

(No Model.)

A. BITNER.  
DUST PROOF WATCH PLATE.

No. 268,354.

Patented Nov, 28, 1882.

Fig. 1.

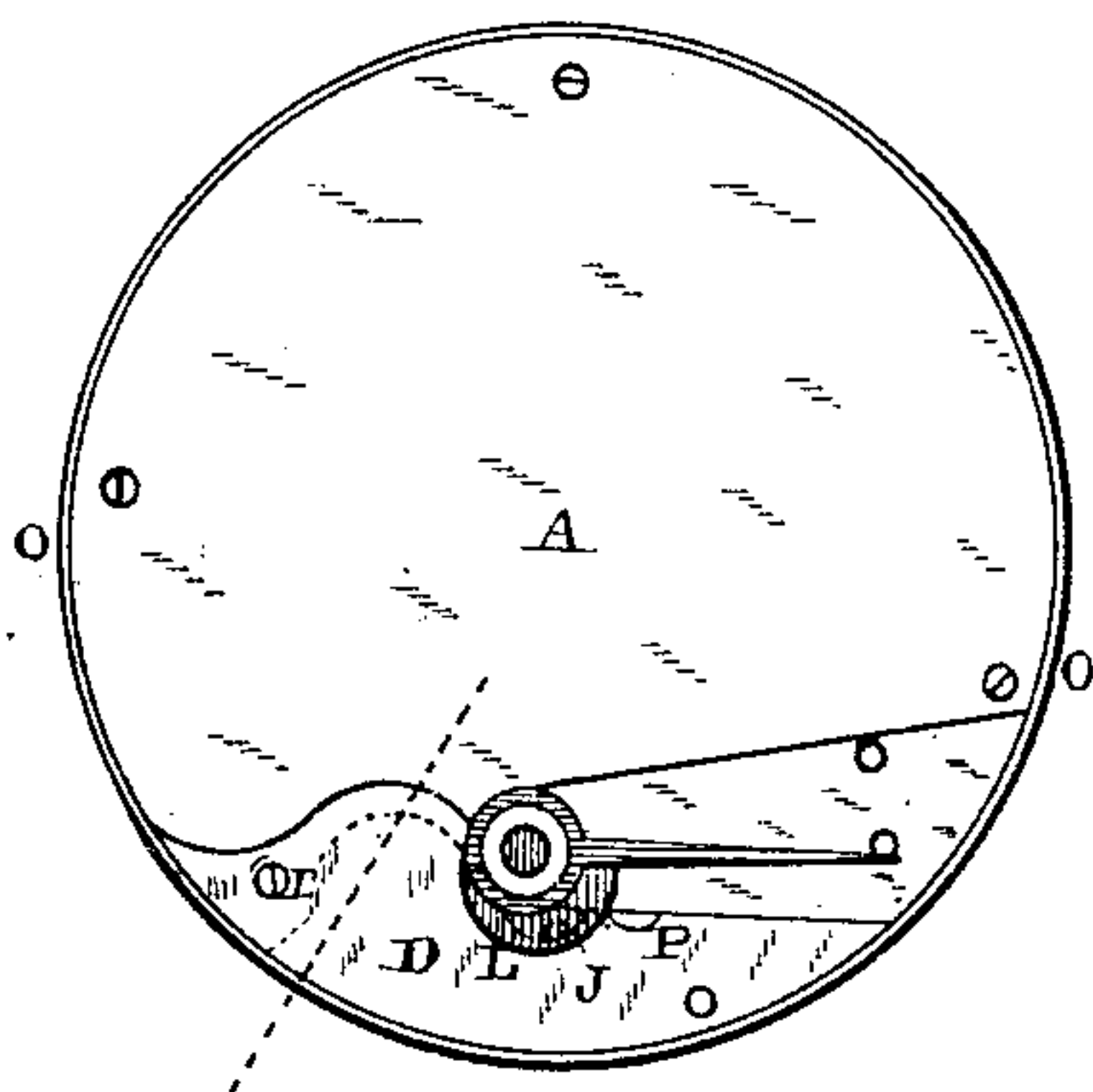


Fig. 2.

