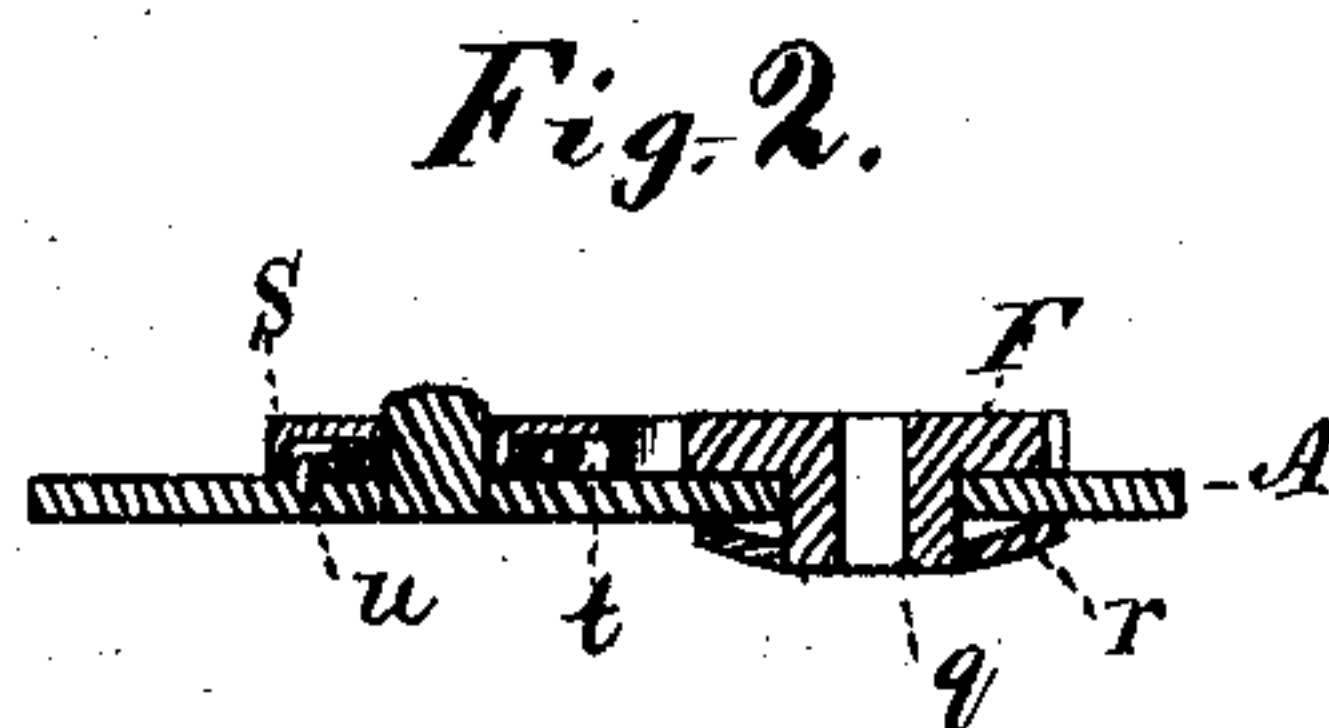
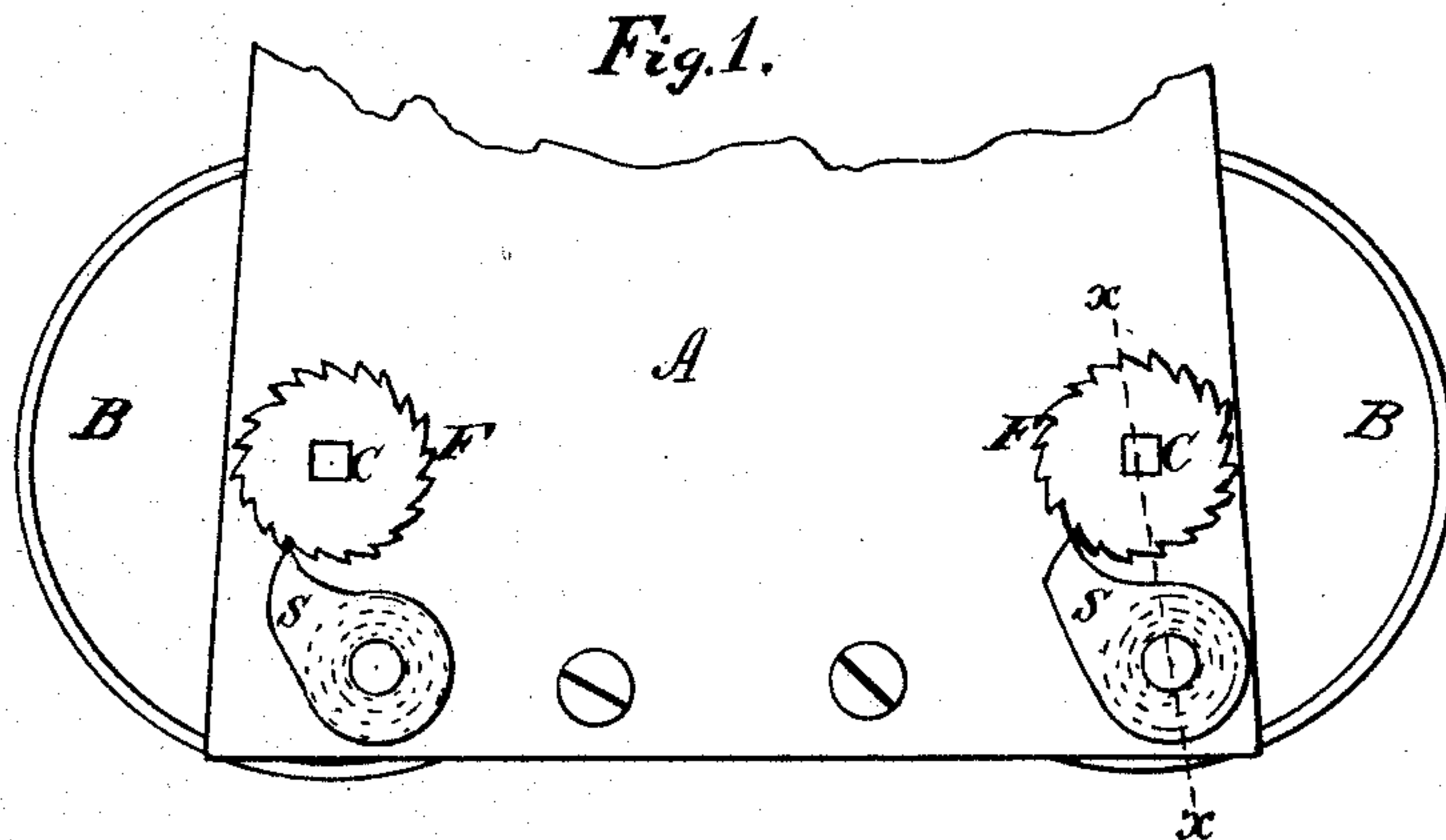


