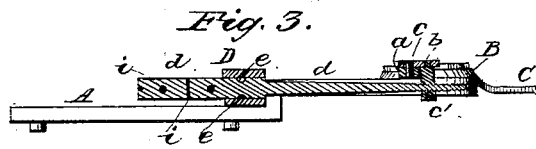
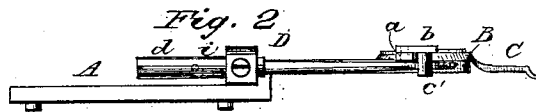
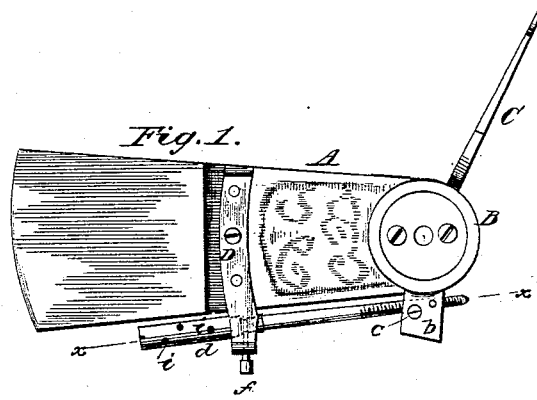


G. BICHSEL.
Watch-Regulator.

No. 204,287.

Patented May 28, 1878.



Witnesses:
Fred G. Dilwick
August Petermann

Inventor
George Bichsel
by Louis Baggett
his Attornies.

UNITED STATES PATENT OFFICE.

GEORGE BICHSEL, OF SEDALIA, MISSOURI.

IMPROVEMENT IN WATCH-REGULATORS.

Specification forming part of Letters Patent No. **204,287**, dated May 28, 1878; application filed April 16, 1878.

To all whom it may concern:

Be it known that I, GEORGE BICHSEL, of Sedalia, in the county of Pettis and State of Missouri, have invented certain new and useful Improvements in Watch-Regulators; 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 which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a plan view. Fig. 2 is a side view, and Fig. 3 is a section after the line *x x* in Fig. 1.

Similar letters of reference denote corresponding parts in all the figures.

This invention relates to certain improvements in watch-regulating devices; and its object is to enable the most delicate adjustment to be made speedily and with perfect accuracy.

It consists in the construction and arrangement of parts, which I shall now proceed more fully to describe with reference to the drawings hereto annexed, in which—

A is the body-plate, upon the end of which is arranged the rotating disk B, having the hand C, which points to the graduated scale. (Not shown in the drawings.) The disk B has a laterally-projecting arm or plate, *a*, upon which is pivoted, by a screw, *c*, a small plate, *b*, having a downwardly-projecting pivoted stud, *c'*, having a transverse screw-threaded perforation.

To the body-plate A is secured a cross-plate, D, projecting at the side, and having a perforation or bearing for a rod, *d*, having a circumferential groove, *e*, by which it is held in place in its bearing by a set-screw, *f*, inserted

from the side. The end of rod *d* is screw-threaded, and is screwed into the perforation of stud *c'* of plate *b*. The lower end of rod *d* is provided with notches for a fine screw-driver, and with perforations *i i*, by inserting a pointed implement into which it may be conveniently turned.

From the foregoing description, and by reference to the drawings hereto annexed, the operation of my invention will be readily understood.

The disk B, to which the spring is connected in the usual manner, can be conveniently turned or adjusted by turning the tangent-screw *d* in the manner described.

Owing to the arrangement of the pivoted plate *b* with its stud *c* upon the arm *a*, the screw *d* will always work in a straight line, and it cannot, for this reason, bend or break.

The arrangement of parts herein described also renders the spring capable of more accurate and delicate adjustment than most watch-regulators as now ordinarily constructed.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a watch-regulator, the combination, with the regulating screw or shaft *d* and the yoke D, carrying the pointer or arm C, of the projection *a*, pivoted plate or lever *b*, and stud *c'*, all arranged to operate as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GEORGE BICHSEL.

Witnesses:

WM. H. HEWETT,
A. C. SCOTT.