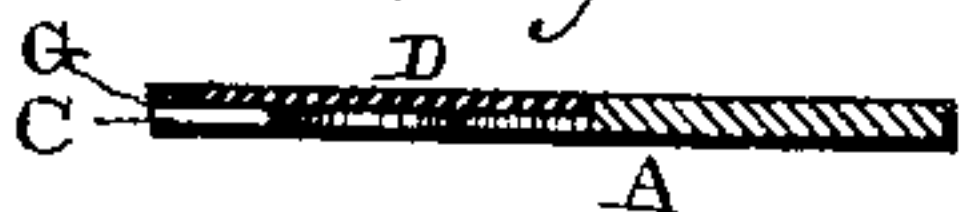


Fig. 3.

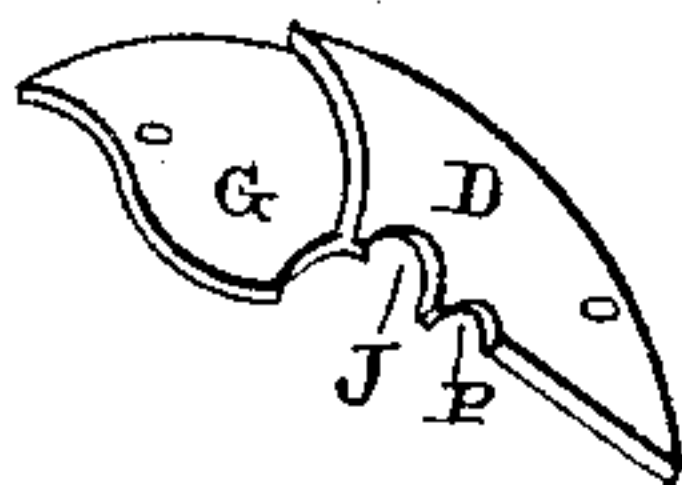
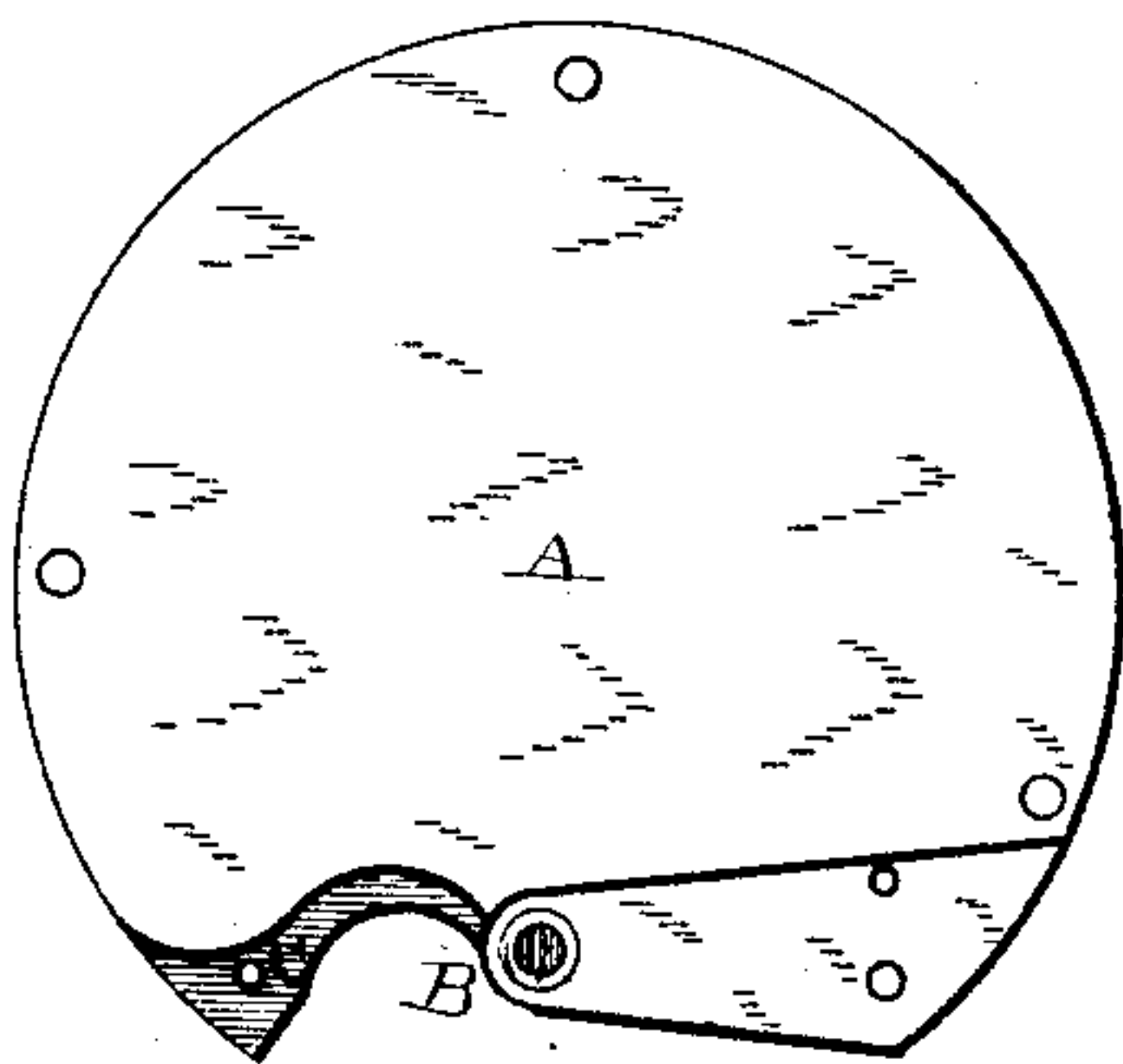


