(No Model.)

S. T. J. BYAM.

WATCH PLATE.

No. 323,852. Patented Aug. 4, 1885.

Fig. 1.

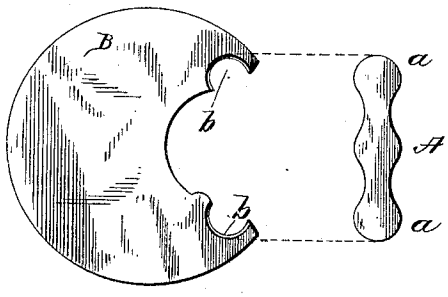


Fig. 2.

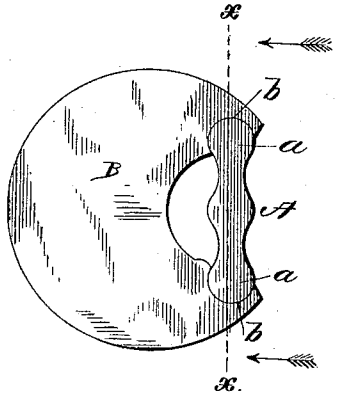
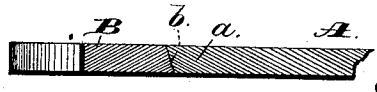


Fig. 3.



Witnesses:
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Henry C. Hazard.

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UNITED STATES PATENT OFFICE.

SEWALL T. J. BYAM, OF NEW HAVEN, CONNECTICUT.

WATCH-PLATE.

SPECIFICATION forming part of Letters Patent No. 323,852, dated August 4, 1885.

Application filed August 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, SEWALL T. J. BYAM, of New Haven, in the county of New Haven, and in the State of Connecticut, have invented certain new and useful Improvements in Watch-Movements; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of my watch-plate and balance-bridge separated. Fig. 2 is a like view of the same combined, and Fig. 3 is a section upon line *x x* of Fig. 2.

Letters of like name and kind refer to like parts in each of the figures.

In the construction of watch-movements it has heretofore been customary to secure the balance-bridge to or upon one of the plates by means of a screw or screws, and to insure the lateral position of said bridge by dowel-pins that were placed within the lower side of the same and fitted into suitable openings in said plate, which construction is not only expensive, but uncertain in its results, as it is difficult to secure perfect accuracy in the fitting of the dowel-pins, and a bridge thus held in lateral position has usually sufficient play to render necessary its adjustment whenever the movement is set up after having been taken down.

To obviate the defects named, to simplify the construction, and to lessen the cost of watch-plates and balance-bridges is the design of my invention; to which end said invention consists, principally, as an improvement in watch-movements, in a balance-bridge which has its ends conformed to and adapted to fit within recesses or notches that are formed within a movement-plate, whereby said bridge is held in position and prevented from movement in a direction parallel with the plane of said plate, substantially as and for the purpose hereinafter specified.

It consists, further, as an improvement in watch-movements, in a balance-bridge which is secured in lateral position with relation to a movement-plate by the engagement of its ends with said plate, substantially as and for the purpose hereinafter shown.

It consists, further, as an improvement in watch-movements, in a balance-bridge which is connected with a movement-plate by the engagement of its ends therewith, and by such engagement is held in lateral and vertical position thereon or therein, substantially as and for the purpose hereinafter set forth.

It consists, finally, as an improvement in watch-movements, in a balance-bridge which is connected with a movement-plate by the engagement of its ends with the latter, and is moved into or out of such engagement in a line perpendicular to the plane of said plate, substantially as and for the purpose hereinafter shown and described.

In the carrying of my invention into effect, a balance-bridge, A, is constructed from a flat piece of metal, and has such length as to adapt it to the style of movement to which it is to be applied. The central portion of said bridge is adapted to receive any desired style of jewel or other balance-arbor bearing, while its ends *a* are preferably formed upon circular lines, as shown. The movement-plate B is provided with notches *b*, that extend through the same and conform to the size and shape of the ends *a* of the bridge A, and are adapted to receive said ends. Said notches have such dimensions as to cause them to closely embrace said bridge, and, in connection with the latter, will usually be formed by dies, so that each will have a slight taper, that will enable them to fit as closely together as may be desired.

While the circular form of the ends *a* of the bridge A is preferably employed, any other form may be used, provided that the notches *b* of the plate B are caused to conform thereto.

The bridge thus constructed and combined with a movement-plate cannot move laterally, and must invariably occupy the same horizontal position with relation to said plate, however often removed from or placed in engagement therewith, while vertically but a slight pressure upon said bridge-ends is necessary to cause it to maintain its engagement, and as the bearing-surface between said parts is large, no ordinary amount of use will cause any appreciable wear, so as to change their fitting.

Having thus fully set forth the nature and merits of my invention, what I claim is—

1. As an improvement in watch-movements, a balance-bridge which has its ends conformed to and adapted to fit within recesses or notches that are formed within a movement-plate,

whereby said bridge is held in position and prevented from movement in a direction parallel with the plane of said plate, substantially as and for the purpose specified.

2. As an improvement in watch-movements, a balance-bridge which is secured in lateral position with relation to a movement-plate by the engagement of its ends with said plate, substantially as and for the purpose hereinafter shown.

3. As an improvement in watch-movements, a balance-bridge which is connected with a movement-plate by the engagement of its ends therewith, and by such engagement is held in lateral and vertical position thereon or therein, substantially as and for the purpose set forth.

4. As an improvement in watch-movements, a balance-bridge which is connected with a movement-plate by the engagement of its ends with the latter, and is moved into or out of such engagement in a line perpendicular to the plane of said plate, substantially as and for the purpose shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 18th day of August, 1884.

S. T. J. BYAM.

Witnesses:
L. J. MULFORD,
A. D. BINGHAM.