

W. E. PORTER.

WATCH.

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996,727.

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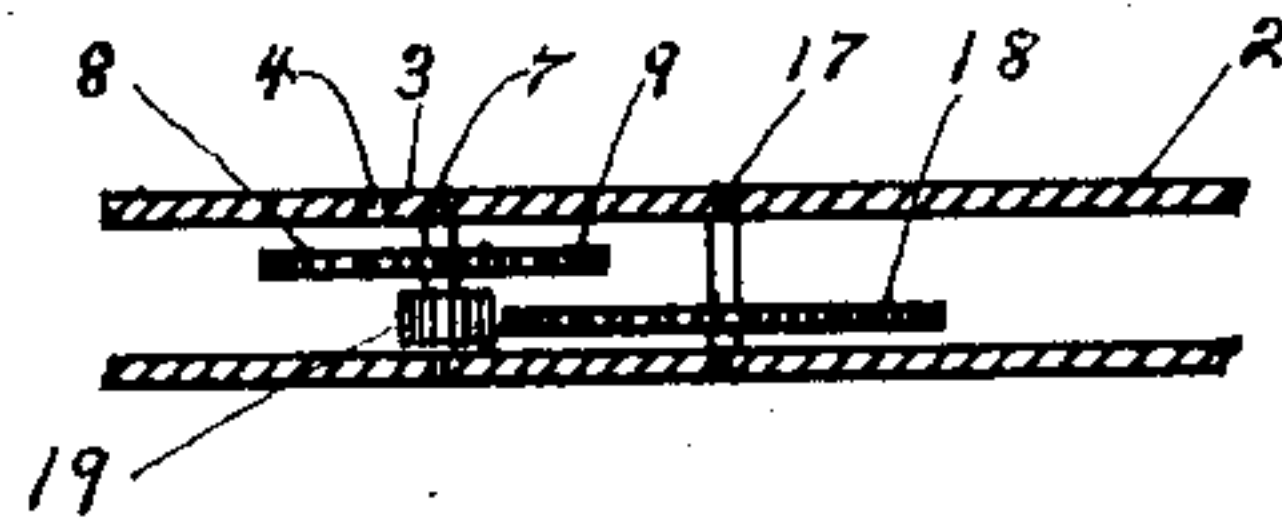


