

F. MINK.
WATCHCASE.

No. 492,629.

Patented Feb. 28, 1893.

Fig. 2.

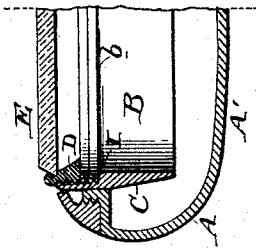


Fig. 3.

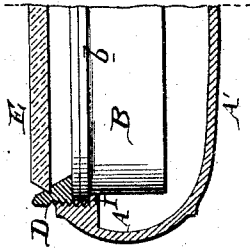


Fig. 4.

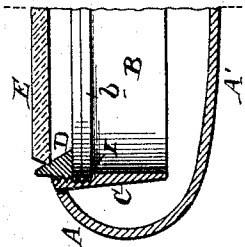


Fig. 5.

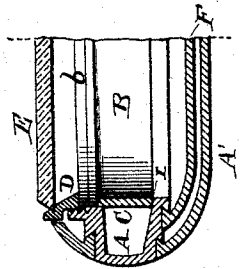
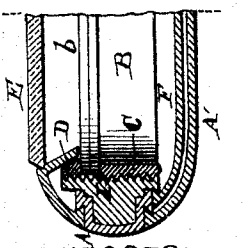


Fig. 6.



WITNESSES:

Wm. H. Mink
S. J. Gerkes

Fig. 7.

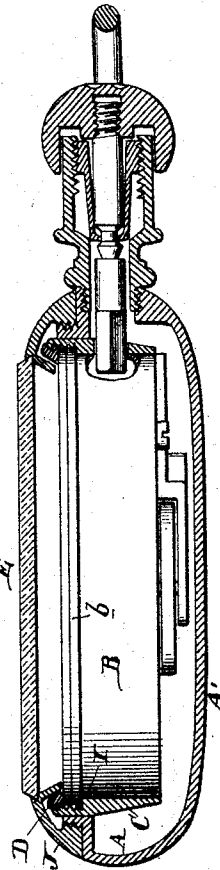


Fig. 7.

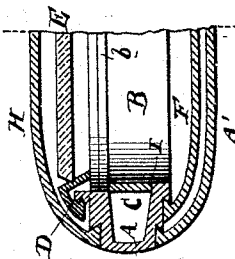


Fig. 8.

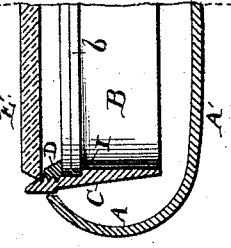


Fig. 9.

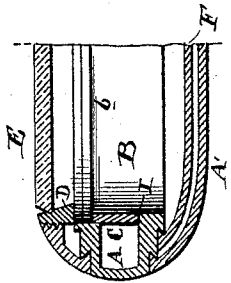


Fig. 10.

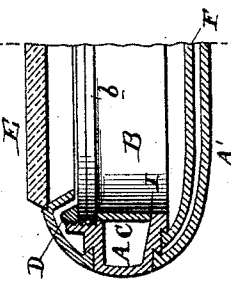
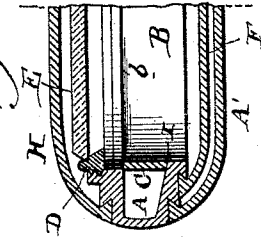


Fig. 11.



INVENTOR:

F. Mink
By Wm. H. Mink

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Fig. 12.

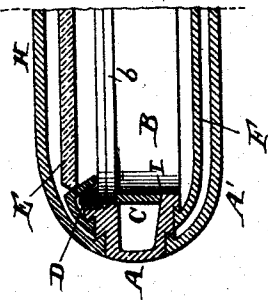


Fig. 13.

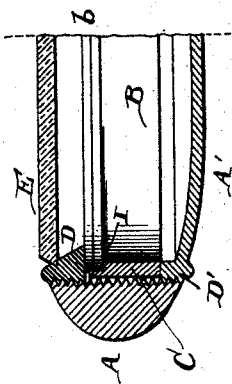


Fig. 18.

