

(No Model.)

E. C. CHAPPATTE.
WATCH CASE.

No. 406,816.

Patented July 9, 1889.

FIG. 2

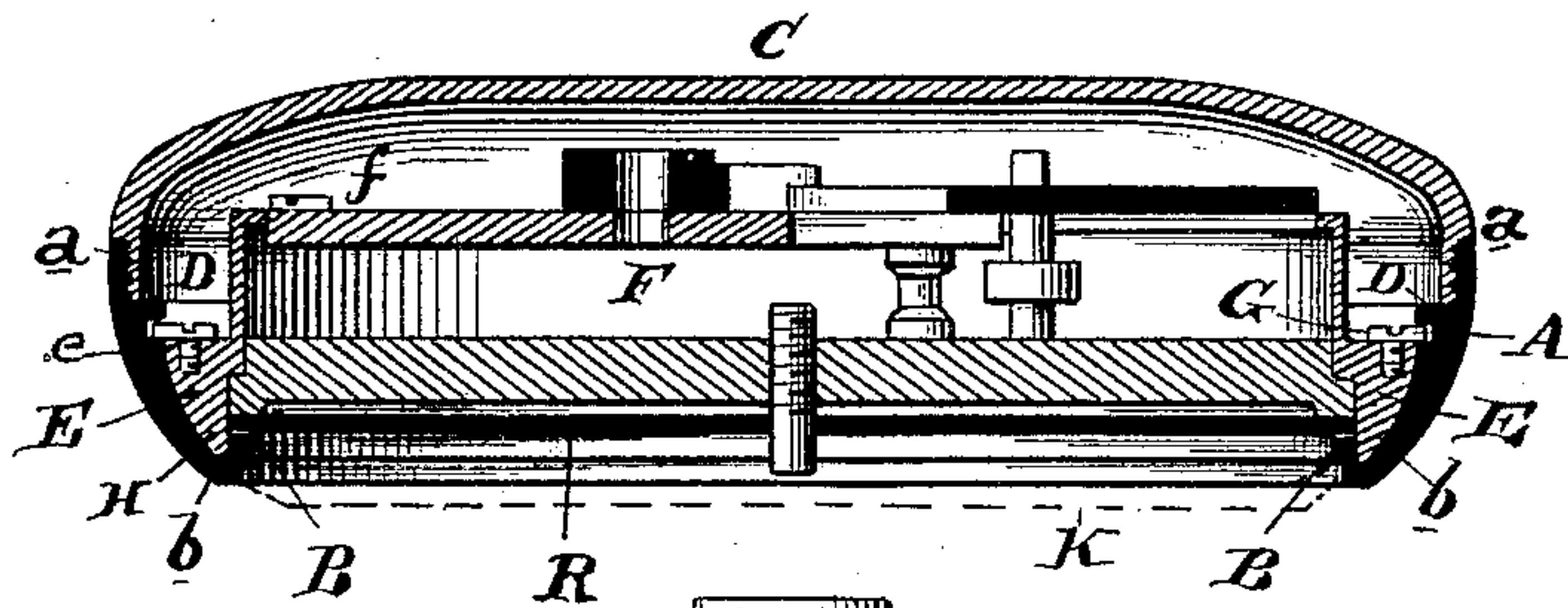


FIG. 1

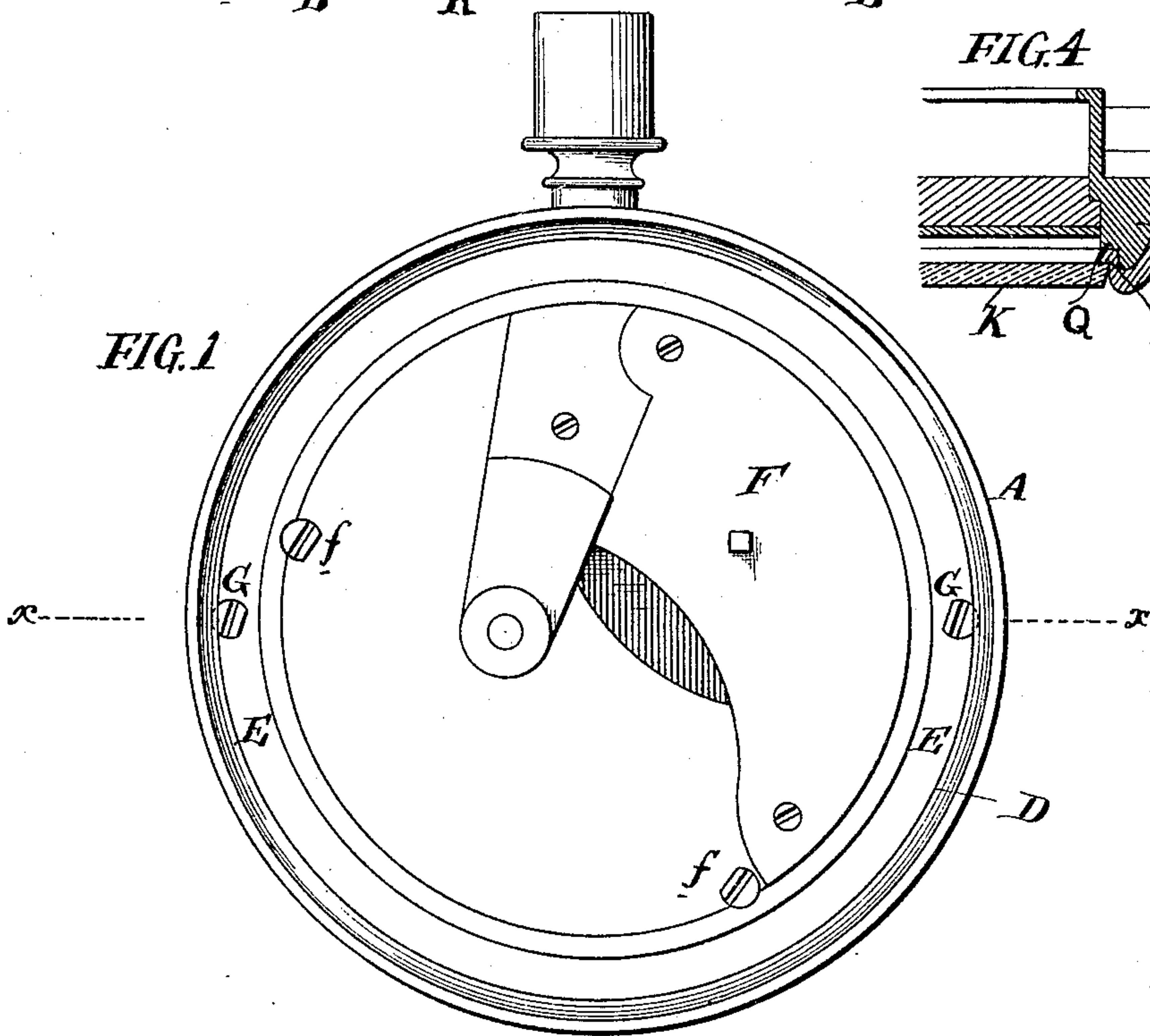