Fig. 2

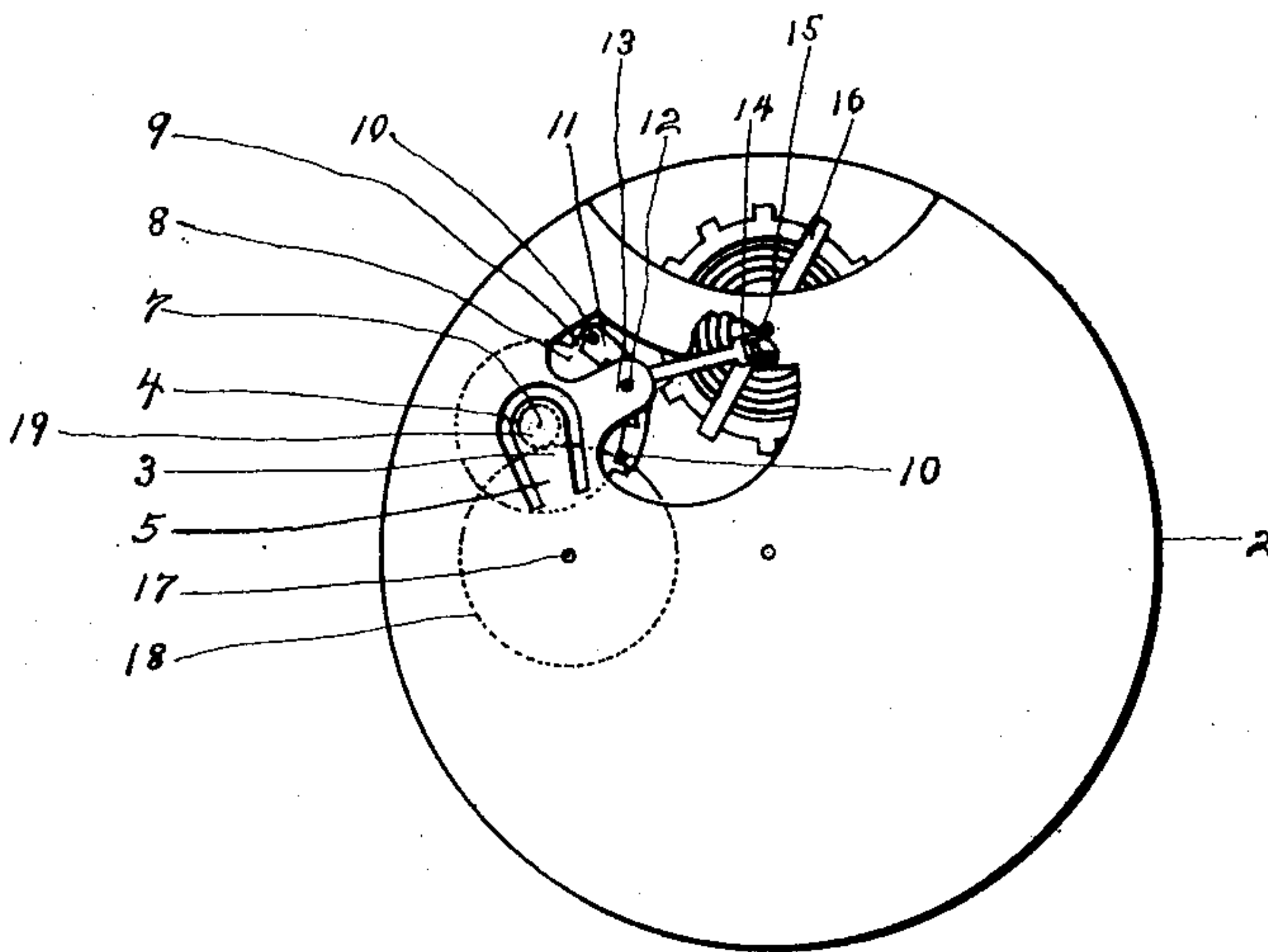


Fig. 1

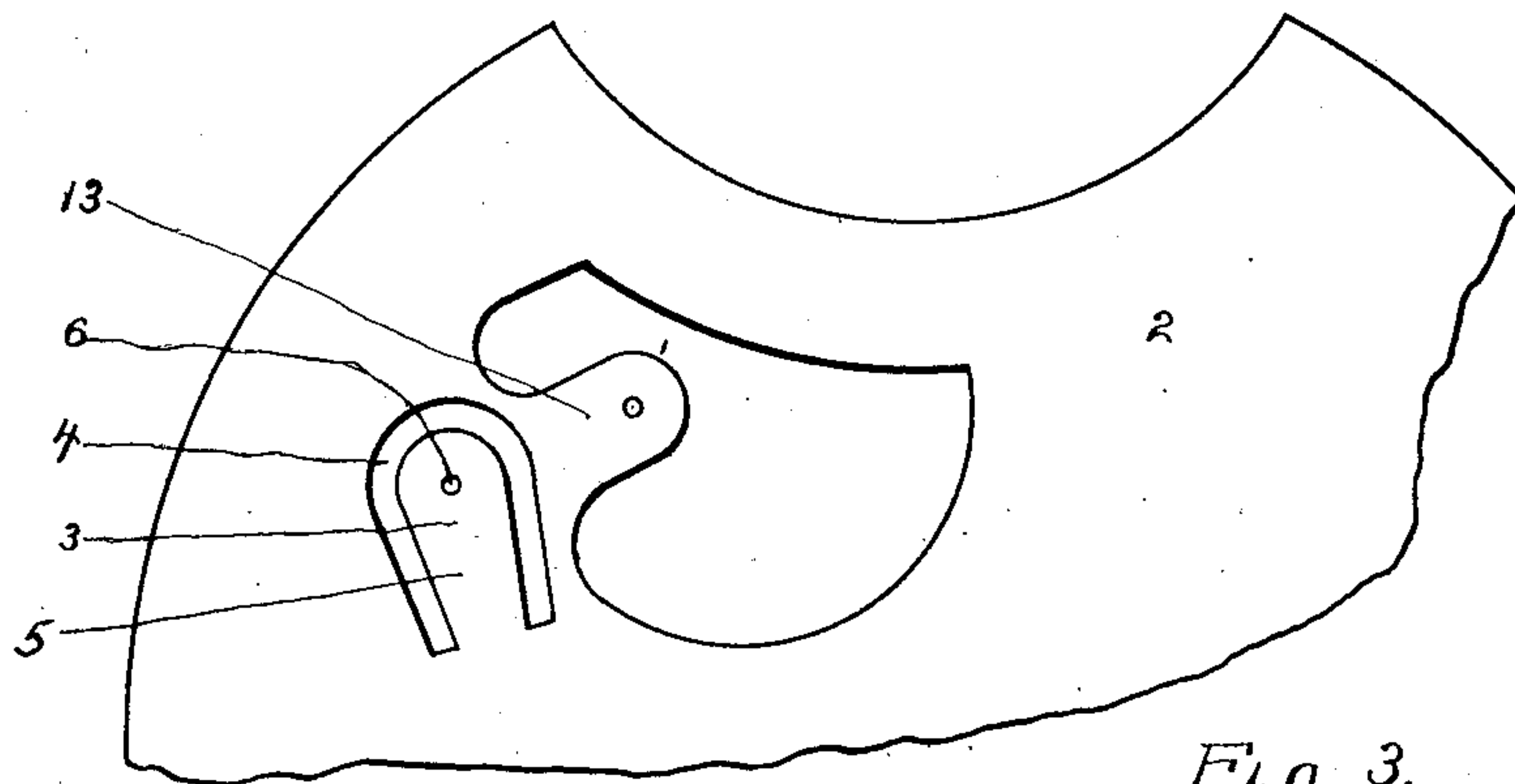


Fig. 3.

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UNITED STATES PATENT OFFICE.

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WATCH.

996,727.

Specification of Letters Patent.

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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 drawing 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 plan view of a watch constructed in accordance with my invention. Fig. 2 a broken view thereof in section. Fig. 3 a broken enlarged view of the front movement-plate.

Heretofore the escapement-pins of watches have generally been positioned so as to lock properly into the teeth of the escapement-wheel by adjusting the pivotal center of the escapement-lever. This method of regulation is, however, attended by the objection that when the lever is bodily moved for the purpose stated, its fork changed in its relation to the impulse-pin carried by the balance-wheel so that a correction in one place is attended by a dislocation of adjustment in another place.

My present invention aims to avoid the objection above referred to by changing the position of the escapement-wheel with reference to the escapement-pins by means simple and effective in their character and not liable to derangement.

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, the front movement-plate 2 is cut away to form a tapering arm 3 free upon both sides and at its rounded outer end, but having its inner end connected with the said plate of which the arm is an integral part, the said arm being inclosed, as it were, in a clearance-space 4 of horseshoe shape in which the arm 3 is free to be bent edgewise in the plane of the said plate 2, in one direction or the other within the limits imposed by the width of the said space 4, and the capacity of the arm 3 to be bent upon its base 5 where it merges into the body of the plate 2. In

the outer end of this arm I form a pivot-hole 6 for the reception of the pivot upon the front end of the staff 7 of the escapement-wheel 8, the teeth 9 of which co-act with two escapement-pins 10 mounted in the escapement-lever 11, the staff 12 of which is mounted at its front end in an arm 13 also formed in the plate 2. The opposite end of the lever 11 is formed with a fork 14 receiving the impulse-pin 15 carried by the balance-wheel 16. I now wish to call attention to the fact that the arm 3 is substantially in line with the center 17 of the fourth wheel 18 of the watch-train, the said wheel 18 meshing into a pinion 19 located at the rear end of the staff 7 carrying the escapement-wheel 8 so that the arm 3 may be bent edgewise without disturbing the mesh of the pinion 19 into the teeth of the fourth wheel 18.

