(No Model.)

# W. A. ALLEN.

## WATCH REGULATOR INDICATOR.

No. 474,789. Patented May 10, 1892.

Fig. 1

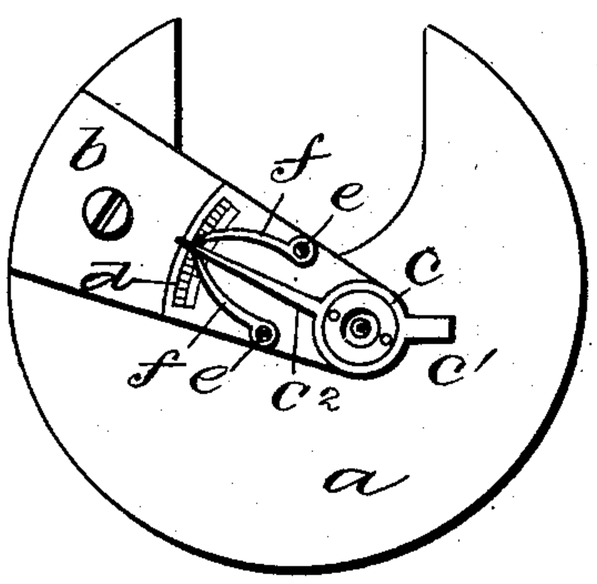
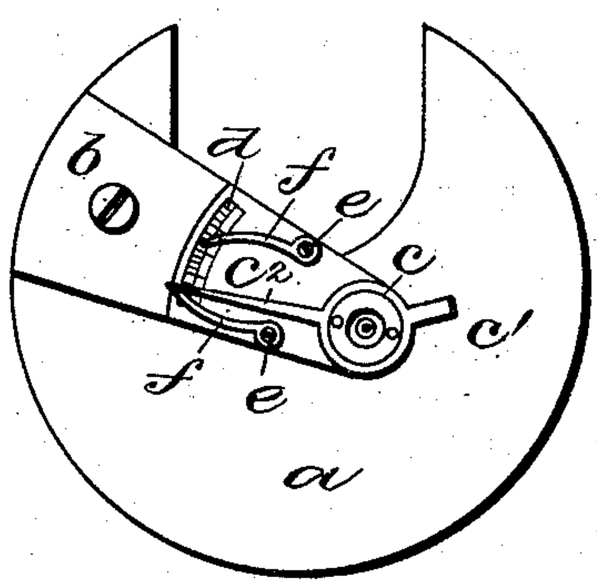



Fig. 2




Witnesses:
Arthur F. Jenkins.
P. A. Phelps.

Inventor,
William A. Allen, by
Harry P. Williamson
Atty.

# UNITED STATES PATENT OFFICE.

WILLIAM ARTHUR ALLEN, OF HARTFORD, CONNECTICUT.

## WATCH-REGULATOR INDICATOR.

SPECIFICATION forming part of Letters Patent No. 474,789, dated May 10, 1892.

Application filed May 23, 1891. Serial No. 393,835. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM ARTHUR ALLEN, a subject of the Queen of Great Britain, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Watch-Regulator Indicators, of which the following is a full, clear, and exact specification.

The invention relates to the class of appliances which are used in connection with the regulator of a watch or other time-piece, the object being to provide a simple and cheap means which can be readily applied to a watch or similar time-piece adjacent to the regulator, whereby the amount of any movement of the regulator for adjusting the balance-spring will be indicated, so that a watch may be quickly and surely regulated.

Referring to the accompanying drawings, Figure 1 is a plan view of one form of regulator provided with an indicator. Fig. 2 is a plan view of the same, showing the regulator moved, with the amount of movement indicated.

In the views, the letter *a* indicates the back plate of a watch, *b* a balance-cock attached thereto by any common means and practically a part thereof, and *c* a regulator-lever supported by a bearing on this balance-cock with one end *c'* adapted to be connected with the spring of the balance-wheel and the opposite end $c^2$ adapted to travel across an index *d*. Movably secured to the balance-cock, preferably by screw-pivots *e*, adjacent to the end $c^2$ of the regulating-lever, and between the fulcrum of said regulator lever or arm are pieces *f*, which can be so moved as to make contact with the regulating-lever, or so as to allow the regulating-lever to be moved away from either piece without disturbing or changing the position of that piece. These pieces *f* are not joined to nor do they exert any pressure upon the regulating-lever; but when the latter is moved in either direction for adjustment one of the pieces is pushed with the lever while the other remains stationary, thus indicating by the space between the parts, as in Fig. 2, the amount of movement of the lever. Should the lever then be at some future time moved back toward its first position, the pieces may be closed up to it or may both be left stationary, and thus indicate the amount of the last two movements. An indicator thus formed is simple, cheap, and can be readily applied to the plates of watches and similar time-pieces, having all the various forms of regulating devices in which a moving lever is used. It does not interfere with nor in any manner restrict the ordinary free movement of the regulating apparatus nor any part of the train, and the amount of the last movement of the regulator is always indicated regardless of the interval of time which has lapsed since the watch was regulated, so a watch may be regulated sooner and with much more certainty than was previously possible.

I claim as my invention—

In a watch-regulator, the combination, with the regulator-arm and its indicating-scale, of two auxiliary pointers pivoted one on each side of said arm, and between the fulcrum of said arm and the said scale, substantially as described.

WILLIAM ARTHUR ALLEN.

Witnesses:
C. P. HANSEL,
H. R. WILLIAMS.