(No Model.)

L. AEBY.

BANKING DEVICE FOR TIME PIECE ESCAPEMENTS.

No. 384,670. Patented June 19, 1888.

Fig. 1.

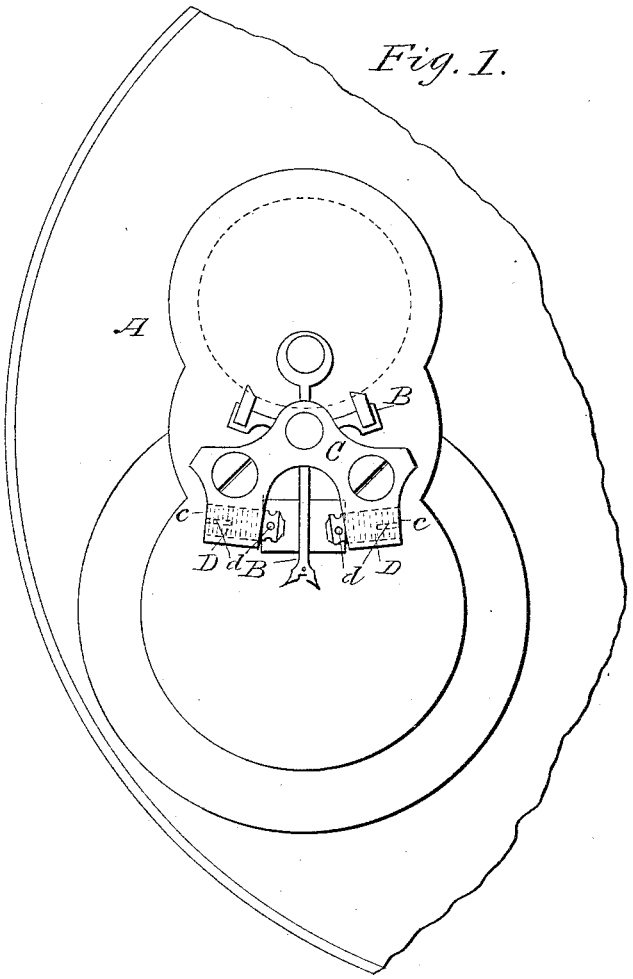
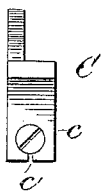


Fig. 2.



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UNITED STATES PATENT OFFICE.

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BANKING DEVICE FOR TIME-PIECE ESCAPEMENTS.

SPECIFICATION forming part of Letters Patent No. 384,670, dated June 19, 1888.

Application filed January 10, 1888. Serial No. 260,343. (No model.)

To all whom it may concern:

Be it known that I, LEO AEBY, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Banking Devices for Watches and other Time-Keepers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improved banking devices applicable to that description of watches or other time-keepers in which lever-escapements are employed. In this construction of watches or time-keepers it frequently happens that a greater impulse than usual is given to the balance by a sudden shake or other cause, whereby the ruby-pin, after the lever has made its movement, is carried so far around that it strikes forcibly against the outside of the lever-fork, and frequently is either damaged or the balance or staff pivot is broken or bent.

The object of my invention is to obviate these evils and to provide independently movable or adjustable banking devices, which can readily be applied to watches or other time-keepers now in use.

In carrying out my invention I employ a lever-bridge and fit in the wings thereof independent and adjustable banking-screws, which are arranged in the plane of action of the lever, with their inner ends pointing toward the same, and at such distances therefrom as will insure its proper motion. These screws are set at a slight angle or inclination in the wings of the lever-bridges, so that the lever will bank against their inner ends, which are flat and arranged parallel to the sides of said lever, and thus prevent any difference in the angle of its motion on account of the necessary end-shake imparted thereto.

In order that my invention may be fully understood, reference is made to the accompanying drawings, wherein the same reference-letters indicate the same parts, and in which—

Figure 1 represents a plan view of so much of a watch with my improved banking devices attached thereto as will enable those skilled in the art to readily understand my invention, said figure showing a piece of a pillar-plate, a forked lever attached thereto, and a winged lever-bridge provided with my improved banking devices; and Fig. 2 represents a side or edge view of the lever-bridge, showing the wing thereof as split in such manner as to hold the adjustable banking-screws with a clamping pressure.

A is a part of the pillar-plate of a watch.

B is the forked lever of a lever-escapement mechanism.

C is the lever-bridge provided with the wings *c c*, having the slits *c' c'*, and D D are the independently movable or adjustable banking-screws arranged at a slight inclination for the purpose stated, and formed with holes and nicks *d d*, for the use of a pin or screw-driver for regulating their distances from the lever and thus insuring the proper motion of the same.

The operation of my improved banking devices will be obvious to those skilled in the art. The independent banking-screws, as above stated, being arranged in the wings of the lever-bridge and in the plane of motion of the lever and at adjustable distances therefrom, will insure the proper action of said lever; also, as said screws are arranged at a slight angle or inclination, as stated, the lever will bank against their flat contacting inner ends, which are parallel to the sides of said lever, and thus any difference in the angle of motion of the lever because of the end-shake imparted thereto will be avoided.

It is obvious that minor changes in the construction and arrangement of the parts of my invention may be made without departing from the principle thereof—as, for instance, the independent banking-screws are not necessarily placed in the wings of the lever-bridge, but may be passed through projections formed integrally with the pillar-plate, or through posts fitted in holes bored in said pillar-plate, or otherwise suitably arranged to take the place of the ordinary banking-pins and springs between which the levers act in the usual constructions of lever-escapement mechanisms.

Having thus fully described the construction, arrangement, and operation of the parts of my invention and the advantages thereof, what I claim as new is—

1. In a lever-escapement for watches, the combination of a pillar-plate and a lever with two independent adjustable banking devices arranged parallel to said pillar-plate and having their ends pointing toward said lever, substantially as described.

2. In a lever-escapement for watches, the combination of a pillar-plate and lever with two independent adjustable banking devices arranged parallel to said pillar-plate and at a slight angle or inclination to said lever, and having their inner ends pointing toward the same, substantially as and for the purpose described.

3. In a lever-escapement for watches, the combination of a pillar-plate and a lever with two independent banking-screws arranged parallel to said pillar-plate and at a slight angle or inclination to said lever, substantially as described.

4. In a lever-escapement for watches, the combination of a pillar-plate and a lever with two independent banking-screws arranged parallel to said pillar-plate and at a slight angle or inclination to said lever and provided with holes for pins for moving them forward and backward, substantially as described.

5. In a lever-escapement for watches, the combination of a pillar-plate, a lever, and a lever-bridge provided with wings, with two adjustable banking-screws passing through said wings and arranged parallel to said pillar-plate and at a slight angle or inclination to said lever, substantially as described.

6. In a lever-escapement for watches, the combination of a pillar-plate, a lever, and a lever-bridge provided with split wings, with two adjustable banking-screws passing through said wings and arranged parallel to said pillar-plate and at a slight angle or inclination to said lever, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

LEO AEBY.

Witnesses:
CHARLES WILLIS WARD,
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