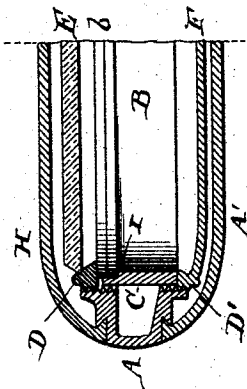


Fig. 14.

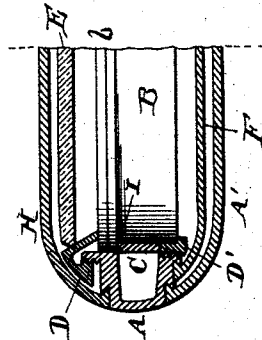


Fig. 17.

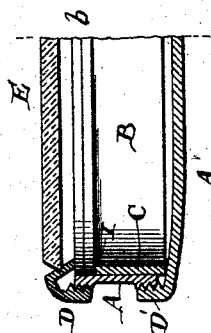


Fig. 15.

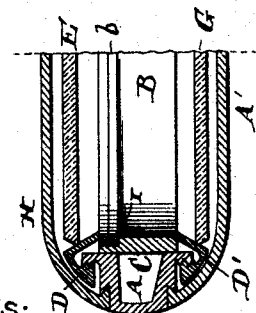
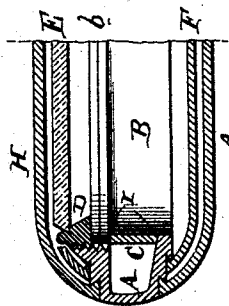


Fig. 16.



WITNESSES:

Wm. M. Mink
S. J. Yerkes

INVENTOR:

Fritz Mink
My lvs atty
J. M. Mink

UNITED STATES PATENT OFFICE.

FRITZ MINK, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE
KEYSTONE WATCH CASE COMPANY, OF SAME PLACE.

WATCHCASE.

SPECIFICATION forming part of Letters Patent No. 492,629, dated February 28, 1893.

Application filed December 19, 1889. Serial No. 334,344. (No model.)

To all whom it may concern:

Be it known that I, FRITZ MINK, of the city and county of Philadelphia and State of Pennsylvania, have invented an Improvement in Watchcases, of which the following is a specification.

My invention relates to watch cases; and consists of certain improvements which are fully set forth in the following specification and are shown in the accompanying drawings which form a part thereof.

The chief improvement of my invention consists in the devices for securing the watch movement or the movement holding ring securely and removably within the watch case, and in making those devices adjustable so as to be suited to movements of different thicknesses. It is desirable for the perfect operation of a watch movement that it should be firmly secured within the case and that the dial plate should be firmly held or secured to the front of the movement and not allowed to become loosened therefrom.

Different kinds or makes of movements are employed in watch making and these vary more or less in thickness, and, with the devices heretofore employed for securing them in the watch case, it has not been possible to adapt the same case to movements of different thickness without making alterations or changes therein. Difficulty has also been experienced in securely fastening the dial plate to the movement which is a serious matter since the loosening of the dial plate interferes with the movement of the hands and may entirely stop the watch or cause it to keep imperfect time.

The object of my invention is to overcome these difficulties, and to produce a watch case in which the movement clamping devices are adjustable so as to be suited, without change or alterations in the case itself, to movements of different thicknesses, and in which the dial plate is securely held to the front of the movement and prevented from becoming loosened therefrom.

In addition to these improvements my invention consists of certain novel combinations of parts and improvements in construction, which are hereinafter more fully described and claimed.

For securing the movement within the case I employ an adjustable clamping ring, which is screwed down upon the movement or movement holding ring so as to force it upon an annular supporting shoulder. The pressure exerted by this clamping ring is uniform about the entire rim of the movement or movement holding ring, so that the latter is secured evenly and firmly in place. By unscrewing the clamping ring the movement may be readily removed if desired. This clamping ring is screwed down to a greater or less degree to suit the thickness of the movement employed and in that manner is adjustable to different thicknesses of movements.

