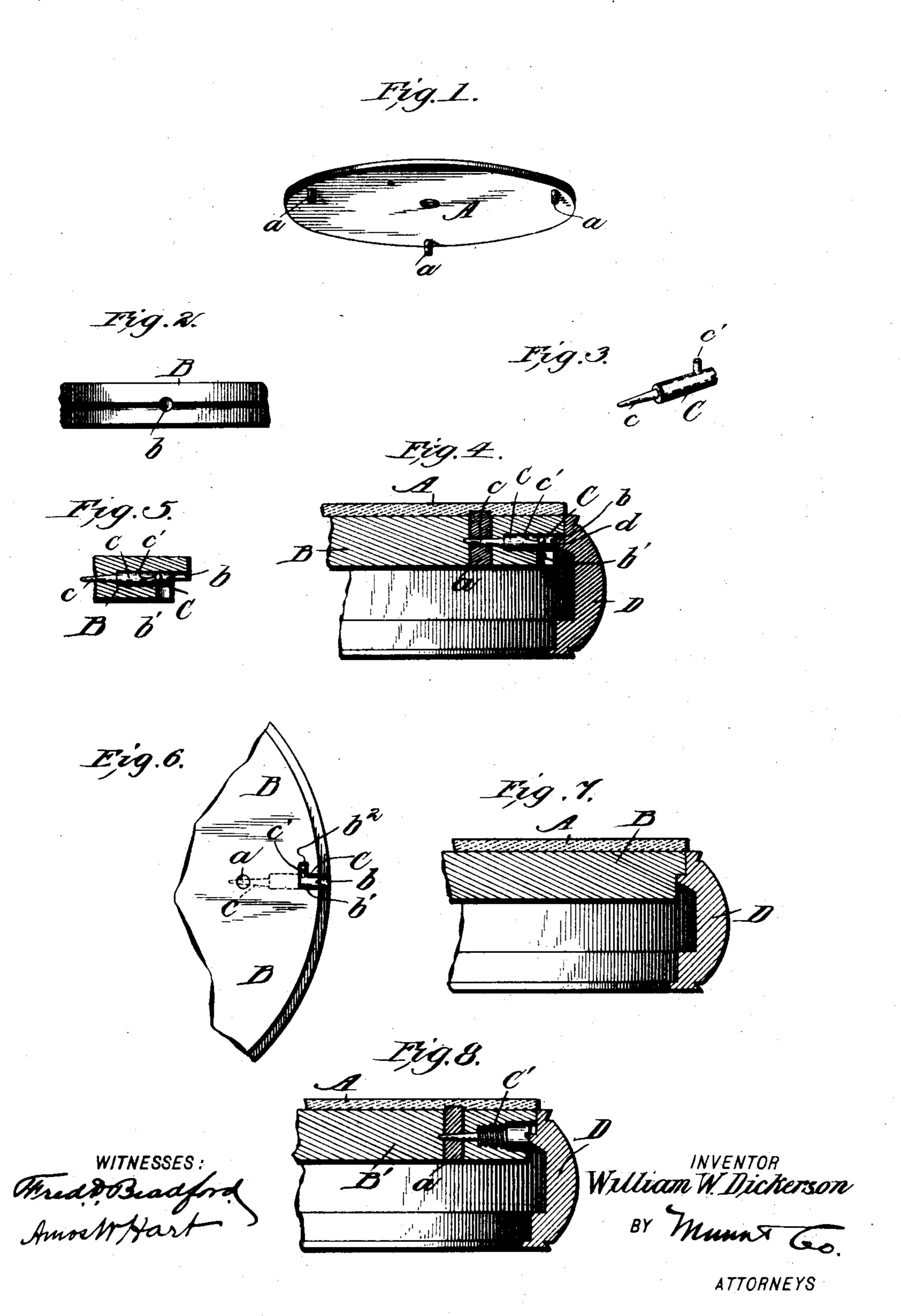
W. W. DICKERSON. FASTENING FOR WATCH DIALS.

(Application filed Jan. 8, 1902.)

(No Model.)



United States Patent Office.

WILLIAM W. DICKERSON, OF WILSON, KANSAS.

FASTENING FOR WATCH-DIALS.

SPECIFICATION forming part of Letters Patent No. 711,833, dated October 21,1902.

Application filed January 8, 1902. Serial No. 88,827. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. DICKERSON, a citizen of the United States, residing at Wilson, in the county of Ellsworth and Useful Improvements in Fastenings for Watch-Dials, of which the following is a specification.

modified form.
I will first de trated in Figs. plate A is provided in the following is a specification.

It has long been the practice to secure the ro dial-plates of watches by means of pins inserted laterally and engaging feet or pillars attached to the dials; but the pins were so inserted and arranged that they were liable to slip out of their sockets, and thus stop the 15 watchwork. Later dials were fastened by screws whose points bore against the dial feet or pillars, and thus pressed them sidewise, whereby the enamel of the dials was strained and cracked in consequence of the local lever-20 age and strain. Further, when the dial-feet gave way from pressure, the same being made of soft copper, the screws or pins would be free to work out, which they were liable to do from the effect of jarring to which watches are 25 subjected, and the pressure being thus relieved the dial would come loose. Various later attempts have been made to provide a secure fastening for dial-plates, and screws and dial-feet have been so constructed and 30 combined as to attain this result in a degree; but the object has still not been completely attained. I have devised an improvement in this line whereby the difficulties attending the usual construction and arrangement 35 of dial-plate fastenings are avoided and certain advantages are attained.

