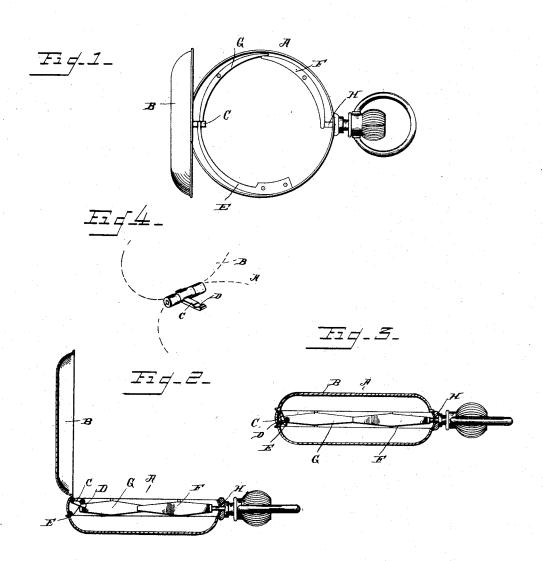
(No Model.)

B. M. GREENE. WATCH CASE SPRING.

No. 419,517.

Patented Jan. 14, 1890.



Hitzesses Ler. E. Frech. By his Attorneys,

Inventor

Barton M. Greene

## UNITED STATES PATENT OFFICE.

BARTON M. GREENE, OF ECKLEY, OREGON, ASSIGNOR OF ONE-THIRD TO ROBERT W. AIREY, OF SAME PLACE.

## WATCH-CASE SPRING.

SPECIFICATION forming part of Letters Patent No. 419,517, dated January 14, 1890.

Application filed May 15, 1889. Serial No. 310,876. (No model.)

To all whom it may concern:

Be it known that I, BARTON M. GREENE, a citizen of the United States, residing at Eckley, in the county of Curry and State of Oregon, have invented a new and useful Watch-Case Movement, of which the following is a specification.

My invention relates to improvements in watch-case movements; and it consists in cer-10 tain novel features hereinafter described and

claimed.

In the accompanying drawings, Figure 1 is a plan view of a watch-case provided with my improvement, showing the lid raised. 15 Fig. 2 is a sectional view of the same, and Fig. 3 is a similar view showing the lid closed. Fig. 4 is a detail perspective view of the hinge.

The case A may be of any desired construc-20 tion, and has the lid B hinged to one side in the usual manner. The hinge-knuckle of the lid is provided with an inwardly-projecting arm C, having a notch D in its upper side, which is engaged by the end of a spring 25 E. This spring E is secured to the side of the case and acts on the said arm C, so as to normally close the lid by pressing the said arm inward and rearward to the position shown in Fig. 3.

On the side of the case opposite that on which the spring is arranged I arrange the levers F G, which are pivoted between their ends within the case and have their adjacent ends projecting slightly past each other, as shown most clearly in Fig. 1. The outer end of the lever F is arranged adjacent to and adapted to be acted upon by the stem H, which is constructed and arranged in the usual or any preferred manner. The inner 40 end of the lever F is arranged to the inner side of the inner end of the lever G, while the outer end of said lever G bears against the under side of the arm C, as shown in Figs. 2 and 3.

In practice, when it is desired to open the watch, the stem is pressed inward by the hand, and the outer end of the lever F thereby pushed inward, and the inner end of lits ends in the case and having its outer

the same consequently moved outward, so as to bear against the inner end of the lever 50 G and move the same outward, as will be readily understood on reference to Fig. 1. As the inner end of the lever G is moved outward the outer end of said lever will be moved inward, so as to bear against the 55 under side of the arm C and raise said arm, so as to open the lid. When the lid is opened, and the arm C thereby raised, the spring will be distended, so that upon re-lieving the pressure on the stem it will at 60 once automatically throw the said arm C downward and inward, and thereby close the lid.

From the foregoing description it will be seen that I have provided a watch-case in 65 which the ordinary snap for holding the lid closed is dispensed with and the lid automatically closed upon relieving the pressure on the stem, so that the annoyance due to closing the watch by hand is overcome. The 70 pressure required to open the lid is no greater than that heretofore required to release the snap, and the advantages of the device are thought to be obvious.

Having thus described my invention, what I 75 claim, and desire to secure by Letters Patent,

1. The combination, with the lid, of a spring acting thereon to hold it normally closed and the system of levers operated by 80 the watch-stem and acting on the lid to open the same, as set forth.

2. The combination, with the lid having its hinge-knuckle provided with an inwardlyextending arm, of a spring having its free end 8: bearing on the upper side of said arm, and a system of levers bearing on the under side of said arm and operated by the watch-stem, as set forth.

3. The combination, with the case and the 90 lid hinged thereto and provided with an inwardly-extending arm having a notch in its upper side, of the spring secured at one end to the case and having its other end engaging said notch, the lever G, pivoted between 95 end bearing against the under side of the arm, and the lever F, having its outer end arranged in the path of the watch-stem and its inner end arranged to the inner side of the inner end of the lever G and adapted to the inner end of the lever act on the same, as set forth.

In testimony that I claim the foregoing as |

E. BENDER,

H. D. DALMAS.