So far as the clamping devices for securing the movement within the case are concerned my invention is not limited to any particular construction of case and the clamping ring itself may be modified in many ways without departing from the principles of my invention and in the drawings I have illustrated many of these modifications.

Referring now to the drawings:—Figure 1 is a sectional side elevation of a watch case embodying the principles of my invention, and Figs. 2 to 18 inclusive are similar views of a portion of a watch case illustrating different modifications of my invention and showing the clamping ring applied to different kinds of cases.

In all of the figures of the drawings the same letters of reference refer to similar parts.

A is the watch case center, and A' is the back, which may be made integral with the center as a combined back and center, as shown in Figs. 1, 2, 3, 4 and 8, or separate from the center as shown in the other figures.

B is the watch movement having the usual flange b.

C is a movement holding ring which may be employed or dispensed with according to the particular construction of the watch case.

D is the clamping ring for adjustably clamping the movement of the watch.

E is the glass or crystal at the front of the watch.

F is the inner back or cap which is used in some kinds of cases and is shown in Figs. 5, 6, 7, 9, 10, 12, 14, 16 and 18.

I is an annular supporting shoulder for the flange *b* of the movement B, against which the movement is clamped by means of the clamping ring D. This shoulder is carried by the center of the watch case A and it may be made integral with the center or on the movement holding ring which is supported by the center or stationary with reference thereto. The movement B is inserted in the watch case so that its flange *b* is supported by the shoulder and the clamping ring D is then screwed to the center, so as to force the flange *b* upon the shoulder I to firmly and evenly clamp the movement in the case. It will be seen that this clamping ring D may be screwed down to a greater or less degree to suit the thickness of the movement, so that it is adjustable for different movements. Obviously this clamping ring is susceptible of a great variety of modifications without departing from the principles of the invention. In Figs. 1, 6, 10, and 12 it is shown screwed in from the front of the case independent of the glass and bezel, and it may be constructed also carrying the glass E as shown in Figs. 2, 3, 4 &c.

D' is a second clamping ring similar in general principles to the clamping ring D, which may be employed in connection with it screwed in on the opposite side of the movement, whereby the latter may be adjusted between these two clamping rings, as shown in Figs. 13, 14, 15, 17 and 18.

G (Fig. 15) is an inner glass for the back of the watch, which is used in some forms of cases and is shown in that view as carried by the clamping ring.

H is the top lid or cover shown in the hunting cases.

J (Fig. 1) is a removable bezel for the glass E.

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

1. A watch case having a flange or support

for a movement, a watch movement supported thereby, said case having a screw threaded rim of metal projecting above the movement on the face side thereof when supported by said flange, and a screw threaded adjustable clamping ring, adapted for attachment to said screw threaded rim of the case to clamp the movement upon the support or flange, having its screw threaded surface unobstructed for a depth greater than the depth of the rim of metal projecting above the face of the movement when supported by the flange.

2. A watch case provided with a flange or support for a movement, and having an annular screw threaded portion adjacent to the face side of the case, in combination with a watch movement supported by said flange, and an adjustable clamping ring adjustably attached to said case having its surface which is attached to said case provided with screw threads for said attachment and unobstructed for a depth greater than the depth of the annular screw threaded portion of the case to which it is attached.

3. A watch case provided with an adjustable flange or support for a movement, and having an annular screw threaded portion adjacent to the face side of the case, in combination with a watch movement supported by said flange, and an adjustable clamping ring adjustably attached to said case having its surface which is attached to said case provided with screw threads for said attachment and unobstructed for a depth greater than the depth of the annular screw threaded portion of the case to which it is attached.

In testimony of which invention I have hereunto set my hand.

FRITZ MINK.

Witnesses:

H. L. ROBERTS,
JOSEPH M. CANFIELD.