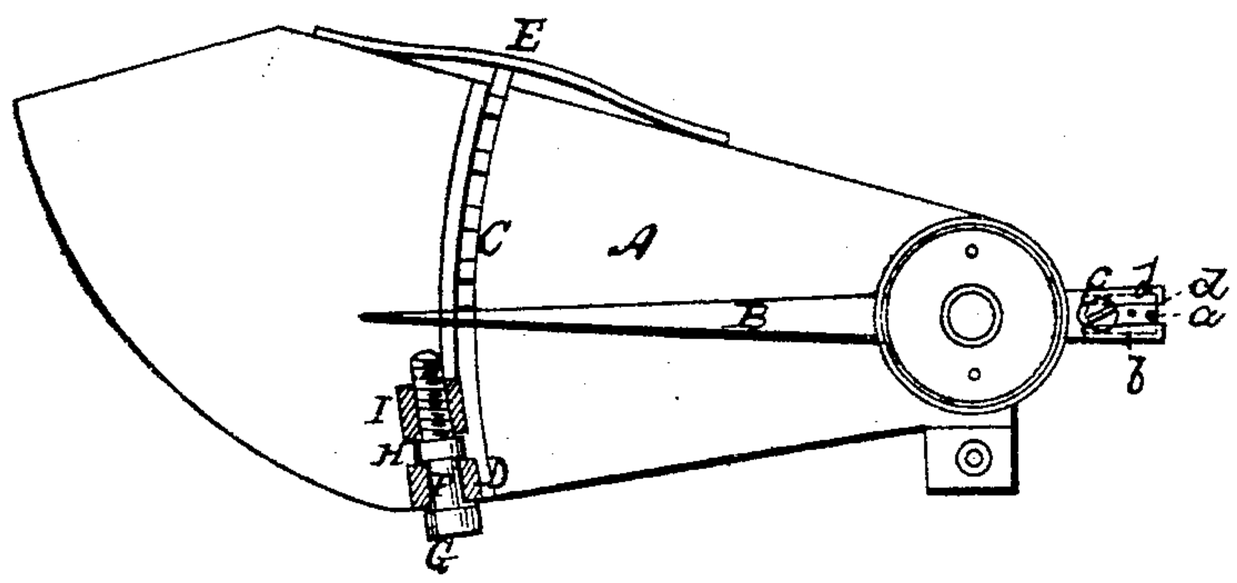
A. Jewett.

Regulator for Watches.

No 63,525. Patented Apl. 2. 1867.



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AUGUSTINE JEWETT, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 63,525, *dated April* 2, 1867.

IMPROVEMENT IN REGULATORS FOR WATCHES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, AUGUSTINE JEWETT, of Boston, in the county of Suffolk, and State of Massachusetts, have invented new and useful Improvements in "Regulators for Watches;" and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

The object of this invention is to enable the movement of a watch to be regulated to a degree as near as it is capable of running with certainty and ease, the great difficulty having been, with the regulators now in common use, to make the necessary adjustment or alteration with sufficient accuracy to produce the desired result.

By the improvements embraced in this invention the object stated above is satisfactorily accomplished, and in an extremely novel and simple manner, the invention consisting mainly in securing to the bridge of the balance of the watch movement a notched index in such manner that it can be moved thereon. With one of the notches of this index the regulator arm is engaged, the relative position of such notch depending upon the adjustment of the said regulator which it is necessary to make to produce the desired regularity in the running of the watch movement, the adjustment of the regulator between such notches being accomplished by moving or sliding the index upon the balance bridge-plate in the proper direction therefor, for accomplishing which a thumb-screw is arranged in connection therewith, as will be hereinafter explained. In the accompanying plate of drawings my improvements are illustrated, the figure being a plan view, on an enlarged scale, of the bridge-plate for the balance, with index attached to it according to the present invention, and the regulator arm.

A, in the drawings, represents the bidge-plate for the balance of the watch movement. B, the regulator arm. C, the notched index-bar or flange, made in the form of an arc of a circle. With one of the notches *a* of this index C the outer end of the regulator arm is engaged. This index C is arranged so as to move or slide upon the bridge-plate A, having secured to one of its ends a hollow lug, D, with a bent spring, E, secured to the opposite edge of the said plate against its other end, the object of this spring being to prevent the index from moving if the watch is shaken from any cause. By changing the regulator from one notch to another of the index C the movement of the watch can be regulated accordingly; but, in order to produce a more perfect regulation of the same, I have provided a thumb or set-screw, F, which is arranged to turn loosely in the lug D, hereinbefore referred to, with its head G upon one side of such lug, and a collar, H, or flange upon the other side, so as to prevent its playing through the same, which screw turns or screws into and through a hollow screw-threaded nut or lug, I, secured to or forming a part of the back or rear side of the index C. By turning the set-screw F either to the right or left it is plainly obvious, from the above description of the arrangement and connection of the same with the index C, that such index will be moved upon the bridge-plate accordingly, carrying the regulator with it, and thus regulating the watch movement. This arrangement and operation of the said screw enable the finer and more delicate adjustments of the regulator to be accomplished with the utmost certainty and accuracy, the bent spring E always tightly binding and holding the index in position. In addition to the improvements above explained, the invention also consists in so attaching or arranging the regulator pins to the regulator arm that they can be moved in or out in case the hair-spring should require to be made of a larger or smaller diameter, to produce isochronous vibrations of the balance. In the drawings, *a a* represent the regulator pins, which, in lieu of being attached directly to the regulator arm, are secured thereto through a plate or holder, *b*, that, in its turn, is secured to the regulator arm by a set-screw, *c*, passing through the longitudinal slot *d* of such arm, which allows the position of the regulator pins to be changed as desired, that is, set either in or out, more or less, upon the regulator arm.

What I claim as new, and desire to secure by Letters Patent, is—

The notched index C, in combination with the regulator of a watch, when such index is arranged so as to slide or to be moved upon the bridge-plate of the balance of the watch, substantially as described and for the purpose specified.

I also claim the combination with the above of the set-screw G, arranged and operating upon the index, substantially as and for the purpose described.

I also claim the regulator pins *a*, when attached to the regulator arm, so as to be adjustable therein, substantially as and for the purpose described.

AUGUSTINE JEWETT.

Witnesses:

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