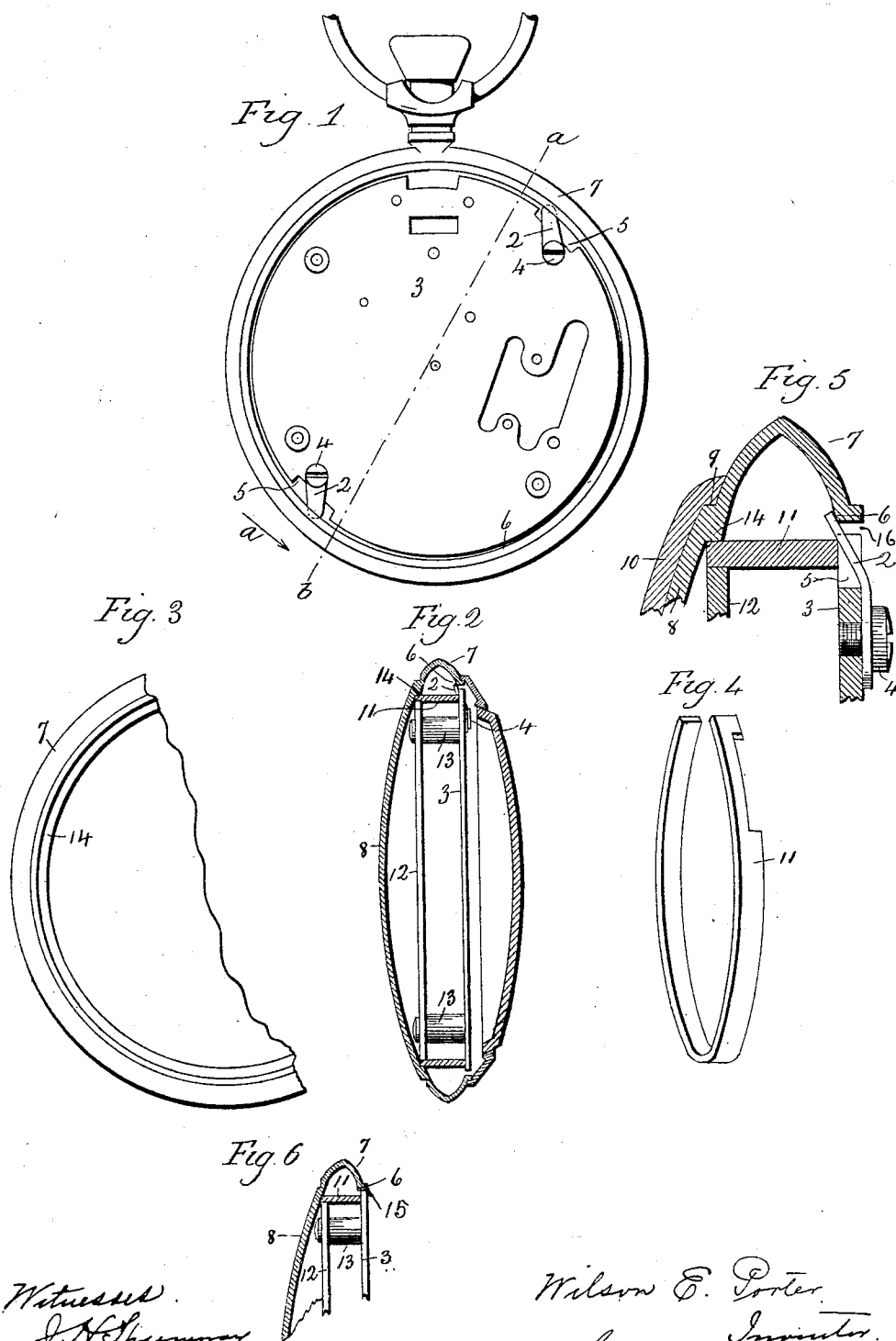


W. E. PORTER.
WATCH.

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Witnessed.
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WATCH.

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To all whom it may concern:

Be it known that I, WILSON E. PORTER, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Watches; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1 a view in front elevation of a watch constructed in accordance with my invention. Fig. 2 a view thereof on the line *a—b* of Fig. 1 looking in the direction of the arrows *a*, the case being shown in section and the movement being shown in elevation. Fig. 3 a broken plan view of the case to show the annular shoulder formed in the inner face of the inside cap thereof for holding the movement-support against lateral displacement. Fig. 4 a detached broken perspective view of the ring forming the movement-support. Fig. 5 a broken sectional view of the case and movement on a greatly enlarged scale to show the engagement of one of the spring retaining-fingers with the case for holding the movement in place therein, and the engagement of the inner edge of the movement-support with the shoulder in the inner face of the inside cap of the case. Fig. 6 a broken sectional view of one of the modified forms which my improvement may assume.

My invention relates to an improvement in watches, the object being to provide simple, convenient and reliable means for securing a watch-movement in place without springing any part of it so as to interfere with its performance.

With these ends in view my invention consists in a watch having certain details of construction and combinations of parts as will be hereinafter described and pointed out in the claims.

