(No Model.)

C. KISTLER.

DUST PROOF CAP FOR WATCHES.

No. 300,088. Patented June 10, 1884.

Fig. 1.

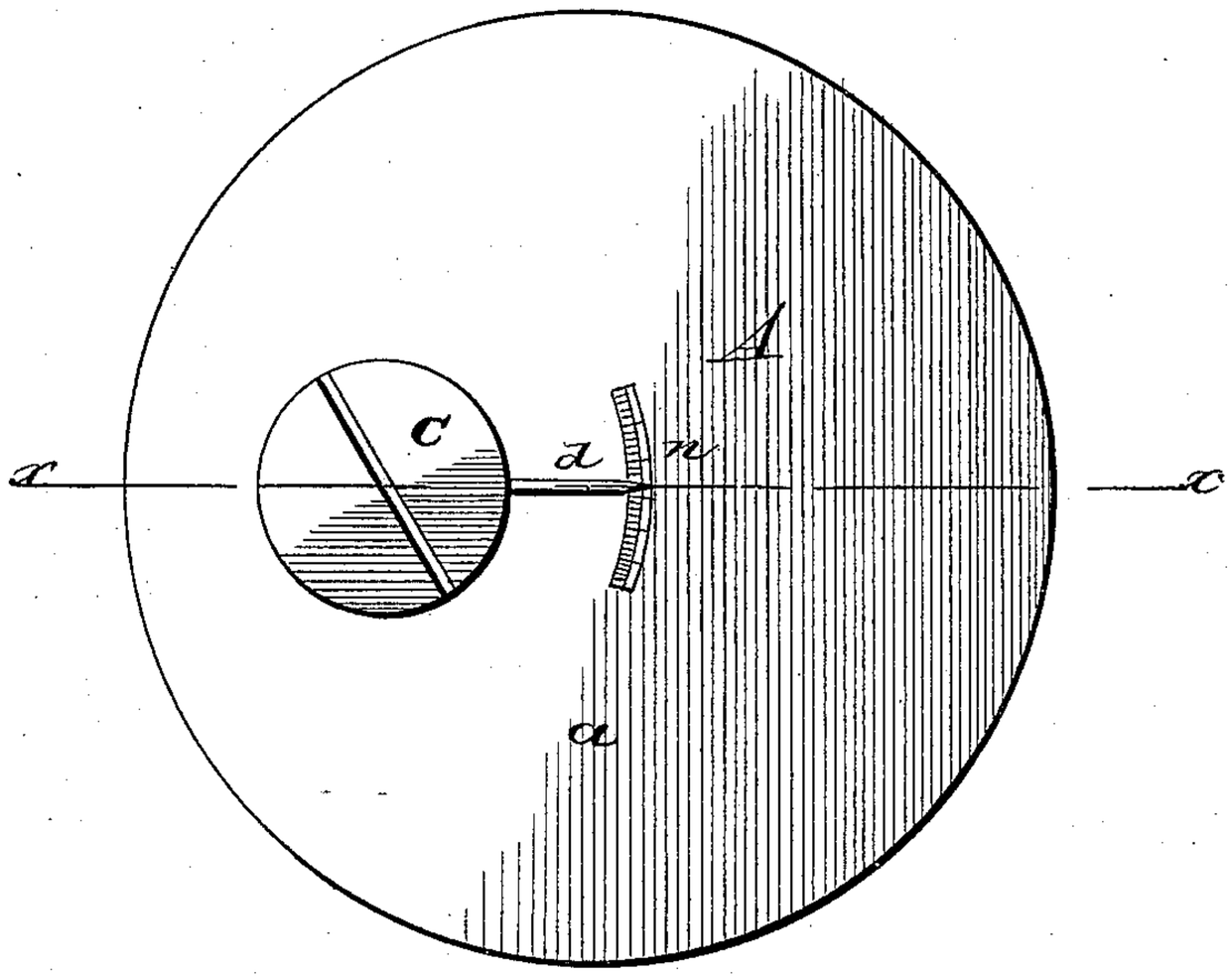


Fig. 2.

