W. C. BALL.

DIAL FOOT FOR WATCHES.

APPLICATION FILED MAY 6, 1908.

974,460.

Patented Nov. 1, 1910.

Fig. 1

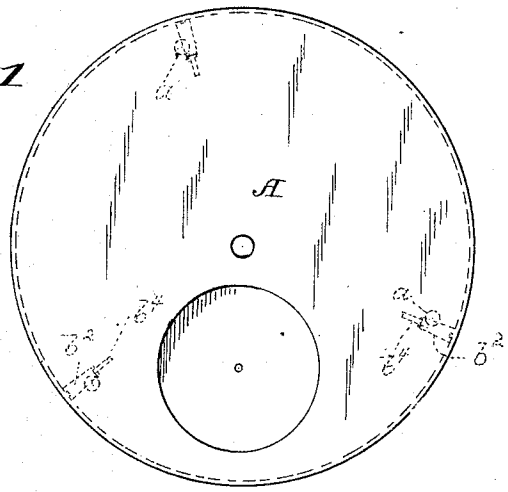


Fig. 2

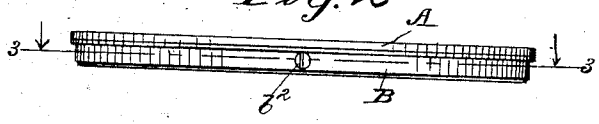


Fig. 3

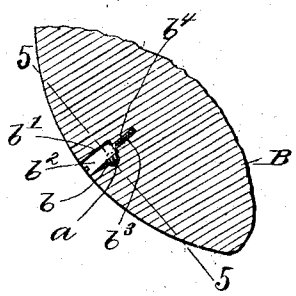


Fig. 4

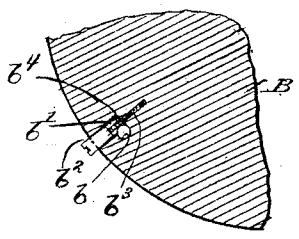


Fig. 5

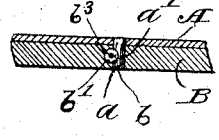


Fig. 6

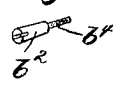
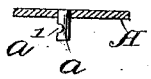


Fig. 7



Witnesses:

J. C. Turner

Jno. F. Oberlin

Inventor:

Webster C. Ball

by J. B. Fay

Attorney.

UNITED STATES PATENT OFFICE.

WEBSTER C. BALL, OF CLEVELAND, OHIO.

DIAL-FOOT FOR WATCHES.

974,460. Specification of Letters Patent. Patented Nov. 1, 1910.

Application filed May 6, 1908. Serial No. 431,079.

To all whom it may concern:

Be it known that I, WEBSTER C. BALL, citizen of the United States, resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Dial-Feet for Watches, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

The present invention relates to watches, or similar time keeping instruments, wherein the dial is attached directly to the bed-plate upon which the works are secured.

The object of the invention is the provision of improved means for thus securing such dial to the bed-plate, there being a marked tendency in prevailing methods of construction for the dial to become loose with use.

To the accomplishment of the above and related ends, such invention, then, consists of the means hereinafter fully described and particularly pointed out in the claim.

The annexed drawing and the following description set forth in detail certain mechanism embodying the invention, such disclosed means constituting, however, but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawing: Figure 1 is a top plan view if the dial and the bed-plate upon which it is mounted; Fig. 2 is a side elevation of the same; Fig. 3 is a broken section taken on a horizontal plane indicated by the line 3—3, Fig. 2; Fig. 4 is a similar section, but showing one of the parts in a different operative position; Fig. 5 is a broken section taken on the line 5—5, Fig. 3; Fig. 6 is a perspective view of one of the locking elements which I employ to secure dial and plate together; and Fig. 7 is a view, similar to Fig. 5, but of the dial and foot alone.

The improved fastening means that I have devised include certain features that have been heretofore employed, viz. so called dial "feet," it being with the means whereby such feet are locked in the bed-plate of the watch that we are here more particularly concerned. Referring, then, to Figs. 1 and 2, A will be seen to designate a dial of usual construction, which dial is provided with a plurality (preferably three) of downwardly projecting lugs, or feet, a for the reception of which the juxtaposed face of the bed-plate B is formed with three openings or apertures b. Such feet and corresponding apertures are located close to the edge of the dial and plate, respectively, and are approximately equidistantly spaced about the periphery of the same.

In the bed-plate are further provided horizontally disposed, radially directed, apertures b' for the reception of locking elements, now to be described, that by suitable engagement with the aforesaid lugs or dial feet secure the dial to the bed-plate. To this end such horizontally disposed apertures b' laterally intersect the vertical apertures b in which the lugs or feet are received, the latter being formed in their sides with recesses a', so disposed as to substantially register with such intersecting apertures in the assembled condition of the parts. These apertures b' are designed to receive screws b^2 constituting the locking members aforesaid and to this end they terminate inwardly in a threaded portion b^3 of smaller diameter, as shown Figs. 1, 3 and 4. The body portion of such screw b^2 is adapted to be wholly contained in the aperture proper, a threaded extension b^4 being provided of such length that the body portion b^2 may be backed out of the part b' of the aperture that intersects the vertical lug-receiving aperture b without the screw portion being entirely released from the threaded portion b^3 of the horizontal aperture. Such screw body is furthermore made of a general tapering form, Fig. 6, and recess a' is so disposed with respect to the horizontal aperture in which the screw body rests, that the latter, as it is forced home, will engage the lower edge of the recess and exert a downward pressure on the same. The dial is thus drawn down, and firmly secured, to the bed-plate.

The manner of assembling the parts entering into my improved construction of dial foot should be readily apparent from the foregoing description, and it is taken that the advantages accruing from such construction will be equally apparent. Not only is the dial absolutely locked against dislodgment from the bed-plate but by virtue of the peculiar engagement of the securing screws there is no possibility of lost motion between the parts, dial and bed-plate being in effect made an integral member. Moreover, by the construction whereby

separation of the parts is made possible without entirely removing the screws, the danger of losing said screws is minimized and the assembling and disassembling of the parts greatly facilitated.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by the following claim or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention:—

The combination with the bed-plate and dial of a watch, of means for securing the latter to the former, such means comprising lugs on the inturned face of said dial, said lugs being laterally recessed and the opposed face of said bed-plate being formed with apertures for the reception of said lugs, and screws in said bed-plate having tapered body portions and reduced terminally threaded portions, the apertures for said screws intersecting those receiving said lugs and being disposed so that the tapered body portions of said screws, upon insertion of the latter, engage the lower edges only of the recesses in the corresponding lugs, whereby the latter are drawn downwardly, the reduced threaded terminal portions of said screws being of a length to permit such body portion to be backed out of such apertures without entirely releasing the screws, yet releasing the dial lugs.

Signed by me this 2nd day of May, 1908.

WEBSTER C. BALL.

Attested by—

MARY ISRAEL,

JNO. F. OBERLIN.