FLORENCE KROEBER.

CLOCK-MOVEMENT.

No. 184,972. Patented Dec. 5, 1876.

Fig: 2

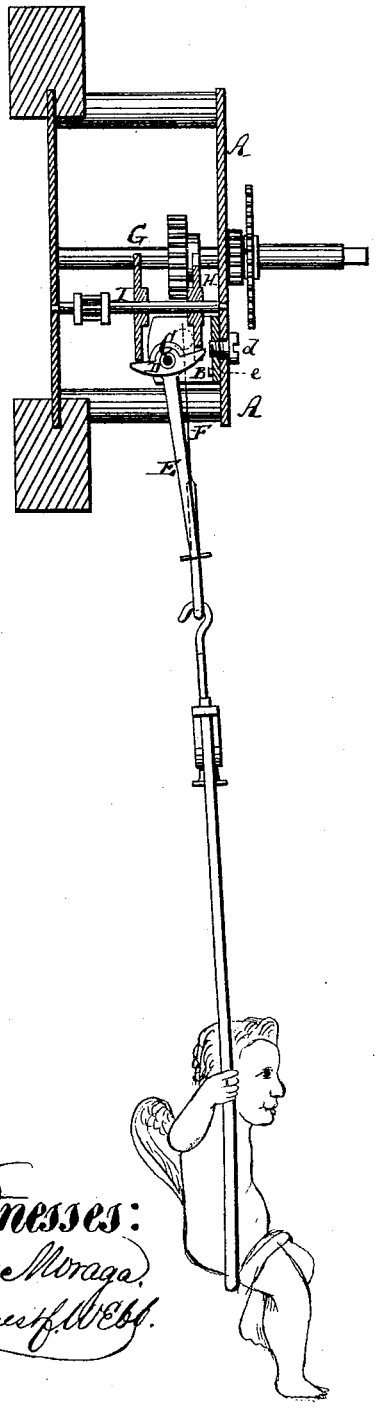

Fig: 1

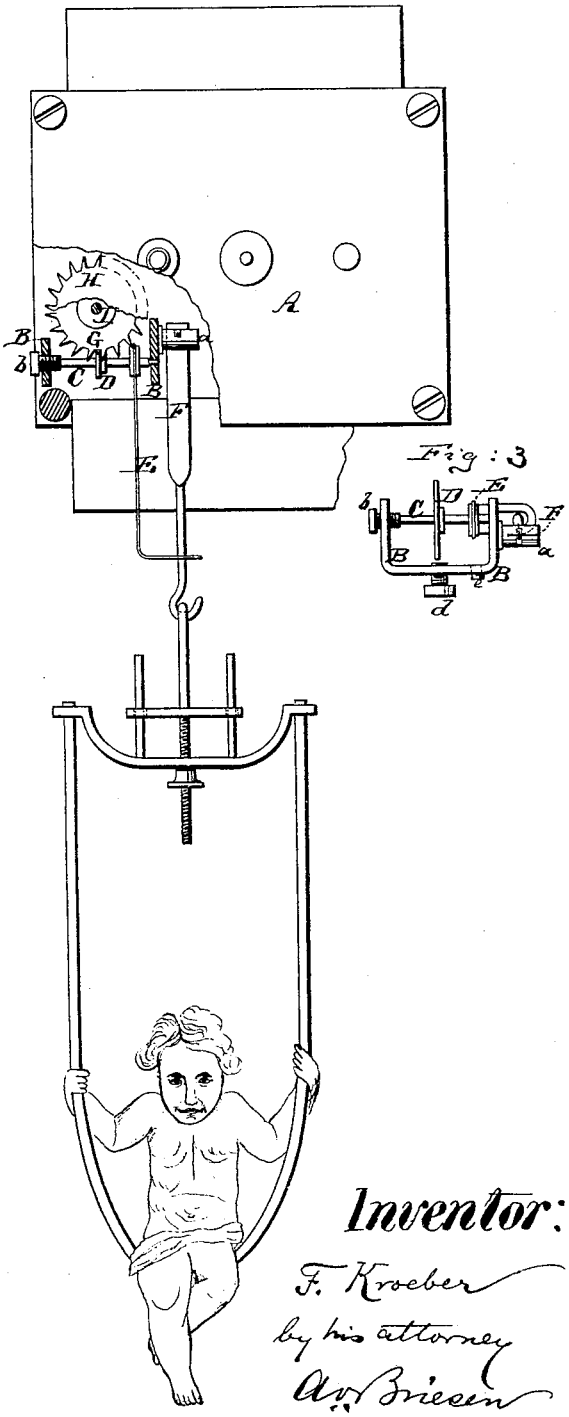

Fig: 3

Witnesses:
A. Monaga.
Ernest F. Webb.

Inventor:
F. Kroeber
by his attorney
A. v. Briesen

UNITED STATES PATENT OFFICE.

FLORENCE KROEBER, OF HOBOKEN, NEW JERSEY.

IMPROVEMENT IN CLOCK-MOVEMENTS.

Specification forming part of Letters Patent No. **184,972**, dated December 5, 1876; application file November 2, 1876.

To all whom it may concern:

Be it known that I, FLORENCE KROEBER, of Hoboken, Hudson county, New Jersey, have invented an Improved Clock-Movement, of which the following is a specification:

Figure 1 is a face view, partly in section, of my improved clock-movement. Fig. 2 is a vertical transverse section of the same; Fig. 3, a detail top view of the yoke in which the anchor-spindle has its bearings.

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

This invention relates to a new construction of escapement for pendulum-clocks of that kind in which the pendulum vibrates in the direction of the axis of the escapement-wheel.

The invention consists more particularly in the construction of a yoke in which the escapement-spindle is hung, and by which the pendulum-spring and the crutch-wire are also secured, all as hereinafter more fully described.

In the drawing, the letter A represents the front plate of the clock-movement. To the inner face of this plate is secured a U-shaped plate or yoke, B, in the ears of which the anchor-spindle C is hung. This spindle C is at right angles to the other spindles of the clock-movement, as indicated in the drawing, and it carries, rigidly attached to it, the anchor D, and also the crutch-wire E. The upper end of the pendulum-rod, or the pendulum-spring F, is secured in a lug, *a*, that projects from one of the ears of the yoke B, all as clearly shown in the drawing. One end of the spindle C enters an adjusting-screw, *b*, which is held in one ear of the yoke, and serves to regulate its friction. The position of the anchor with reference to the two escapement-wheels G H that hang on the spindle I is controlled by a screw, *d*, that fastens the yoke B to the plate A. I prefer to further connect the yoke B to the plate A by a small pivot-pin, *e*, and to use the screw *d* as a means of regulating the position of the yoke, for it is well understood that an extremely small displacement of the yoke will vary the effect of the anchor on the escapement-wheels.

I do not claim to have invented an escapement which consists of an anchor working into two escapement-wheels, for the purpose of regulating the motion of the clock by a pendulum that vibrates in the direction of the axis of these escapement-wheels; but

I do claim—

1. The yoke B, carrying the spindle C, upon which the pendulum-anchor and clutch-wire are mounted, combined with the adjusting-screw *b*, substantially as herein shown and described.

2. In combination with the yoke B, the supporting-pin *e*, and adjusting and fastening screw *d*, substantially as and for the purpose described.

3. The yoke B, made with the projecting lug or block *a*, for supporting the pendulum, combined with the spindle C, crutch-wire, and anchor, substantially as herein shown and described.

The foregoing description of my invention signed by me this 30th day of June, 1876.

FLORENCE KROEBER.

Witnesses:

ERNEST C. WEBB,

A. V. BRIESEN.