

O. F. STEDMAN.

Watch Case.

No. 67,224.

Patented July 30, 1867.

FIG. 4.

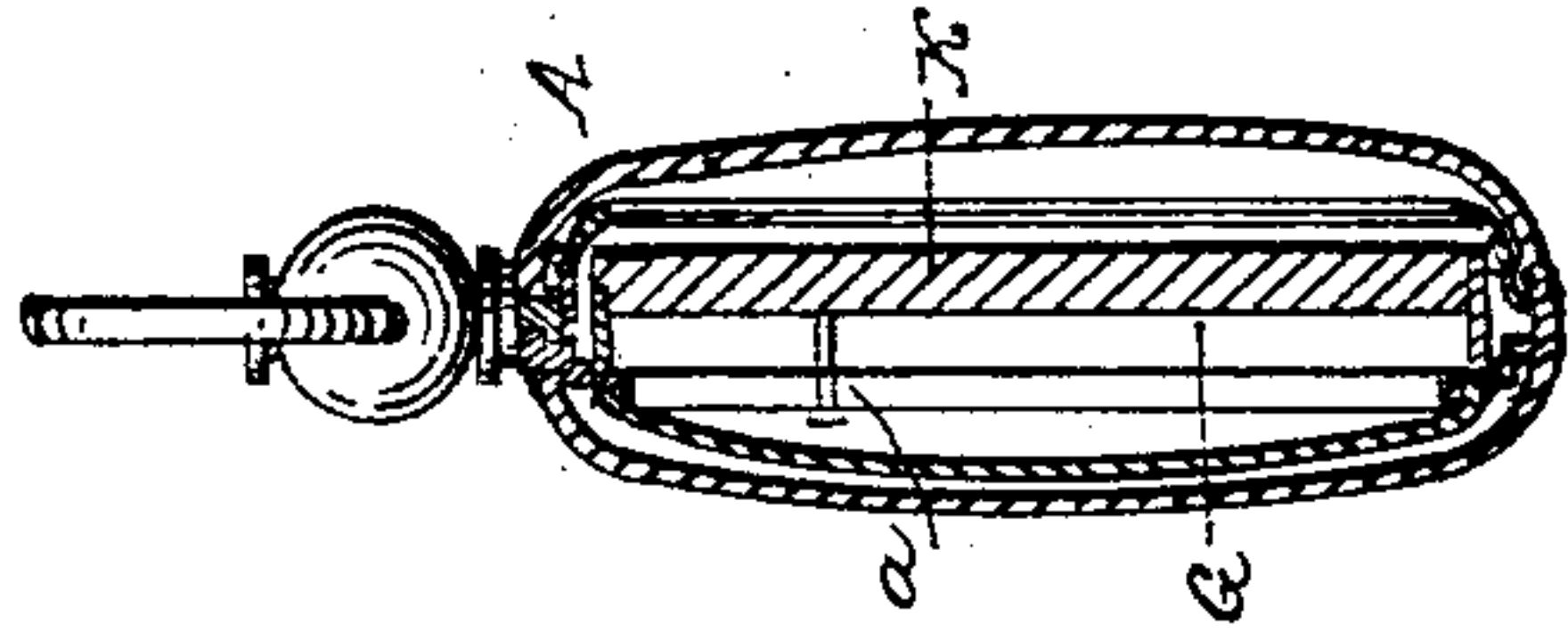


FIG. 3.

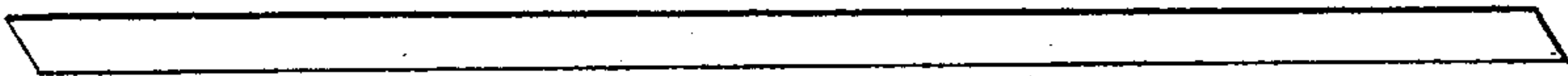


FIG. 2.