FIG. 4

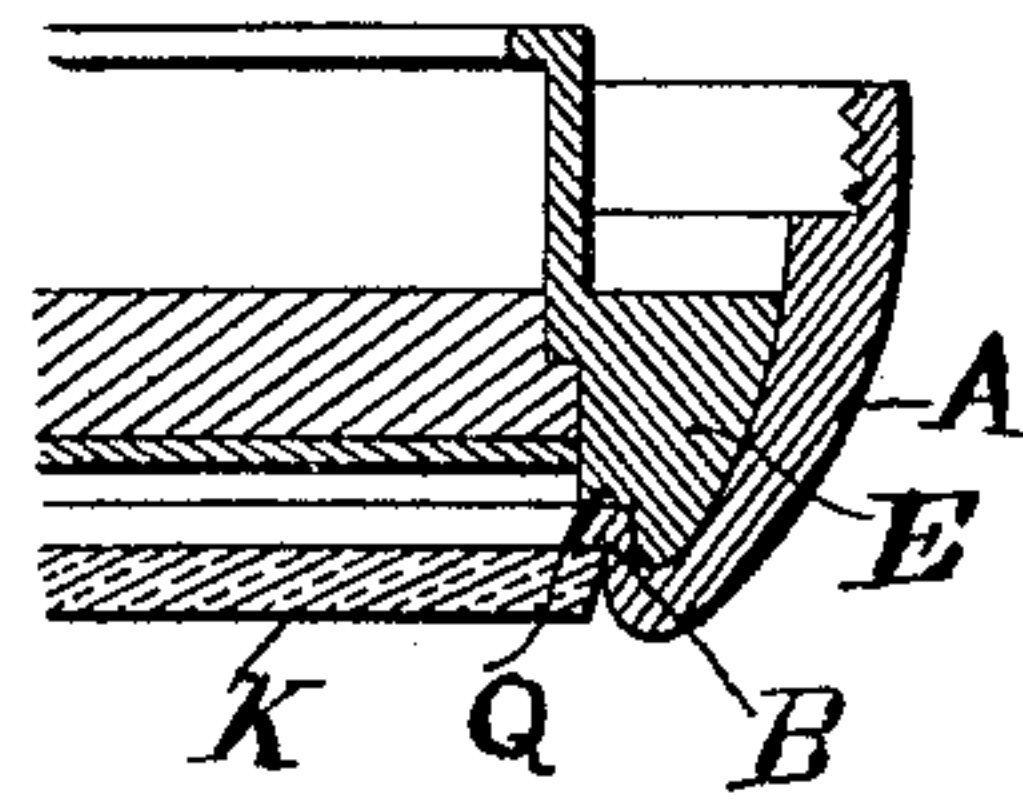
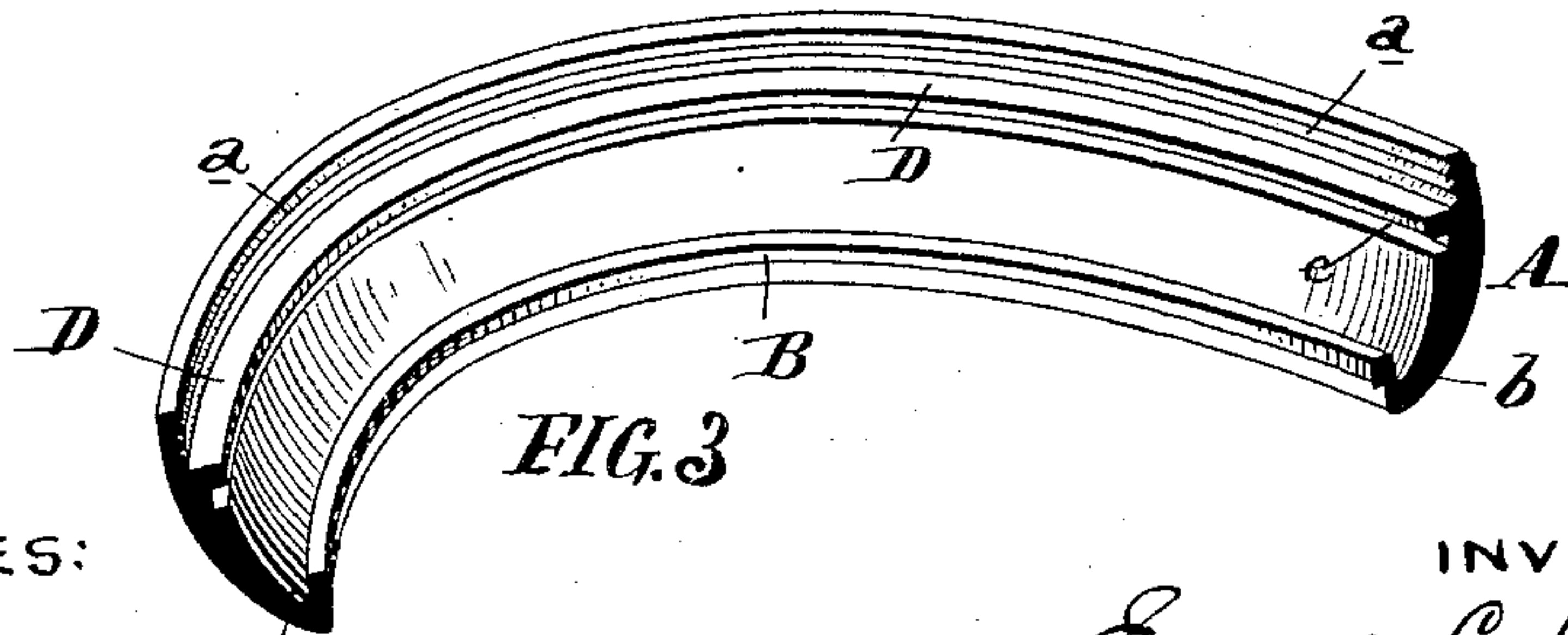


