

A. WADSWORTH.

Watch.

No. 52,227.

Patented Jan'y 23, 1866.

Fig 1

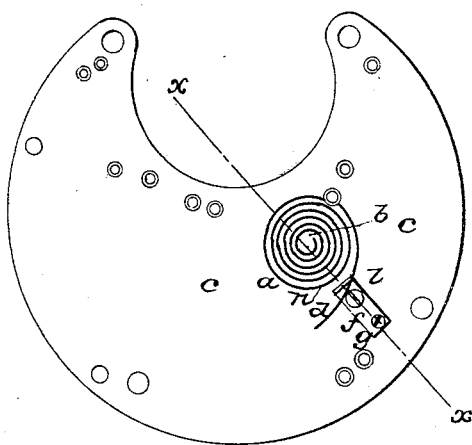
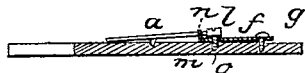


Fig 2



WITNESSES

Wm. Brown
Thos. Tusch

INVENTOR

A. Wadsworth
By *[Signature]*
Atty

UNITED STATES PATENT OFFICE.

ARTHUR WADSWORTH, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN WATCHES.

Specification forming part of Letters Patent No. 52,227, dated January 23, 1866.

To all whom it may concern:

Be it known that I, ARTHUR WADSWORTH, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Watches and other Time-Pieces; 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 drawings, forming part of this specification.

The present invention relates particularly to the manner of securing the outer end of the coiled spring of watches, ordinarily and commonly known as the "hair" or "pendulum" spring; and it consists in a novel mode of accomplishing the same, whereby its release is easily effected, when so desired, and no twisting of it is necessary to secure it, as is now most commonly the case, which serves to weaken and deteriorate it.

In accompanying plate of drawings my improvement is illustrated, Figure 1 being a front view of a coiled spring, showing it secured according thereto, and Fig. 2 a section through the same in the plane of the line *x x*, Fig. 1.

a a in the drawings represent the coiled or hair spring of a watch, to be connected with the balance in the usual manner, the spring and balance being of any of the usual forms and styles, according to the watch in which they are to be placed. The outer end, *d*, of the coiled spring *a*, before referred to, is held in and between the projecting or raised lip *n* of the small narrow plate *f*, secured at its outer end to the main plate *c* by a screw, *g*, and the head *l* of a screw or cam, *m*, passing through the said plate *f*, and into the principal plate *c*, if desired.

The screw-shaft *o*, in lieu of being formed concentric with its head *l*, is made eccentric

therewith—that is, out of the center and toward the side of the screw-head farthest from its contact-point with the spring—so that by turning the screw-head with any suitable tool to the right, for instance, it will swing away from the spring, and by reversing the direction toward the spring and in contact therewith, according as it is turned more or less, thus binding the spring with any desired force between it and the raised lip *d*, before referred to. It is obvious that various forms of cams can be used in lieu of the eccentric-headed cam *l*. By this mode of holding the outer end of the hair-spring of time-pieces it is obvious the results hereinbefore named are wholly secured, and in a simple and most economical manner, the advantages and importance of which are manifest to all conversant with the manufacture or use of time-pieces.

The small plate may be dispensed with, if desired, and the raised lip or shoulder for the spring to be held against formed upon the main plate of the watch, the eccentric or cam being also inserted at the proper point therein without departing from the principles of my invention, as have been hereinbefore fully stated.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

Holding the outer end of the hair or pendulum spring of time-pieces by and between a fixed shoulder or lip and an eccentric or cam, substantially as herein described, and for the purpose specified.

The above specification of my invention signed by me this 2d day of September, 1865.

ARTHUR WADSWORTH.

Witnesses:

M. M. LIVINGSTON,
C. L. TOPLIFF.