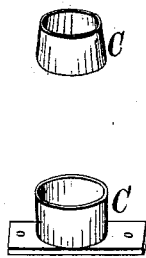


L. D. MERRILL.  
WATCH DUST-CAP.

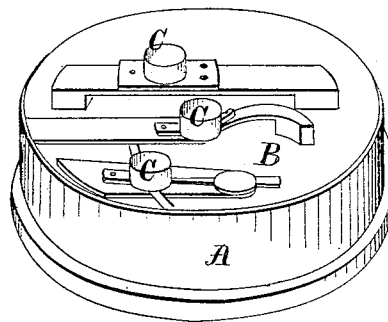
No. 190,233.

Patented May 1, 1877.

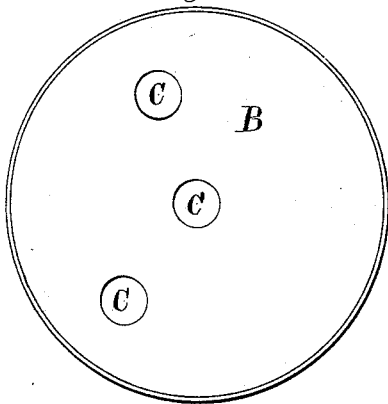
*Fig. 4.*



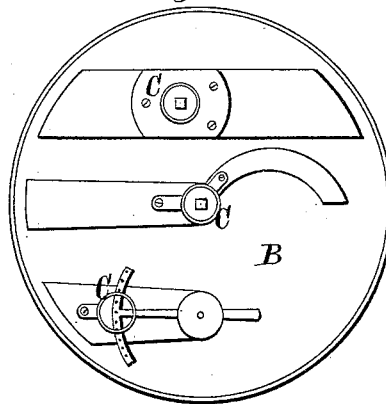
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses:*

*David C. Hoop.*  
*Mason A. Thayer.*

*Inventor:*

*Llewellyn D. Merrill.*

# UNITED STATES PATENT OFFICE.

LLEWELLYN D. MERRILL, OF SPARTA, WISCONSIN.

## IMPROVEMENT IN WATCH DUST-CAPS.

Specification forming part of Letters Patent No. **190,233**, dated May 1, 1877; application filed March 22, 1876.

*To all whom it may concern:*

Be it known that I, LLEWELLYN D. MERRILL, of Sparta, in the county of Monroe and State of Wisconsin, have invented a new and useful Improvement in Protections to Watch Movements, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to secure the movements of watches against dust and small particles of dirt, which I accomplish by the means of a glass in combination with the dust-ring A, Fig. 1, and the dust-cups C, which dust-ring and dust-cups are now in use by watchmakers.

In my improvement the works or movement of the watch are completely protected by a glass closely fitted at its outer edge all around to the dust-ring, and also closely fitted to the dust-cups around the hand-post, winding-post, regulator, &c.

I make my dust-cups in two forms: First, they are made of the same size at top and bottom, with a flange at the bottom to screw them onto the various parts of the watch; second, I make them tapering, and either with or without the flange, as shown in Fig. 4.

Figure 1 is a perspective view of my im-

provement, showing the glass attached to the dust-ring and the several dust-cups in their positions. Fig. 2 is a vertical view of the glass beveled and perforated to receive the dust-cups. Fig. 3 is a vertical view of the movements with dust-cups attached. Fig. 4 is a perspective view of the two kinds of dust-cups.

Attached to the point of the regulator is a long curved piece projecting equally on both sides. This has dents or cavities in its upper surface, which, as the regulator is turned to adjust the movements of the watch, come within the cup, and the regulator is moved and adjusted by inserting a steel point in these cavities.

I claim as my invention—

1. The regulator, constructed as described, in combination with the dust-cup, substantially as described, and for the purposes set forth.

2. The combination of the glass plate with holes for winding and regulating, dust-cups C, winding-post, and regulator, substantially as described, and for the purposes set forth.

LLEWELLYN D. MERRILL.

Witnesses:

DAVID C. HOPE,  
MASON A. THAYER.