June 24, 1930. J. WILCOX, JR 1,766,806

CLOCK MOVEMENT AND DIAL SUPPORTING MEANS

Filed Feb. 1, 1926

Fig. 1.

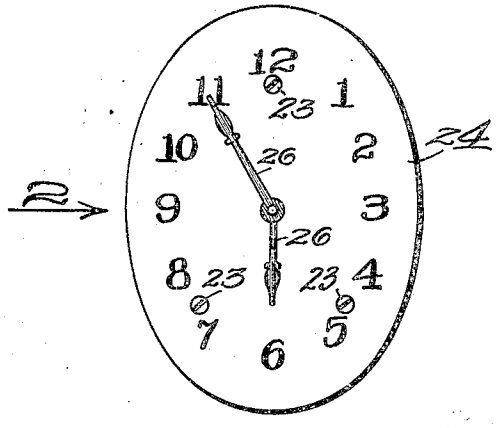
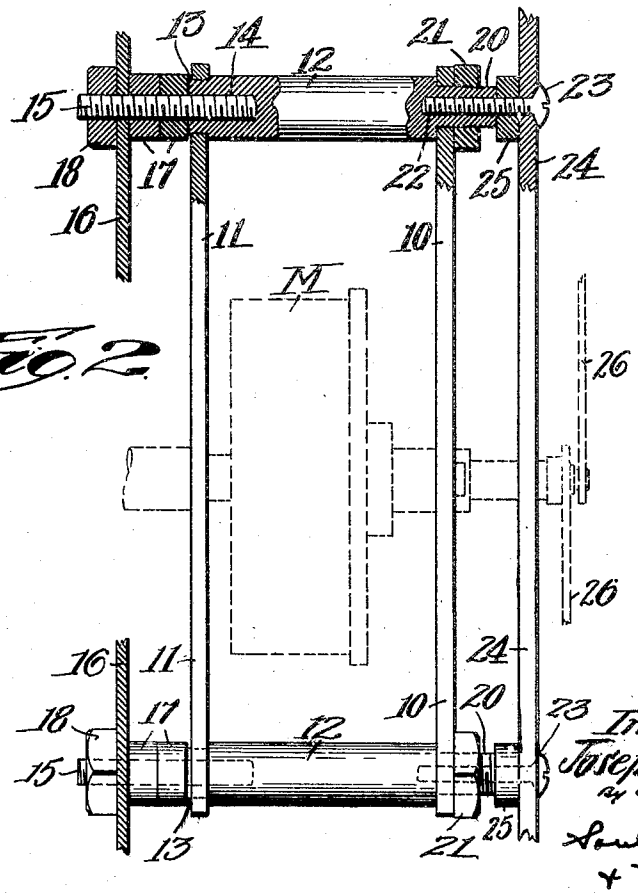


Fig. 2



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UNITED STATES PATENT OFFICE

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CLOCK MOVEMENT AND DIAL-SUPPORTING MEANS

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This invention relates to a clock movement of the type used in small clocks such as are commonly sold for table or mantel use or in toilet sets. It is desirable that these small clock movements shall constitute complete units which may be easily inserted in any one of an extended line of different cases.

It is the general object of my present invention to provide an improved movement and dial support so constructed that the dial is mounted directly on the movement frame, and the dial and hands may be assembled with the movement before the movement is inserted in the casing.

My improved construction is also such that the dial may be quickly and easily removed when it is necessary to repair or clean the movement.

My invention further relates to arrangements and combinations of parts which will be hereinafter described and more particularly pointed out in the appended claims.

A preferred form of the invention is shown in the drawings in which:

Fig. 1 is a front view of my improved movement and dial; and

Fig. 2 is a side elevation, partly in section, looking in the direction of the arrow 2 in Fig. 1.

Referring to the drawings, I show a clock movement comprising a front movement plate 10, a back movement plate 11, and movement posts 12 which hold the front and back plates in definite spaced relation. The clock mechanism M is mounted between the movement plates and may be of any usual construction.

