L. C. BRIGGS.

Watch-Regulator.

No. 206,533. Patented July 30, 1878.

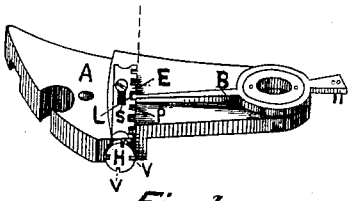

Fig. 1.

Fig. 2.

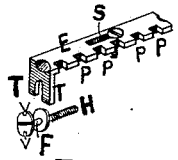

Fig. 3.

Witnesses.

H. S. Talbot

Edward Edmunds

Inventor:

Leonard C. Briggs

By Sylvenus Walker

Atty

UNITED STATES PATENT OFFICE.

LEONARD C. BRIGGS, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN WATCH-REGULATORS.

Specification forming part of Letters Patent No. **206,533,** dated July 30, 1878; application filed April 1, 1878.

To all whom it may concern:

Be it known that I, LEONARD C. BRIGGS, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Watch-Regulators, of which the following is a specification:

The object of my invention is to provide a watch-regulator with means of accurate or nice adjustment, which shall be less liable to become defective by use, and shall not be affected by changes of temperature, as is the case with those heretofore constructed for the purpose, wherein are used long springs or extended set-screws, liable to expand and contract, so as to cause the watches to which they are attached to gain or lose time as their temperature varies. These and other objections are obviated by my invention; and it consists, first, in providing the end or index-point of the regulator with a round end, forming about two-thirds of a circle; and, further, in the construction, combination, and arrangement of a notched plate or bar, so as to receive in one of said notches this round end or index-point of the regulator, the plate or bar being secured to the balance-wheel arm or bridge by a screw or screws passing through an oblong slot in such bar, in such manner as to be adjusted in a straight line by means of an adjusting-screw, which has a groove near its head, into which is placed a vertical or downward projecting bifurcated end of the said plate or bar, as hereinafter more fully described and set forth.

Figure 1 is a perspective view, showing my invention as attached. Fig. 2 is a section view of Fig. 1, as shown by dotted line. Fig. 3 is a view of the separate detached parts.

A represents the arm, to which the balance-wheel is journaled at its top, and to which the regulator B is pivoted in the usual manner. E represents the notched bar, having a series of notches, P, upon its edge, into one of which the rounded end L of the regulator is placed, the bar E being provided with a slot, S, about midway on its horizontal body, through which a screw is passed, so as to permit it to be slid back and forth upon or beneath the flat head of the screw which secures it in position on the top of the arm A. This bar E is provided with a bifurcated or forked end, T, which is bent downward, so as to stand at a right angle to the top or notched body portion E, as shown in Fig. 2, and embraces the body of the adjusting-screw H near its head, where it is provided with a groove, F, to receive the ends T, one passing each side of the screw H, which fits into a screw-threaded hole inside of the arm A, its head being provided with the usual slot and several notches V around the edge or periphery of same, so as to permit of being screwed out or in by any small instrument placed therein, by which means the bar E may be moved very slightly in either direction, so as to adjust the regulator B, whose opposite end is provided with projecting pins, which pass each side of the hair-spring connected with the balance-wheel, as heretofore, so as to increase or diminish the force of the spring, as usual, and thus regulate the running of the watch or chronometer, as desired.

The several notches P in the bar E are to permit the regulator end L to be placed in such notch as may be required, in order to move the regulator B the distance, in either direction, desired, and may be changed from one notch to another, whenever required, by removing the screw from slot S in the bar E, so as to permit its removal and readjustment.

The bar E may be curved upon its notched edge.

I am aware that a notched segmental plate moved concentric with the axis of the index by means of a set-screw has heretofore been employed for the purpose; therefore I do not claim such.

Having thus described my invention, I claim—

In combination with the regulator B, having a rounded end, the adjustable straight bar E, having the notches P, slot S, and bifurcated end T, embracing the adjusting-screw H, having groove F and notches V, substantially as and for the purposes set forth.

LEONARD C. BRIGGS.

Witnesses:

SYLVENUS WALKER,

HORATIO NELSON.