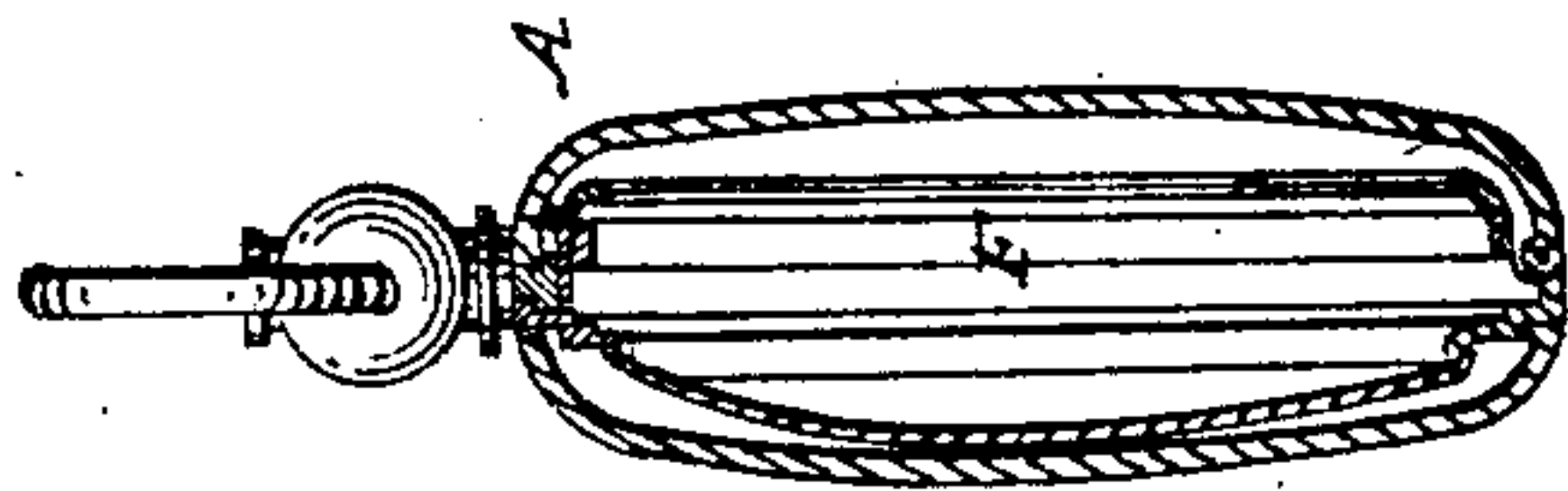
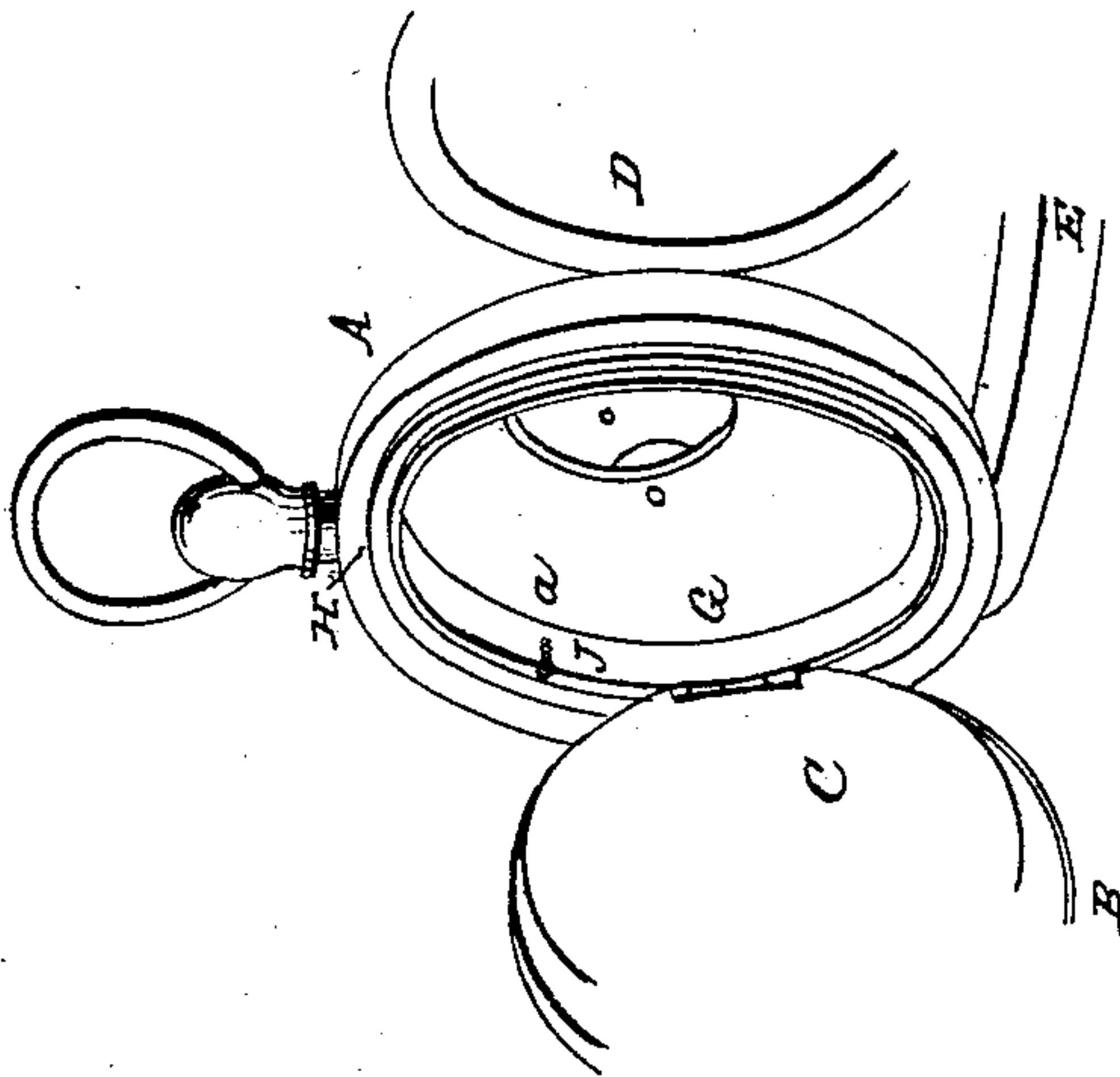


