Sept. 16, 1952 M. HUGUENIN 2,610,462

SHAPED TIMEPIECE AUTOMATICALLY REWOUND BY MEANS OF A MOVABLE MASS

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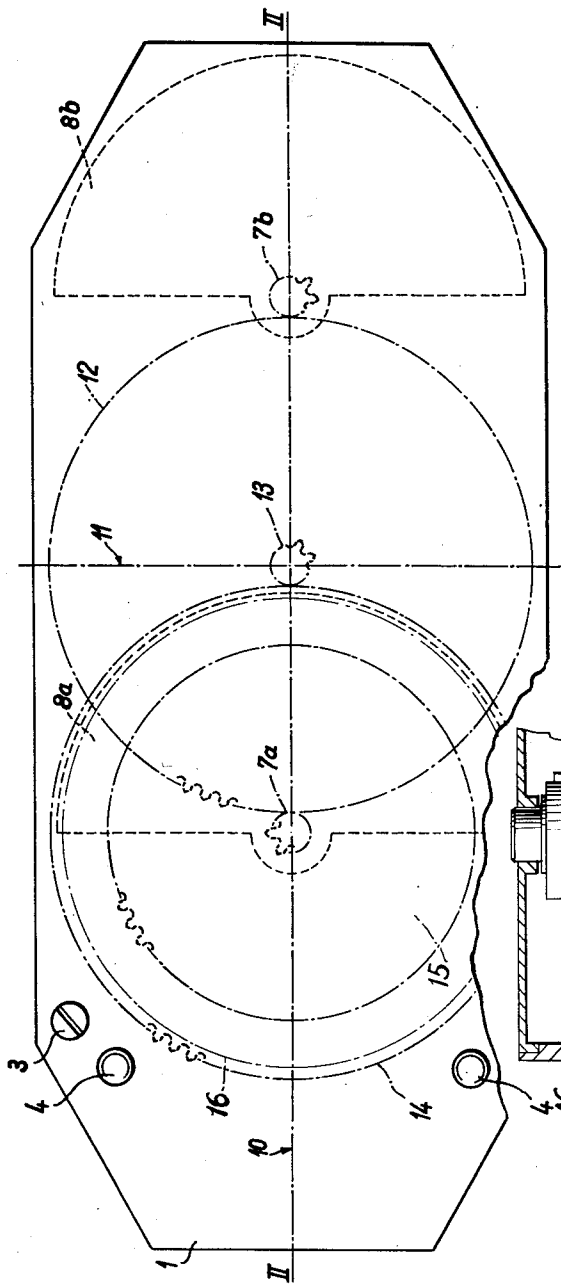

Fig.1

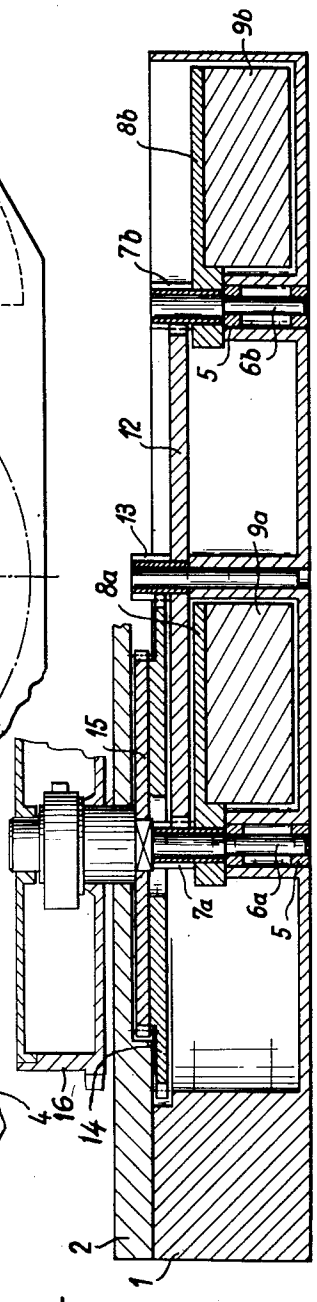

Fig.2

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SHAPED TIMEPIECE AUTOMATICALLY REWOUND BY MEANS OF A MOVABLE MASS

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5 Claims. (Cl. 58—82)

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The present invention relates to a shaped time-piece, automatically re-wound by means of a movable mass.

This time-piece is characterised by the feature that it comprises two rotatably mounted masses situated at positions substantially in the longitudinal axis of the movement, each of these masses co-operating with a wheel which forms part of the winding train.

One form of construction of the invention is illustrated by way of example in the accompanying drawings, in which:

Figure 1 is a plan view of the time-piece, and

Figure 2 shows a section on the line II—II in Figure 1.

In this time-piece a cage 1, carrying most of the winding members, is fixed upon the barrel bridge 2 by means of screws 3 and feet or lugs 4.

Upon this cage are rotatably mounted, by means of bearings 5, two shafts 6^a and 6^b, to which are secured two pinions 7^a and 7^b respectively. To these pinions are secured arms 8^a and 8^b respectively, carrying rewinding masses 9^a and 9^b respectively, of semi-circular form. Hence these masses are pivoted at points situated in the longitudinal axis 10 of the movement, these points being symmetrical in relation to the transverse axis 11 passing through the centre of a wheel 12. The pinions 7^a and 7^b both mesh with the wheel 12, which is pivotally mounted upon the cage 1. This wheel is rigid with a pinion 13, meshing with a wheel 14, which is fixed, by means not shown, to the barrel ratchet, denoted by 15. It is to be observed that the wheel 14 and the barrel designated by 16, are concentric with the shaft 6^a of the mass 9^a.

The two masses 9^a and 9^b are displaceable parallel to themselves. They can execute complete revolutions; and the sum of their weights is equivalent to that of a larger mass, which, in a shaped watch, would not have room to turn and

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would have to oscillate, which is less favourable for the winding.

In the form of construction illustrated, the masses both co-operate with the wheels 12. It would also be possible to devise a construction in which each mass would co-operate with a different wheel, each of these wheels forming part of the winding train.

What I claim is:

1. In a shaped time-piece for automatic winding comprising a barrel, a movable winding mass and a gear train connecting said mass to said barrel; said winding mass consisting of two masses rotatably mounted at points situated substantially in the longitudinal axis of the movement and a wheel forming part of said gear train with which said masses cooperate, said masses having constantly both the same orientation with respect to said longitudinal axis.

2. In a time-piece as claimed in claim 1, two pinions meshing with the said winding-train wheel, each of said pinions being rigid with one of said masses.

3. In a time-piece as claimed in claim 2, a wheel concentric with said barrel, a pinion rigid with said winding-train wheel and meshing with said wheel concentric with the barrel.

4. In a time-piece as claimed in claim 3, a ratchet for the barrel upon which is fixed said wheel concentric with the barrel.

5. In a time-piece as claimed in claim 1, the feature that the barrel is concentric with one of the two winding masses.

MARC HUGUENIN.

REFERENCES CITED

The following references are of record in the file of this patent:

FOREIGN PATENTS

Number	Country	Date
142,511	Switzerland	Dec. 1, 1930