The movements posts 12 are preferably formed as indicated in Fig. 2, which shows the rear end of the post 12 as provided with a threaded projection 13 adapted to be riveted into the back plate 11. A tapped hole 14 is formed in the rear end of the post 12 and is adapted to receive a threaded pin or stud 15, projecting rearwardly therefrom.

A back casing plate 16 is mounted on the studs 15 and is spaced from the back movement plate 11 by one or more collars 17. Nuts 18 threaded on the studs 15 secure the back casing plate 16 in position.

At their front ends the movement posts 12 are each provided with a threaded extension 20 projecting through the front movement plate 10. Nuts 21 on the extensions 20 firmly retain the plate 10 in position and in definite spaced relation from the plate 11.

The extensions 20 on certain of the posts 12 are threaded at 22 to receive screws 23 extending through corresponding openings in the dial 24. Collars 25 may be provided for spacing the dial at a desired distance from the movement plate 10. The dial 24 may be of the oval shape shown in Fig. 1, which is particularly well adapted for attachment in this manner to a clock movement, as the dial may be secured by a three point attachment and the several screws 23 are desirably located on the dial face.

Having thus described the details of construction of my improved movement and dial supporting means, it will be seen that the movement and dial constitute a single unit which may be placed in a casing or removed therefrom without removing the hands 26 or otherwise separating the parts.

Furthermore the movement may be inserted as a friction fit within a casing, as is now common, and when thus inserted the back plate 16 already mounted on the movement will close the rear opening of the casing and exclude dirt and dust from the movement. Whenever it is necessary to clean or repair the movement the dial may be easily removed by taking out the screws 23 and the back plate may be correspondingly removed by taking off the nuts 18.

The dial is secured in an exact predetermined relation to the movement and hands and there is no chance for the dial to become relatively displaced, thus causing the hands to bind against the opening in the dial.

I have thus described my invention and the advantages thereof and I do not wish to be limited to the details herein disclosed otherwise than as set forth in the claims, but what I do claim is:

1. In a clock, a movement having front

and back movement plates, a plurality of movement posts by which said plates are secured in fixed spaced relation, certain of said posts being forwardly extended through and beyond said front movement plate and being externally threaded and having axially disposed tapped holes therein, a dial, and screws extending through said dial and into said holes to detachably secure said dial in position, forwardly spaced from said plate, spacing collars provided on said screws between said dial and said post projections, whereby the space between said dial and said posts may be adjusted, and means on said extensions to lock said front plate to said posts.

2. In a clock a movement having front and back movement plates, a plurality of movement posts by which said plates are secured in fixed spaced relation, certain of said posts being forwardly extended through and in front of said movement plate and having axially disposed tapped holes therein, an oval dial, and means to detachably secure said dial to the forward end of one of said extended posts near one end of the long diameter of said oval dial and to secure said dial to the forward end of two additional extended posts at the opposite end of said dial, thereby providing a rigid three point support for said dial, and spacing means provided for said dial securing means whereby the space between said dial and said posts may be adjusted, and said additional posts being more closely adjacent to each other than to said first post.

3. In a clock having a case, a movement unit consisting of a dial, a frame, and clock works supported therein, said unit adapted for ready insertion in said case after assemblage, and for ready removal from said case; said frame comprising front and back movement plates, a plurality of movement posts by which said plates are secured in fixed spaced relation, certain of said posts being forwardly extended through and in front of said movement plate and having axially disposed tapped holes therein, screws extending through said dial and into said holes to detachably secure said dial in position, forwardly spaced from said front plate, and said posts being riveted to said back movement plate, and having threaded studs inserted therein, spacing collars on said studs and nuts to secure the back plate of said casing to said studs and against said collars.

In testimony whereof I have hereunto affixed my signature.

JOSEPH WILCOX, JR.