March 23, 1954 H. STAMM 2,672,725

FIXING PLATE FOR A WATCH OR CLOCK MOVEMENT IN ITS CASE

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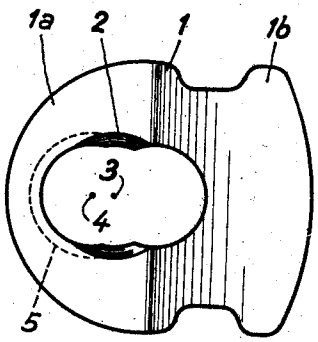


Fig. 1

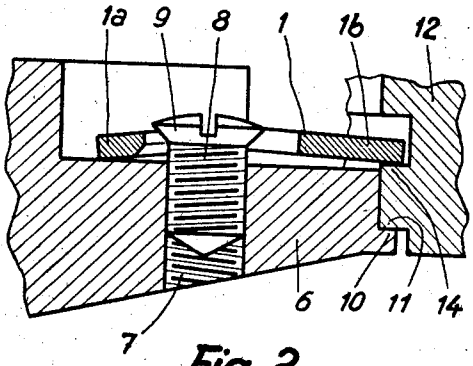


Fig. 3

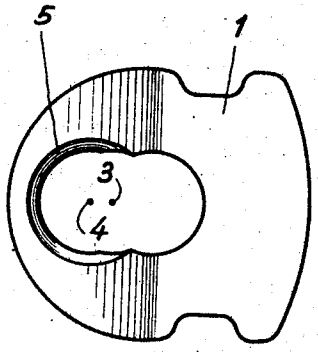


Fig. 2

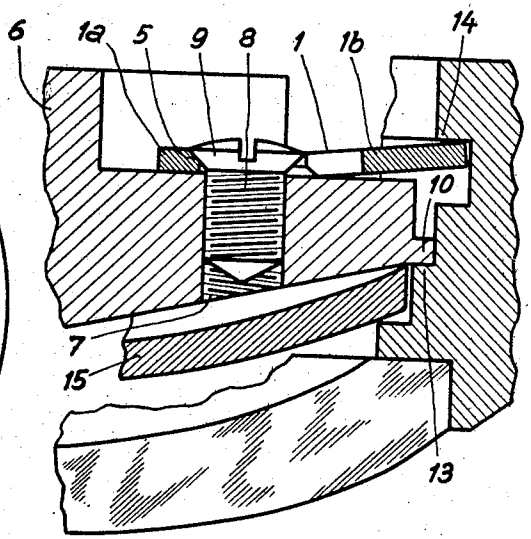


Fig. 4

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FIXING PLATE FOR A WATCH OR CLOCK MOVEMENT IN ITS CASE

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2 Claims. (Cl. 58—88)

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The fixing of a watch or clock movement in its case only by means of screws has the disadvantage that the corresponding holes in the movement have to be disposed very close to the edge of the movement, so that, especially when said edge is tapered, a too short thread is often insufficient. It is known to remove this drawback by using fixing plates screwed on the movement edge, which project beyond this edge and bear on a corresponding shoulder of the case. It was thus possible to displace towards the interior, the holes for the fixing screws, in a place where the movement edge is somewhat thicker.

These fixing plates must project by a determined amount beyond the body of the movement in the non-watertight watches, whereas they must project beyond the outer edge of the movement in the watertight watches. Since it is not desirable to make two different types of fixing plates for the two kinds of watches, it has already been proposed to make an elongated hole in the plates considered, so that according to the watch type the clamping place can be chosen in order to determine the lateral projection of the plate.

The fixing plates known have the drawback of having no centering means, so that the worker must always put the plate by hand into the position corresponding to the type of watch considered, that is with the desired amount of projection.

The present invention relates to a fixing plate for a watch or clock movement in its case, having an elongated hole, in which two countersunk conical centering seats are arranged on different sides of the plate, the imaginary axes of said cones being staggered with respect to each other.

The elongated hole may have a symmetry axis and the distances, as measured on this symmetry axis, between one of said axes and the edge of the plate situated beyond the other axis, may be different.

