

C. FASOLDT.
Watch Regulator.

No. 42,175.

Patented April 5, 1864.

Fig. 1.

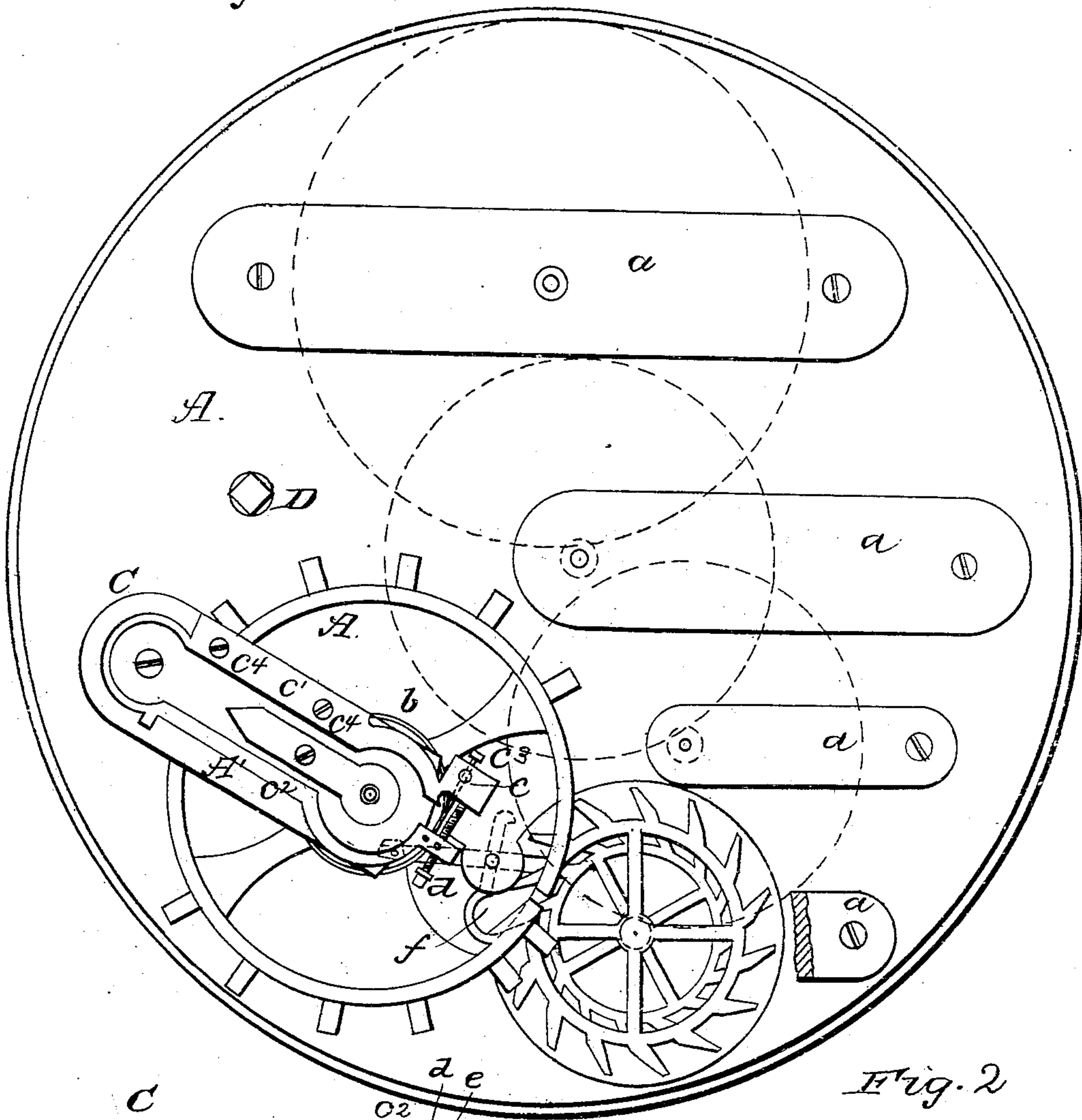
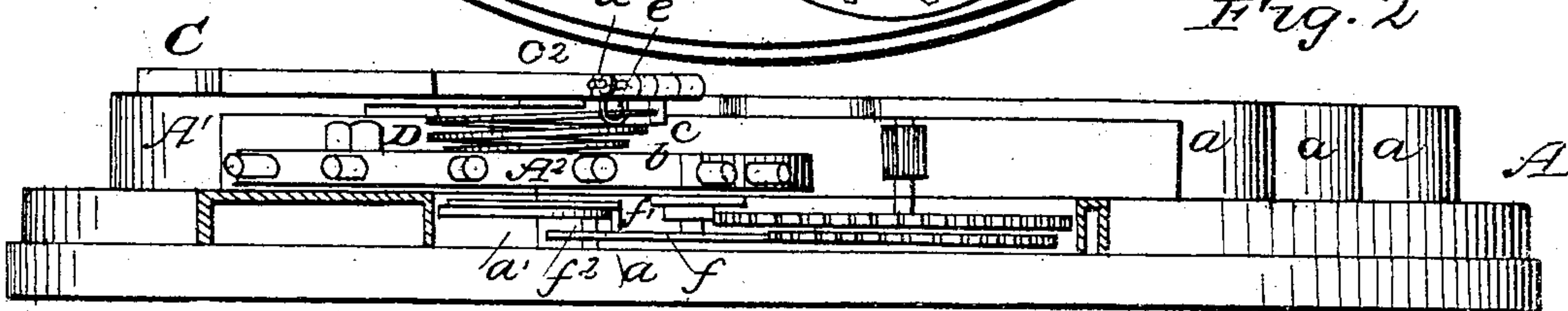