FIG. 3



WITNESSES:

Henry Drury
S. W. Breckinridge

INVENTOR:

Edward C. Chappatte
By his atty

[Signature]

UNITED STATES PATENT OFFICE.

EDWARD C. CHAPPATTE, OF PHILADELPHIA, PENNSYLVANIA.

WATCH-CASE.

SPECIFICATION forming part of Letters Patent No. 406,816, dated July 9, 1889.

Application filed March 2, 1889. Serial No. 301,730. (No model.)

To all whom it may concern:

Be it known that I, EDWARD C. CHAPPATTE, of the city and county of Philadelphia, and State of Pennsylvania, have invented an Improvement in Watch-Cases, of which the following is a specification.

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

It is the object of my invention to construct an efficient and economical dust-proof watch-case, and one in which the interior of the watch shall be protected as well at the face as at the back. It has been sought to form a dust-proof case by securing one of the caps to the movement-ring; but this is objectionable, because it places too great a strain upon the movement-ring and does not protect the works of the watch from any dust that may collect upon the dial-plate.

In carrying out my invention I form a combined center and bezel, and secure the movement-holding ring to it in such a manner that a perfectly dust-proof protection is given to the works from the front or face of the watch, and to the combined center and bezel the cap or back is screwed, forming a dust-proof joint or protection upon that side also. In this way it will be seen that the works are entirely protected. The dial-plate is pressed against an inwardly-extending part forming a reflector-rim, which construction, while reflecting the light down upon the minute-marks of the dial-plate, also forms a dust-proof joint. This joint is protected by the joint between the glass and bezel, and thus a double dust-proof joint is formed in the front or face of the case.

In the drawings, Figure 1 is a plan view of a watch-case embodying my improvements, with the cap or back removed. Fig. 2 is a cross-sectional view of the same upon the line $x x$ of Fig. 1. Fig. 3 is a perspective view of a portion of the combined center and bezel, and Fig. 4 is a sectional elevation of a modification.

A is the combined watch-case center and bezel, having the inwardly-projecting bezel reflector-rim B on the front, and provided on

the back with a threaded edge a , adapted to receive the back C. The interior of this combined center and bezel A is slightly curved, so as to form an inwardly-curving annular groove b between the inner surface of the combined center and bezel A and its bezel reflector-rim B.