FIG. 1.



WITNESSES:

W. H. Burmidge
Frank Alden.

INVENTOR:

O. F. Stedman.

United States Patent Office.

O. F. STEDMAN, OF RAVENNA, OHIO.

Letters Patent No. 67,224, dated July 30, 1867; antedated February 22, 1867.

IMPROVEMENT IN WATCH-CASES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, O. F. STEDMAN, of Ravenna, in the county of Portage, and State of Ohio, have invented certain new and useful improvements in Watch-Cases, being an improvement on a patent granted to me January 15, 1867; and I do hereby declare that the following is a full and complete description of the construction of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the watch with the diaphragm in place.

Figure 2 is a transverse section, showing the case without the diaphragm

Figure 3 is a transverse section with the diaphragm.

Like letters of reference refer to like parts in the views.

A, fig. 1, is an ordinary hunting-watch case, B and C the back caps, D the glass frame, and E the face cap. In these cases the works are placed upon and supported by a shoulder formed around the lower edge of the rim F, and to which the face-plate is screwed or otherwise secured. In this improved case the shoulder referred to is omitted, and a diaphragm, G, fig. 1, introduced, which consists of a metallic strip G, fig. 3, cut to the proper length and width, to fit around within the case-frame, as shown in fig. 1, in which G is the diaphragm and H the frame. It will be observed that the diaphragm is not quite as wide as the thickness of the frame, and hence forms a shoulder, J, a little below the edge of the rim. This shoulder is in the same position and performs the same office of supporting the works and face-plate as the one referred to in the ordinary watch-case. The position of this diaphragm, when in place, is such as to enclose the works entirely from the channel surrounding the case, and also from the spring and hinge-slots, and thus the dust is prevented from finding its way into the works, so that they are not liable to become dirty, and, as a consequence, irregular and uncertain in their movements. It will be seen that the diaphragm rests upon the inner surface of the back of the case-frame, and as the face-plate is provided with a flange, and by which it is supported upon the shoulder formed by the diaphragm, the face-plate can therefore be made very close fitting and tight, as shown in fig. 4, in which K is the face-plate and G the diaphragm. The ends of the diaphragm are cut with a bias, so that when they are together by pressing strongly down upon them, by means of the screw *a*, it will cause it to expand, and thereby be made to press against the sides of the case with more strength, and become thereby more secure and close fitting.

The advantages of a case thus constructed are, the making of a case without the flange or shoulder commonly used to support the face-plate and keep the works from displacement; hence there is greater simplicity of construction, more durability and firmness, as the ordinary shoulder sometimes gives way to the pressure of the screw, which holds the movement in place. By thus making the diaphragm and shoulder in one is effected the twofold purpose above described, viz, the excluding the dirt and dust from the works, and the supporting the face-plate. The convenience and ease of removing the diaphragm, should the case or spring need repairing, it being slipped into its place instead of being sprung in, as in my former patent, which was necessary for the reason that the ends of the diaphragm were cut transversely, but in this case the ends being biased, it is easily loosened by inserting some thin-pointed implement behind it. The tightening of the screw which holds the movements in place secures the rim or diaphragm firmly in its place between the face-plate and back of the case-frame, and thus the joints between the face-plate and diaphragm and case are made perfectly tight. The face-plate resting directly upon the diaphragm, with no separate intervening metal, renders the joints close throughout their whole extent.

What I claim as my improvement, and desire to secure by Letters Patent, is—

The diaphragm G, when arranged in connection with the case in such a manner as to form a shoulder for the support of the movement-plate K, and so constructed that it is held in position by the movement-screw *a*, or its equivalent, substantially in the manner and for the purpose described.

O. F. STEDMAN.

Witnesses:

W. H. BURRIDGE

J. HOLMES.