

E. G. BOYNETT.

WATCH.

No. 192,222.

Patented June 19, 1877.

Fig. 1.

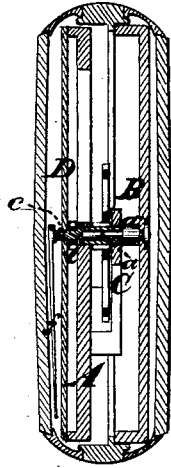


Fig. 2.

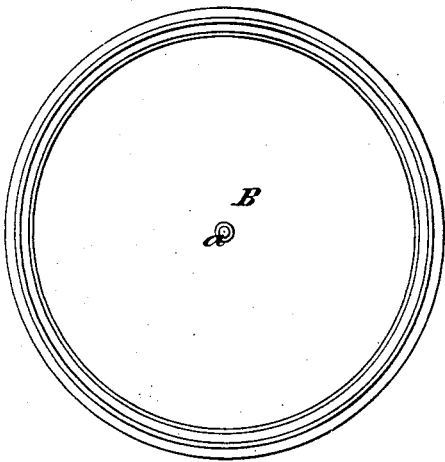
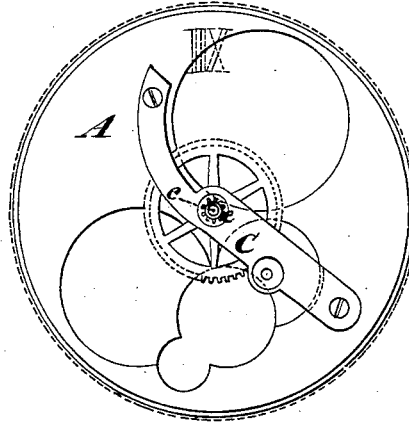


Fig. 3.



Witnesses

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IMPROVEMENT IN WATCHES.

Specification forming part of Letters Patent No. **192,222**, dated June 19, 1877; application filed May 2, 1877.

To all whom it may concern:

Be it known that I, EDWARD G. BOYNETT, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Watches; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification.

It is well known that a watch-movement, to keep time with the most perfect accuracy, should be always kept in the same position, and that if regulated in one position it will not go so accurately in another position.

The object of this invention is to provide for keeping the movement always in the same position, whether the watch be carried in the pocket or whether it be hung up when not so carried; and to this end the invention consists in applying the movement within the case of the watch upon a central pivot, upon which it is free to rotate or oscillate, so that the heaviest part or center of gravity of the movement will always fall below the said pivot, when the watch is carried, suspended, or placed in an upright, or approximately upright, position, without regard to which part of the case is uppermost.

The invention is illustrated in the accompanying drawing, in which Figure 1 is a central section of as much of a watch as is necessary for the illustration. Fig. 2 is a view of the inside of the back of the case, showing the position of the central pivot. Fig. 3 is a back view of the movement detached from the case.

In this example of my invention, the central pivot *a*, upon which the movement hangs and swings when the watch is upright or on edge, and which is attached securely to the inner back *B* of the case, enters into a central

bearing provided in the center arbor *c*, which carries the center pinion *e* and minute-hand *f* of the watch. In order to provide for this bearing in the center arbor *c*, the rear portion of the said arbor is made somewhat larger than usual, and bored centrally from the rear end, the central bore constituting the bearings. *A* is the principal plate of the movement. *C* is the bridge, which receives the rear pivot of the center arbor *c*, and *D* is the dial.

By making the bearing for the central pivot *a* in the center arbor *c*, the necessity of making the watch any thicker is obviated or reduced; otherwise the bearing for the central pivot might be provided without altering the working parts of the movement.

The central pivot *a* might be attached rigidly to the movement, and turn in a bearing in the case. I, however, prefer the construction shown.

It will be readily understood that when the movement is thus arranged on a central pivot, if the center of gravity of the movement is at any distance from the center arbor *c*, it must always fall below the central pivot *a* when the watch is suspended or set up edgewise, and that, therefore, the movement will then always occupy the same position without respect to which part of the case is upward or downward.

What I claim as my invention is—

A watch having its movement placed on a central pivot, on which it is free to oscillate or rotate, substantially in the manner and for the purpose herein described.

EDWARD G. BOYNETT.

Witnesses:

BENJAMIN W. HOFFMAN,
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