

(No Model.)

F. MINK.
BACK AND BEZEL FOR WATCH CASES.

No. 470,646.

Patented Mar. 8, 1892.

FIG. 1.

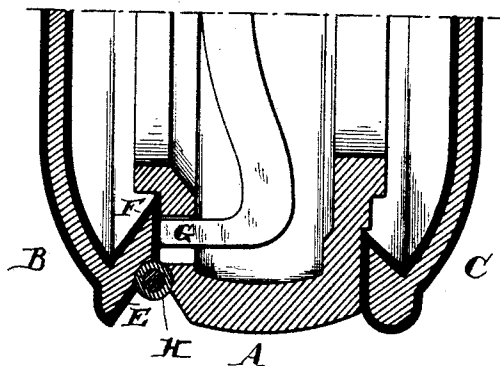


FIG. 2.

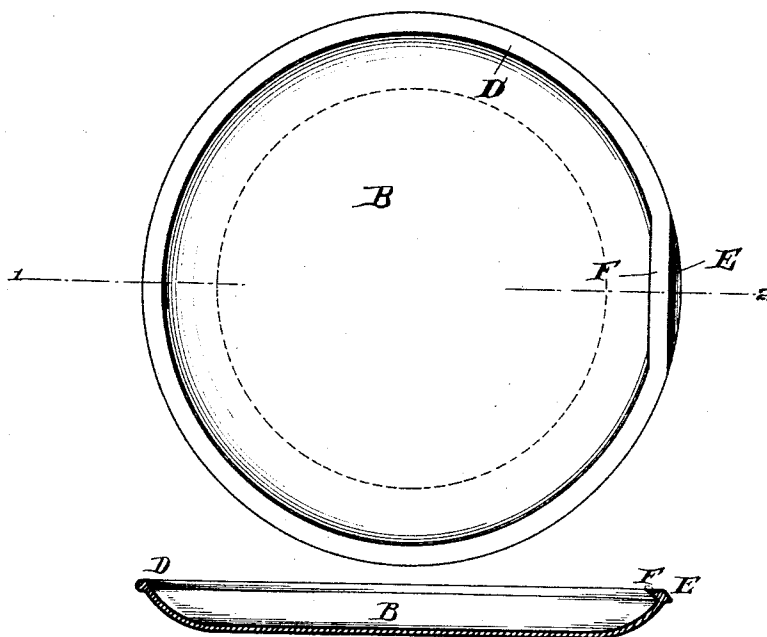


FIG. 3.

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UNITED STATES PATENT OFFICE.

FRITZ MINK, OF PHILADELPHIA, PENNSYLVANIA.

BACK OR BEZEL FOR WATCH-CASES.

SPECIFICATION forming part of Letters Patent No. 470,646, dated March 8, 1892.

Application filed October 11, 1890. Serial No. 367,845. (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
5 Covers or Bezels for Watch-Cases, of which the following is a specification.

My invention has reference to backs or bezels for watch-cases; and it consists of certain improvements, which are fully set forth
10 in the following specification and shown in the accompanying drawings, which form a part thereof.

My invention is particularly adapted to that class of watch-cases known as "filled-metal
15 cases," or those in which the interior of the metal of the case is formed of brass or a cheap composition, upon which is secured by a well-known process a layer or covering of gold. The backs or bezels are stamped out
20 of sheet metal and are formed into the requisite shape. Subsequently the hinge-flat is formed upon the said back or bezel by means of suitable apparatus, which causes the metal to flow in its cold state. By this means the
25 body of the metal is shaped without abrading the covering of gold and a hinge-flat is formed in a filled-metal case with the same continuous surface covering of precious metal with the body of the back or bezel.

Heretofore the hinge-flat has been formed
30 by filing or cutting off a portion of the metal of the rim. It is not practical to make a filled-metal case with a hinge-flat of this character because the cutting of the surface metal
35 exposes the interior base filling.

The apparatus by which my improved watch-case cover or bezel is produced is shown
40 in my application, Serial No. 374,972, filed December 17, 1890. In this application, however, I do not claim the mechanism for making the back or bezel or the process of producing it, but simply the new article of manufacture, itself independent of the machine
upon which it is produced.

Referring to the drawings, Figure 1 is a sectional elevation through a portion of a watch-
45 case, showing the construction of my improved back or bezel adjacent to the hinge. Fig. 2 is a plan view of the back or bezel,
50 looking toward the interior and showing its

construction before the hinge is applied; and Fig. 3 is a cross-section of the same on line *ax*.

A is the watch-center.

B is a cover, and C is the back, which may be made in precisely the same manner as the
55 cover. The description which applies to the cover B also applies to the back C, which is in reality the rear cover. If desired, the cover B may be formed in the shape of a bezel, as indicated in dotted lines in Fig. 2, the center
60 portion of said cover being filled with a glass or crystal.

The cover or bezel is formed of filled metal having the base interior and the thin outer
65 covering of precious metal. It is normally stamped into shape with the inwardly-projecting rim or flange D. The hinge-flat E is formed by pressing diagonally upon the rim from the outside and causing the flange of
70 the rim D to be pushed inwardly, as indicated at F in Fig. 2, maintaining at the same time the full width of the said flange, so that the cover or bezel adjacent to the hinge-flat will be as strong as the remaining portions of the
75 circumference of the cover or bezel. The metal is thus pressed into shape to form the hinge-flat of full size without cutting or abrading of the surface metal and consequent exposure of the inner base filling. The same
80 continuous surface covering of precious metal extends over the hinge-flat and body portion. In addition to the strength imparted by moving the rim or flange of the rim D inwardly, as at F, the said part F is adapted to take the
85 place of the extra piece of metal usually soldered into the cover for receiving the action of the spring G held in the center. This spring G acts upon the part F of my improved cover or bezel. If desired, the inner edge of
90 the part F, where the spring acts upon it may be slightly raised by the action of the dies, as indicated in dotted lines in Fig. 3, so that the spring will have no tendency to slip over the edge of the said part F.

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

As a new article of manufacture, a watch-
case bezel or cover consisting of an inner portion of base metal and a thin outer covering
100

of precious metal with a hinge-flat upon the
edge of the rim at an acute angle to the plane
of the rim, having the same continuous outer
covering of precious metal with the body of
5 the cover extending over and covering the
flattened portion and edge of the interior of
base metal which forms the hinge-flat.

In testimony of which invention I have here-
unto set my hand.

FRITZ MINK.

Witnesses:

ERNEST HOWARD HUNTER,
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