In the accompanying drawings, Figure 1 is a perspective view of a dial-plate provided with feet or pillars according to my inven-40 tion. Fig. 2 is an edge view of the pillarplate or movement-plate. Fig. 3 is a perspective view of my preferred locking device. Fig. 4 is an enlarged cross-section showing a dial-plate and locking device arranged ac-45 cording to my invention. Fig. 5 is a detail section showing a portion of the pillar-plate and the locking device with its head arranged flush therewith. Fig. 6 is a bottom plan view of the pillar-plate with dial-locking device 50 inserted in place. Fig. 7 is a transverse section of the dial-plate, pillar-plate, and case. Fig. 8 is a transverse section of the dial-plate, I

pillar-plate, case, and a locking device of a modified form.

I will first describe the invention as illus- 55 trated in Figs. 1 to 7, inclusive. The dialplate A is provided with feet or pillars a, having transverse perforations. As shown in Fig. 4, these feet a pass down into openings provided in the pillar-plate or movement- 60 plate B. The locking device shown in Fig. 3 has a cylindrical body and an alined extension - pin c, which is preferably tapered, as shown. The body of the device is further provided with a lateral arm c', and the head 65 is notched to receive a screw-driver or other tool for rotating it. Since this locking device C is inserted in place as shown in Figs. 4, 5, and 6, the extension-pin c passes not only through the pillar a, but into the opposite 70 wall or side of the pillar-plate, so that said pin is not liable to be broken off by any strain to which it may be subjected. Further, by reason of its tapered form it tends to draw the foot a inward, so as to secure the 75 dial-plate A more firmly. The cylindrical body of the locking device C enters a socket of corresponding form, and the inner end of the same abuts the inner end of the socket b, formed in the pillar-plate B. The notched 80 head of the device C is flush with the periphery of the pillar-plate B, as shown in Figs. 4 and 5—that is to say, it is flush with the lower rabbeted portion of such periphery, so that when the dial-plate and pillar-plate are placed 85 in the case D, as shown in Figs. 4 and 7, the head of the screw will abut or come in contact with the annular shoulder d of case D, whereby the locking device will be held securely in place without danger of becoming loose or 90 detached by jarring or otherwise. In fact, the locking device C cannot be detached except by first removing the pillar-plate B from the case D. As shown in Figs. 2 and 5, the opening b, in which the locking device C is 95 inserted, is formed partly in the upper wider portion of the pillar-plate.

In inserting the locking device C the arm c' is turned downward, so as to pass through the slot b', (see Figs. 4 and 5,) and the device roo is then rotated one-quarter way around, whereby said arm is carried into the lateral socket b^2 , (see Fig. 6,) which is provided in the under side of the pillar-plate. When the arm

is in this position, it effectively locks the device C irrespective of the engagement of the head of the latter with the rib d of the case D.

It will be seen that in order to detach the locking-pin C to provide for removal of the dial-plate A from the pillar-plate B it is only necessary to rotate the device a quarter-way around, and the lateral arm or lug c' being thus accessible in the slot b' in the pillar-plate. B leverage may be easily applied to said arm

10 B leverage may be easily applied to said arm for forcing the device C laterally or outward.

In the modification shown in Fig. 8 the body of the locking device C' is screw-threaded, and the socket in the pillar-plate B', in which it is inserted, is similarly screw-threaded, so that the device C' is screwed in and out in inserting and removing it, as will be readily understood.

By my improved fastening the dial-plate is secured firmly in place, so that it is not liable to become loose and to fall against the hands of the watch. Also there is no strain whatever on the feet or pillars, so that the enamel of the dial is not liable to be cracked. Further, the locking device is easily inserted and

as easily removed and when in place is locked by the portion of the watchcase surrounding the pillar-plate.

Having thus described my invention, what 30 I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the dial-plate hav-

ing a perforated foot, and a pillar-plate having a radial socket which is alined with the perforation in said foot and provided with a 35 slot-opening also at the periphery of the pillar-plate, and the locking device having a lateral lug which is adapted to move into said slot as the said device is inserted, as shown and described.

2. The combination, with a dial-plate having a perforated foot, and a pillar-plate having a radial socket alined with the transverse perforation of said foot and a lateral socket communicating with the radial one, of a lock-45 ing device, having a cylindrical body, an alined extension-pin, and a lateral arm or lug which is adapted to fit in the lateral socket provided in the pillar-plate, as shown and described.

3. The combination, with the dial-plate having a perforated foot and a pillar-plate provided with a radial socket, which is alined with the perforation in said foot, and with a slot b' which communicates radially with the socket, 55 of a locking device adapted for insertion in said socket and provided with a lateral arm or lug adapted to pass through the said slot, as and for the purpose specified.

WILLIAM W. DICKERSON.

Witnesses:

JEROME W. BRIGGS, S. B. SHORTRIDGE.