

J. Elson,

Watch Regulator.

No. 113281.

Patented Apr. 4. 1871.

Fig. 1.

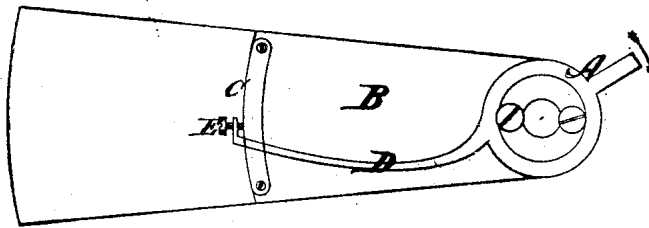
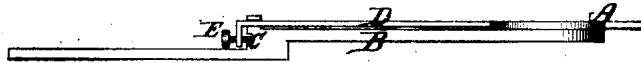


Fig. 2.



Witnesses.

C. F. Brown
James Wilson

Inventor.

Julius Elson

United States Patent Office.

JULIUS ELSON, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 113,281, dated April 4, 1871.

IMPROVEMENT IN WATCH-REGULATORS.

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

I, JULIUS ELSON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Watch-Regulators, of which the following is a specification.

Figure 1 is a plan view of my invention, and Figure 2, a side elevation of the same.

The object of this invention is to produce a device for effecting the most minute adjustment of a watch-regulator; and

It consists mainly of an ordinary regulator, provided with a curved and slightly flexible lever, bent downward at one end over a raised or depressed segmental bearing-edge on the balance-bridge, (or any other segment of an arc which runs concentric with the motion of the regulator,) said bent end having a screw passing through the same and bearing against said segmental edge, as will hereinafter more fully appear.

In the drawing—

A represents the regulator, which is of the usual form, and secured in the usual manner to the balance-bridge B, which latter is provided with the depressed and grooved segmental edge C.

D represents a curved lever, which forms a part of the regulator A, and is bent downward at its outer end over the edge C, as shown in fig. 2.

The bent end of lever D is provided with a screw, E, which passes through the same and bears against the edge C, engaging with the groove thereof, as shown in fig. 2.

Operation.

The lever D may be moved in the usual manner

for ordinary regulation, but when especial minuteness is required it is effected by the screw E, which, when turned in such manner as to cause it to bear against the edge C, will exert a tension on the lever D, drawing the end thereof outward, thereby imparting a slight motion to the regulator A in the direction of the arrow, thus effecting the desired adjustment, which may be indicated by a suitable pointer or index if desired.

This device is particularly applicable in correcting in watches the slight errors produced from an over or under-compensated balance, the regulator, as shown in fig. 1, acting to adjust an over-compensated balance, while the reversal of the curve of the lever D will, in a watch of similar construction, adjust an under-compensated balance.

Having thus fully described my invention,

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

The regulator A, provided with the curved lever D, having bent end and screw E, arranged and operating over segmental edge C, substantially as described.

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

JULIUS ELSON.

Witnesses:

CARROLL D. WRIGHT,
CHARLES F. BROWN.