An embodiment of the invention will now be further described by way of example with reference to the accompanying drawing, in which

Fig. 1 is a top view.

Fig. 2 is an underview.

Fig. 3 is a cross-sectional view through the plate mounted into a non-watertight watch, and

Fig. 4 is a similar view for a watertight watch.

The fixing plate 1 is slightly bent upwards to obtain a resilient effect. Its left-hand portion 1*a* is adapted to be fixed by means of a screw to a watch or clock movement, whereas its right-hand portion 1*b* partially projects beyond the edge of the movement and bears against a corresponding shoulder, for instance of the caseband. The portion 1*a* has an elongated hole or slot with a symmetry axis. In the edges of said slot, on the upper side, are countersunk conical centering seat-forming recesses 2, the imaginary axis of which is situated at 3. On the underside of the plate 1 (Fig. 2) is also countersunk a similar conical centering seat-forming recess 5, the imaginary axis 4 of which is located at a certain distance from the axis 3. The positions of the two axes are chosen in a manner such that the distance between the axis 3 and the edge of the portion 1*a*, as measured on the extension of the symmetry axis of the elongated hole, is smaller than the distance measured in the same way between the axis 4 and the edge of the portion 1*b* of the fixing plate 1.

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In Fig. 3 the fixing plate 1 is shown mounted into a non-watertight watch. Besides the difference already stated about the projection, i. e. the amount by which the plate extends beyond the edge of the movement, there is another difference in the two types of watches as regards the disposition of the fixing plate. In the non-watertight watches indeed, due to the elasticity of the plate, the movement is drawn towards the side of the bottom, whereas in the watertight watches it is pressed against the side of the dial. This different effect of the fixing plate is obtained by the fact that the convex surface of the plate is turned towards the side opposite to the movement in the non-watertight watches, whereas it is turned towards the side of the movement in the watertight watches.

In Fig. 3 the movement edge is denoted by 6. In a hole 7 of the latter is screwed a fixing screw 8 provided with a shank of a diameter which is smaller than the width of the slot and with a conical head 9 of a diameter less than the length of the slot but greater than the width of the slot, for maintaining in position the plate 1. Due to the elasticity of the plate, the shoulder 10 of the movement edge 6 bears against a shoulder 11 of the caseband 12. The conical head 9 of the screw 8 enters the conical centering seat 2, and the portion 1*b* of the plate 1 bears against a shoulder 14 of the caseband 12.

In a watertight watch (Fig. 4), the plate is turned over by 180° and the conical head 9 of the screw 8 enters the conical centering seat 5. The plate 1 thus presses the movement 6 against the side of the dial 15, the shoulder 10 being pressed against a shoulder 13 of the caseband 12, whereas the portion 1*b* of the plate 1 bears against a shoulder 14 of the caseband 12.

From the foregoing may be brought out that

on assembly there is no other care to be taken besides introducing the plate 1 in a manner such that its convex surface is turned towards the correct side according the type of watch considered. The centering operation is then made automatically, for the conical head 9 of the screw 8 readily enters one of the conical centering seats 2 or 5 and thus brings the fixing plate 1 into the correct position with respect to the movement, whether the watch is watertight or not.

What I claim is:

1. A device for detachably fixing a horological movement in a case comprising a fixing plate having an elongated slot therein to receive an attaching screw provided with a shank of a diameter which is smaller than the width of the slot and having a conical head, said slot having a length greater than the diameter of said screw head, and said plate having conical seat-forming recesses in the side edges of said slot to provide on one side of the plate at one position in the slot a seat for receiving the conical head of the screw and fixing the position of the plate relative to the screw, and said plate having conical seat-forming recesses in the side edges of said slot to provide on the other side of the plate at another position in the slot a seat for receiving the conical head of the screw and fixing the position of the plate relative to the screw, the axis of one seat being spaced from the axis of the other seat longitudinally of the slot.

2. A device according to claim 1 in which the plate is curved so that one side surface is convex and the other side surface is concave, and one of said seats is provided in the convex side and the other seat is provided in the concave side.

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