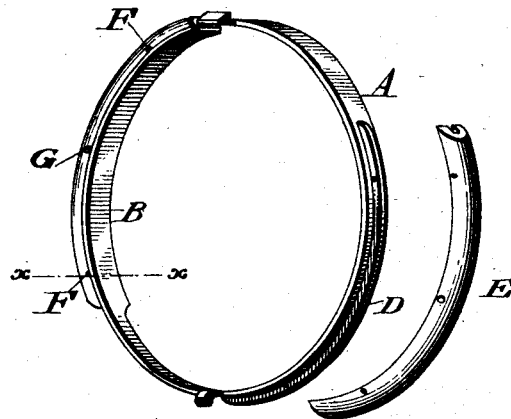


Fig. 2.

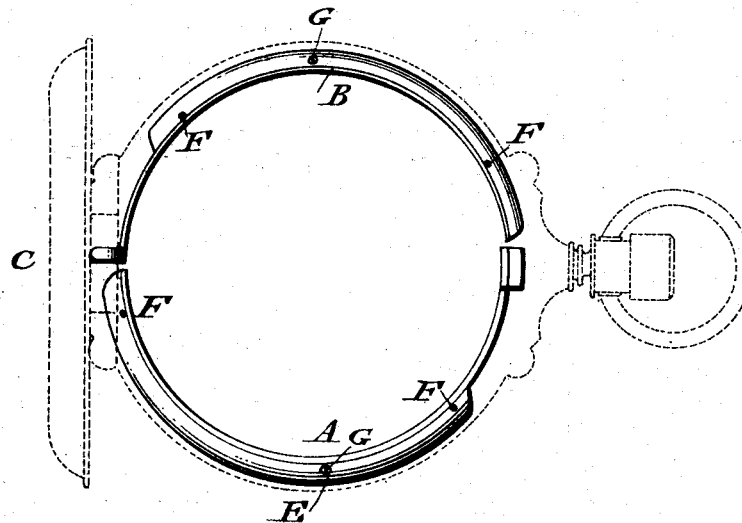
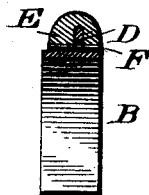


Fig. 3.



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WATCH-CASE SPRING.

SPECIFICATION forming part of Letters Patent No. 423,174, dated March 11, 1890.

Application filed August 24, 1889. Serial No. 321,848. (No model.)

To all whom it may concern:

Be it known that I, PHILIP MUHR, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Watch-Case Springs, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of the construction of watch-case springs whereby they are stiffened and strengthened and their durability vastly lengthened, as will be hereinafter set forth.

Figure 1 represents a perspective view of watch-case springs embodying my invention. Fig. 2 represents a face view of the springs, showing also a watch-case in dotted lines. Fig. 3 represents a section on line *x x*, Fig. 1, on an enlarged scale.

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

Referring to the drawings, A and B designate the springs of a watch-case, the same being employed, respectively, for securing the back C and throwing out the same, which features, broadly considered, are well known in the art in the class of hunting-case watches.

The back of each spring is formed with a rib or tongue D, formed integral therewith, the same extending a portion of the length of the spring, thus stiffening and strengthening the same without affecting the remaining portion where the resiliency is required.

Connected with each spring is a segmental piece E, of metal or other suitable material, whose inner face is formed with a groove serving as a sheath to receive the rib or tongue D, said piece being also in contact with the back of the spring, forming a re-

enforce. Openings are formed in the pieces E and tongue D and rivets or pins F passed through the same, whereby the pieces are attached to the tongues, the springs being connected with the watch-case by screws G, which pass through said pieces E and tongue D and the center of the watch-case.

It will be seen that the springs may be secured in position in a firm, reliable, and durable manner, and they are strengthened and prevented from being fractured or broken, while the proper degree of resiliency is preserved.

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

1. A watch-case spring having a tongue on its back and provided with a re-enforce piece covering said tongue, said parts being combined substantially as described.

2. A watch-case spring having a rib or tongue extending in the longitudinal direction thereof, and a piece which is applied to the back of the spring, provided with a groove to receive said rib or tongue, substantially as described.

3. A watch-case spring having a tongue or groove extending a portion of the length of the same, acting as a brace or stiffener of the spring, leaving the remainder of the spring free for resiliency, substantially as described.

4. A watch-case spring having a tongue or rib at the back thereof, and a sheath which is connected with said spring and receives said tongue or rib and is attachable to the watch-case, substantially as described.

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