In adjusting a watch constructed in accordance with my invention, in case the escapement-pins 10 do not lock properly into the teeth 9 of the escapement-wheel 8, the arm 3 is bent edgewise just enough in one direction or the other to bring the said pins and teeth into correct locking positions, this being done without in any way disturbing the escapement-lever 11 nor interfering in any way with the meshing of the wheels and pinions of the escapement-train.

It is apparent that my invention may also be applied to clocks.

I claim:—

1. A time-mechanism having one of its movement plates provided with an integral pivot-carrying arm having a pivot-hole and located within a clearance-space adapting it to be bent edgewise in the plane of the said plate for changing the position of the pivot-hole with respect to the mechanism.

2. In a time-mechanism, the combination with a balance-wheel, an escapement-lever and an escapement-wheel, the said lever being provided with escapement-pins coacting with the teeth of the escapement-wheel; of a movement-plate cut away to form a pivot-carrying arm having a pivot-hole and located within a clearance-space, permitting the said arm to be bent edgewise in the plane of the said plate to change the position of the said escapement wheel sufficiently with reference to the said escapement-pins to cause the same to properly lock into the teeth of the said escapement-wheel.

3. In a watch, the combination with a balance-wheel, of an escapement-lever having escapement-pins, an escapement-wheel the teeth of which co-act with the said pins, a
5 staff for the escapement-wheel, a pinion mounted upon the said staff, a fourth wheel meshing into the said pinion, and a movement-plate formed with an integral pivot-carrying arm, located within a clearance-
10 space, having a pivot-hole receiving one end of the said escapement-wheel staff, and located in line with the center of the said

fourth wheel, whereby by bending the said arm edgewise the teeth of the escapement-wheel may be positioned properly for locking into the escapement-pins. 15

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

WILSON E. PORTER.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