D is an annular shoulder or ledge about the interior of the part A, preferably just below the screw-threaded rim a , for the purpose of securing the movement-ring E in the case. This movement-ring E contains the watch-movement F, and is constructed with an annular shoulder or step e , upon which are half-headed screws G, adapted to engage with the ledge D for the purpose of securing the movement-ring in the combined center and bezel A. These screws are partly unscrewed when the works and movement-ring are placed in position in the center, and their heads are caused to engage under the ledge D, and thus force the movement-ring down into the center and the dial-plate against the reflector-rim. The tendency of these screws is to unscrew; hence their natural tendency is also to hold the movement-ring and dial-plate R more firmly in position. This movement-ring E is formed with a curved annular flange or rim H, which extends beyond the dial-face R when the movement is secured within the ring E, and is adapted to fit closely in the groove b , so that the bezel-reflector B seats upon the dial-plate of the watch.

K is the glass or crystal, and is indicated in dotted lines. It is supported in the bezel.

The rim H and the groove b cause the parts to be exactly centered and to form a perfectly dust-proof protection for the works, which will also be effected by the seating of the bezel-reflector B upon the dial-plate, so that the works are perfectly protected in this manner on the face or front of the watch from any dust that may collect upon the dial-plate. At the back by the screwing of the cap C to the part A no dust can enter. The watch-movement F is held in the ring E by means of half-headed screws f , and it will be seen that access to the works may be conveniently had without removing the movement-holding ring from the watch-case, as is necessary in some watches, such as the "swing-

ring" cases. In place of the reflector of the bezel fitting down tightly on the dial-plate to make a tight joint, the movement-ring may have an annular flange Q, which meets the reflector-surface of the bezel and makes a tight joint, as shown in Fig. 4.

It is apparent that in place of the annular shoulder D lugs may be used to secure the movement-holding ring to the part A, or the screws G may be placed on the upper part of the shoulder D and screwed down upon the movement-holding ring; but these and other details of construction may manifestly be varied in many ways without departing from the principles of my invention, and are not to be taken as limitations thereof.

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

1. The combination of a center having a flange or rim projecting inwardly from the bezel and forming an annular groove back of the bezel, with a movement-ring formed with an annular rim extending beyond the dial-plate and within said groove and centering upon the flange.

2. The combination of a combined watch center and bezel provided with a curved annular groove about the bezel portion and on the interior of the center, a movement-holding ring secured in said combined center and bezel and provided with a curved annular rim adapted to fit into said groove, and a removable back secured upon said combined center and bezel.

3. The combination of a combined watch center and bezel provided with a curved annular groove about the bezel portion and on the interior of the center, a movement-holding ring provided with a curved annular rim

adapted to fit into said groove, a removable back secured upon said combined center and bezel, and means, substantially as described, to removably secure said movement-ring in said combined center and bezel and force said curved rim into said annular groove to form a dust-proof connection.

4. The combination of a combined watch center and bezel provided with a curved annular groove about the bezel portion and on the interior of the center, a movement-holding ring provided with a curved annular rim adapted to fit into said groove, a removable back secured upon said combined center and bezel, and means, substantially as described, to removably secure said movement-ring in said combined center and bezel and force said curved rim into said annular groove to form a dust-proof connection, consisting of a projecting ledge or flange about the surface of said combined bezel or ring and half-head screws upon said movement-ring.

5. The combination of the combined bezel and center A, having the bezel reflector-rim B, forming the annular internal groove *b*, the movement-ring E, having annular rim or flange H, fitting into said annular groove *b*, means, substantially as described, to removably secure said movement-ring in said combined center and bezel and force the flange or rim H into the annular groove to form a dust-proof connection, and a removable back secured upon the combined bezel and center.

In testimony of which invention I hereunto set my hand.

EDWARD C. CHAPPATTE.

Witnesses:

H. M. KAIN,
A. MINNICK.