

W. E. PORTER.
REGULATOR FOR WATCHES.
APPLICATION FILED APR. 27, 1908.

948,652.

Patented Feb. 8, 1910.

Fig. 1.

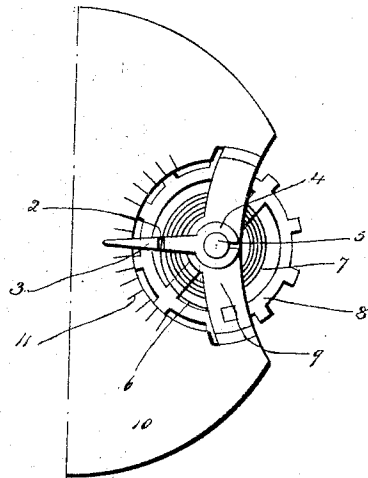


Fig. 2.

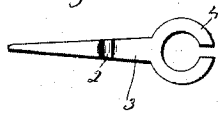
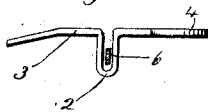


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WILSON E. PORTER, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO NEW HAVEN CLOCK CO., OF NEW HAVEN, CONNECTICUT, A CORPORATION.

REGULATOR FOR WATCHES.

948,652.

Specification of Letters Patent.

Patented Feb. 8, 1910.

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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 Regulators for Watches; and I do hereby declare the following, when taken in connection with the accompanying drawings and the figures 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 broken plan view of a watch provided with my improved regulator. Fig. 2 a detached plan view of the regulator. Fig. 3 a view thereof in side elevation with the outer coil of the balance spring shown in section.

My invention relates to an improvement in regulators for watches, the object being to simplify and cheapen their construction and make them more reliable in use by discarding the wire loop heretofore employed for the reception of the outer coil of the balance spring.

With these ends in view my invention consists in a regulator formed with a downwardly bent transverse loop for the reception of the outer coil of the balance spring.

In carrying out my invention as herein shown, I form a downwardly extending U-shaped loop 2 in a sheet-metal regulator 3 which may be otherwise of ordinary construction and is formed at its inner end with a split eye 4 adapting it to be frictionally mounted upon the head of a stud 5 which takes the place of the balance-screw in an ordinary clock. At its outer end the regulator 3 is tapered to form a pointer. The said loop opens upwardly and is arranged

transversely to the axis of the regulator and receives the outer coil 6 of the hair spring 7 of the balance-wheel 8 which may be of any approved construction. The upper end of the balance staff, which is not shown, is supported in a bridge 9 made integral with the movement plate 10 which is formed with a segmental series of graduations 11 over which the tapered outer end of the regulator 3 is moved back and forth. The loop 2 takes the place of the wire ordinarily employed to confine the outer coil of the hair spring and objectionable in that it is expensive to make and apply to the regulator, and liable to get loose even when carefully riveted in place, for which purpose the regulator must first be drilled to prepare for the insertion of the upper end of the wire loop which is then riveted in place.

I claim:—

A sheet-metal regulator for watches, the said regulator being adapted at its inner end to be applied to a watch-movement so as to turn on an axis concentric with the axis of the balance-staff, and shaped at its outer end to form a pointer, and folded upon itself between its said ends to form an upwardly opening integral loop, the said inner and outer ends of the regulator being located substantially in line with each other and the said loop extending downwardly between them at substantially a right angle to them and adapted to receive a coil of a balance-spring.

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

WILSON E. PORTER.

Witnesses:

GEORGE DUDLEY SEYMOUR,
CLARA L. WEED.