G. H. BLAKESLEY.

Winding Ratchets and Pawls for Clocks.

No. 155,411.

Patented Sept. 29, 1874.



WITNESSES.

H. W. Beadles,
H. E. Matthews.

INVENTOR

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GILBERT H. BLAKESLEY, OF BRISTOL, CONNECTICUT.

IMPROVEMENT IN WINDING RATCHETS AND PAWLS FOR CLOCKS.

Specification forming part of Letters Patent No. **155,411**, dated September 29, 1874; application filed January 14, 1873.

To all whom it may concern:

Be it known that I, GILBERT H. BLAKESLEY, of Bristol, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Clocks, of which the following is such a full, clear, and exact description as will enable others skilled in the art to make and use it, reference being had to the accompanying drawings, which form part of same.

My invention relates to an improvement in the winding mechanism of clocks and other time-pieces.

Figure 1 is a front view of a portion of a clock-movement which embodies my invention; Fig. 2, a sectional view on line *x x*, Fig. 1.

My invention consists in certain combinations and arrangements of devices and appliances, as hereinafter set forth and claimed, in which—

A represents the front frame-plate of the clock-movement. The wheels, hammers, fly and striking mechanism of this movement being substantially like those in common use, it is deemed unnecessary to describe, or represent them in the drawings. BB are the driving-springs, to the shafts C of which are attached ratchet-wheels F, into which ratchet-wheels engage pawls S. The ratchet-wheel F is provided with a hub, *q*, which passes through the plate A, and upon the end of said hub is secured firmly a dishing-spring,

r, which retains the ratchet in the plate A, so that it cannot be accidentally detached therefrom, although the main shaft C may be withdrawn from the ratchet, while it is free to revolve with its shaft when the square part of said shaft is passed through the square hole in the hub of the ratchet. In the under side of the pawl S is formed a circular recess or depression, *t*, Fig. 2, in which is placed a coiled spring, *u*, with one end hooked into a hole in the plate A, and the other end into the pawl S, and thereby the pawl is made to constantly bear against and engage with the teeth of the ratchet F.

Thus, the spring is wholly concealed from sight, and the ratchet, pawl, and spring are always attached to the plate, so that detaching the other parts of the clock will not disarrange them.

My invention is equally applicable to either the time or strike side of a clock-movement.

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

The ratchet-wheel F, secured to the frame-plate A by means of its hub *q* and spring *r*, in combination with its pawl S and concealed spring *u*, also permanently secured to the plate A, substantially as described.

GILBERT H. BLAKESLEY.

Witnesses:

HENRY A. MITCHELL,
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