In carrying out my invention as herein shown I employ two small retaining-fingers 2 located opposite each other and pivotally attached to the outer face of the front movement-plate 3 by means of screws 4 passing through their inner ends into the said plate, these fingers being located adjacent to clearance notches 5 formed in the edges of the plate to permit the outer ends of the fingers to be sprung downward sufficiently to be caught under the flange 6 (Fig. 5) of the sheet-metal case-center 7 which is formed with an integral inside cap 8 having an external shoulder 9 over which the outside cap or back cap 10 is "snapped". In conjunction with the retaining-fingers 2 I employ a movement-support in the form of a ring 11 adapted in diameter to receive the watch movement which is represented sufficiently for the purpose of this disclosure by the front movement-plate 3 aforesaid, the rear movement-

plate 12 and the pillars 13. The said ring 11 is held against lateral displacement within the watch-case by having its inner edge set within an annular positioning shoulder 14 formed in the inner face of the integral inside cap 8 as clearly shown in Figs. 3 and 5. The rear movement-plate 12 fits snugly within the said ring 11, while the front movement-plate 3 is made larger in diameter than the rear movement-plate 12 so as to rest upon the outer edge of the said ring 11 as clearly shown in Fig. 5. The watch-movement is entered into and removed from the case-center 7 through the opening formed by the said flange 6, which opening is larger in diameter than the diameter of the annular positioning shoulder 11 aforesaid.

It will be understood from the foregoing that the ring 11 and the watch-movement having been properly placed within the case, the retaining fingers 2 are swung radially outward over the clearance notches 5 and sprung downward so as to have their outer ends caught under the flange 6 of the case-center 7 whereby the watch-movement and the ring will be held in the watch-case under the tension of the spring fingers which will tend constantly to crowd the front movement-plate 3 against the front edge of the ring 11 and to crowd the rear edge of the ring 11 against its seat on the inner face of the inside cap 8. In this way the watch-movement is firmly held in place without springing either of its two plates so as to interfere with its best performance. At the same time the removal and reintroduction of the watch-movement is made extremely simple.

If desired, instead of forming the inner face of the inside cap 8 with an annular shoulder 14 for preventing the ring 11 from lateral displacement, the front movement-plate may be adapted in diameter, as shown in Fig. 6, to come to a bearing at the point 15 upon the flange 6 of the case-center 7 instead of leaving a narrow space 16 between the edge of the plate 3 and flange 6 as shown in Fig. 5.

I claim:—

1. In a watch, the combination with the case thereof, of a watch-movement having front and back movement-plates, a movement-support made independent of the said movement and adapted to be set into the said case, and retaining means carried by the front movement-plate and located thereon in position to be engaged with the inner face of the case for holding the movement in place upon the said movement-support.

2. In a watch, the combination with the case thereof, of a watch-movement having front and back movement-plates, retaining means carried by the front movement-plate in position to be engaged with the inner face of the said case, and a movement-support made independent of the said movement and adapted to be set into the said case and having the inner face of the front movement-plate brought to a bearing upon its front edge by the pressure of the said retaining means when they are engaged with the inner face of the said case.

3. In a watch, the combination with the case thereof, of

- a watch-movement, a movement-support made independent of the said movement and located within the case and having the movement supported upon it, and spring retaining-fingers pivoted upon the front movement plate and adapted to be swung outwardly into engagement with the inside of the said case for bringing the movement to a bearing upon the movement-support which in turn is brought to a bearing upon the inside of the bottom of the case.
4. In a watch, the combination with the case thereof, of a watch-movement having front and rear movement-plates, the former having notches formed in its edge, spring retaining-fingers mounted upon the front movement-plate adjacent to the said notches in the edge thereof, the said fingers being adapted to be engaged at their outer ends with the case, and a movement-support upon which the movement rests and which in turn bears upon the inside of the case.
5. In a watch, the combination with the case thereof, of a ring made independent of and adapted to be set within the said case, a watch-movement having front and back movement plates, the former bearing upon the front edge of the said ring, and spring retaining-fingers mounted upon the front movement-plate and adapted to be engaged with the inner face of the case for holding the said front movement plate against the front edge of the said ring.
6. In a watch, the combination with a case having the inner face of its inside cap formed with an annular shoulder, of a ring set into the case in position to be engaged with the said shoulder which holds it against lateral displacement, a watch-movement supported upon the front edge of the said ring, and retaining means mounted upon the front movement-plate and adapted to be engaged with the case for holding the said plate against the front edge of the ring and the inner edge of the ring against the said cap.

7. In a watch, the combination with a sheet-metal watch-case having its case-center and inside cap made integral and having an annular positioning shoulder or ledge formed upon the inner face of its said inside cap, of a ring adapted to be positioned and held against edgewise displacement by the said shoulder, a movement having front and back movement plates and adapted to be set within the said ring barring its said front movement plate which rests upon the front edge of the said ring, and retaining means carried by the said front-movement plate and engaging with the inner face of the said case through the opening formed therein for the insertion of the said ring and movement.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

WILSON E. PORTER.

Witnesses:

GEORGE D. SEYMOUR,
FREDERIC C. EARLE.