Fig. 2



Witnesses
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IMPROVEMENT IN REGULATING WATCHES.

Specification forming part of Letters Patent No. 42,175, dated April 5, 1864.

To all whom it may concern:

Be it known that I, CHARLES FASOLDT, of Rome, in the county of Oneida and State of New York, have invented a new and useful Improvement in Time-Keepers; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a back view of the mechanism of a watch embodying my invention. Fig. 2 is a side or edge view thereof, both views being made on an enlarged scale to illustrate more clearly the minute mechanism.

Similar letters of reference indicate corresponding parts in the several views.

This invention consists in an improved device for regulating the hair-spring, by means of which the most delicate adjustment may be readily effected, as will be explained.

In order that others skilled in the art to which my invention appertains may be enabled to fully understand and use the same, I will proceed to describe its construction and operation.

In the accompanying drawings, A may represent the foundation-plate, and *a* various parts of the frame-work of a watch.

A' represents a bridge which works the upper end of the shaft *a'* of the balance-wheel A², to which shaft *a'* is secured the inner end of the hair-spring *b* in customary manner. The outer end of the hair-spring *b* is securely fastened in a pin, *c*, projecting from an elastic bow-spring, C, mounted upon the bridge A'. The bow-spring C is formed with arms *c'* *c*², the pin *c* being retained in the arm *c'* by a screw, *c*³. The arm *c'* is held in a stationary position upon the bridge A' by screws *c*⁴

*c*⁴, but the arm *c*² is adapted to be moved to any desired extent, so as to expand or contract the hair-spring *b*, there being formed on the arm *c*² a loop, *e*, through which the hair-spring passes. The movement of the arm *c*² is effected by means of a screw, *d*, which works in screw-threaded apertures in the ends of the arms *c'* *c*². It will thus be seen that by turning the screw *d* the loop *e* is caused to act upon the hair-spring *b* in such manner that the motion of the mechanism may be accelerated or retarded according as the screw *d* is turned to lessen or increase the distance between the arms *c'* *c*². By this arrangement of devices it is manifest that the adjustment of the hair-spring may be effected with the greatest nicety, inasmuch as the extent of the movement of the hair-spring *b* may be limited in such gradual manner that each degree of its limitation may not exceed that which will be effected by turning the screw *d* to such an extent only as will vary the relative distances of the arms *c'* *c*² not more than the width of a thread. Another advantage of this arrangement is that when it is designed to clean or repair the mechanism of the watch the bow C and hair-spring *b* may be removed and fixed in position again without varying its adjustment in the least.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

In combination with the screw *d*, the bow-spring C *c'* *c*², constructed and arranged substantially as hereinbefore set forth.

CHARLES FASOLDT.

Attest:

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