Fig. 4.



Witnesses.

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# UNITED STATES PATENT OFFICE.

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## DUST-PROOF WATCH-PLATE.

SPECIFICATION forming part of Letters Patent No. 268,354, dated November 28, 1882.

Application filed September 19, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, ABRAHAM BITNER, of Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Dust-Proof Watches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in dust-proof watches; and it consists in the combination of the cap-plate with a dust-plate that is applied thereto, so as to cover the recess or opening in the side of the top-plate without increasing the thickness of the watch-movement.

It further consists in the combination of the cap-plate, the dust-plate, and a regulator having an extension formed on its hub, the regulator-pins being made to pass down through an opening left between the edges of the plates.

It still further consists in the combination of the cap-plate, having a shoulder formed on it, with the dust-plate, having a corresponding shoulder formed on it at one end and having recesses formed in its inner edge, all of which will be more fully described hereinafter.

The object of my invention is to apply a dust-plate over the opening, which is usually made in one side of the cap-plate, so as to exclude all dust, dirt, and moisture from the works, and that without in any way increasing the thickness of the watch-movement.

Figure 1 is a plan view of a movement embodying my invention. Fig. 2 is a detail vertical section of the dust and cap plate. Fig. 3 is a perspective of the dust-plate alone; Fig. 4, a plan view of the cap-plate.

A represents the cap-plate of a three-quarter movement, and which has the opening or recess B made in one side in the usual manner. The edge of the cap-plate around this opening or recess B is cut away so as to form a shoulder, C.

Applied over the top of the recess B in the side of the cap-plate is the dust-plate D, which corresponds accurately to the shape of the recess B, though the shape of the recess need not be exactly as is shown here. This dust-plate

has a shoulder, G, formed around its inner edge, corresponding to the one formed on the cap-plate, so that the edges of the two plates will overlap each other and form a dust and moisture proof joint. This dust-plate is here shown as held in position by means of the two screws, which pass down through it into the pillar or bottom plate below; but it may be held by means of a spring or any other devices which will answer the same purposes.

In order that the two regulator-pins may pass down through the top plate, there is an opening, J, left between the edges of the dust and cap plates, and this opening is covered over by the extension L, which is formed on one side of the regulator-hub. A second but much smaller opening, P, is also left between the two edges just beyond the reach of the extension L, and this hole is closed by the head of the hair-pin stud. The dust-plate is first placed in position and then secured, and then the usual dust-band, O, is slipped down over the edges of the movement, so as to exclude the dust at these points. The dust-band and the dust-plate together enable me to produce an absolutely dust and moisture proof watch.

Having thus described my invention, I claim—

1. The combination of the cap-plate with a dust-plate, which is applied thereto so as to cover the recess or opening in the side of the top plate without increasing the thickness of the watch-movement, substantially as shown.

2. The combination of the cap-plate A, having the shoulder C, with the dust-plate D, having the shoulder G at one end and the recesses J P formed in its inner edge, substantially as described.

3. The combination of the cap-plate, the dust-plate, and the regulator having the extension formed on its hub, the regulator-pins being made to pass down through an opening left between the edges of the plates, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

A. BITNER.

Witnesses:

F. A. LEHMANN,  
LOUIS F. GARDNER.