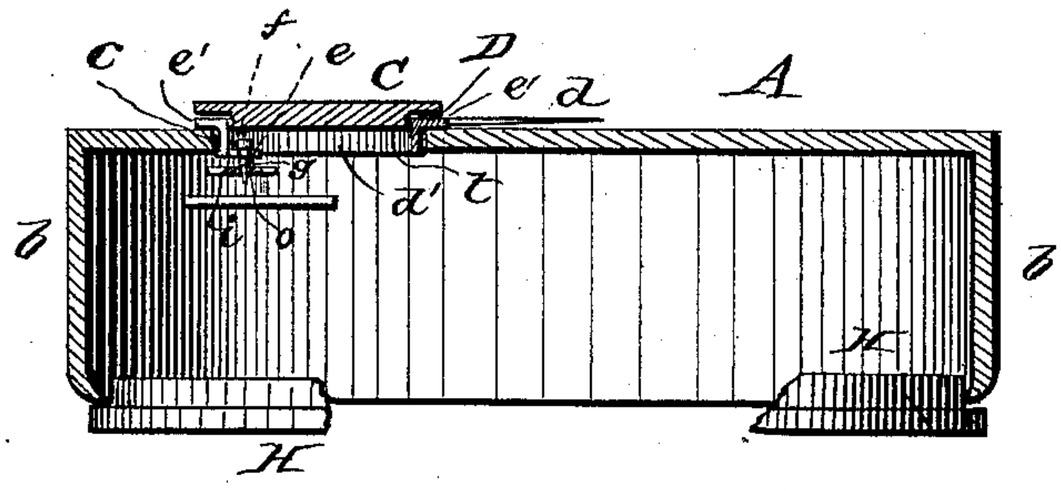
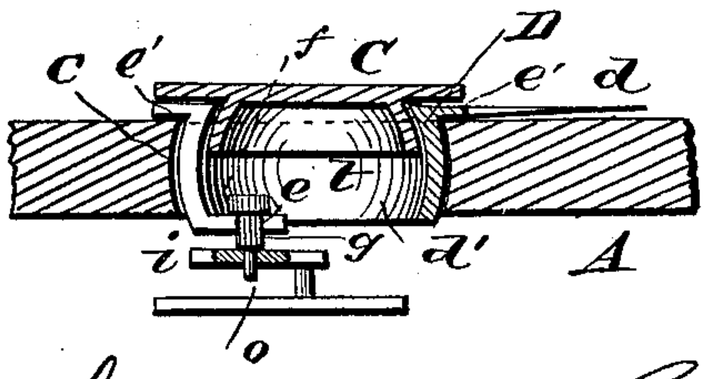


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

CASPER KISTLER, OF STERLING, ILLINOIS.

DUST-PROOF CAP FOR WATCHES.

SPECIFICATION forming part of Letters Patent No. 300,088, dated June 10, 1884.

Application filed June 4, 1883. (No model.)

To all whom it may concern:

Be it known that I, CASPER KISTLER, a citizen of the United States, residing at Sterling, in the county of Whiteside and State of Illinois, have invented certain new and useful Improvements in Dust-Caps for 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in watches, whereby I provide an absolute dust-tight cover or cap, which incloses the entire works of the watch, and at the same time combines with it a method for regulating the movement of the works without removing or in any way interfering with the cap.

In the drawings, Figure 1 is a plan view of a watch embodying my invention. Fig. 2 is a sectional view of Fig. 1 through the line *x x* thereof. Fig. 3 is an enlarged sectional detail.

A is a dust-cap of any desired metal—brass being best adapted to its manufacture—and is formed from one entire piece, and composed of the flat surface *a* and flange or rim *b*. The lower edge of the flange *b* is drawn slightly inward, so that when the cap is formed to adjust itself closely to the periphery of the plate H, to which all the works of the watch are fastened, it may be sprung onto such plate H so firmly that it will exclude every particle of dust, or moisture even, from coming in contact with the works of the watch. In the surface *a* of the cap A, I form the graduated scale *n*, and at a point directly over the regulator of the watch I cut the annular hole *c* of any diameter I desire, but usually of about one-fourth inch in diameter, as shown.

D is a ring of metal provided at one side and on a plane with its upper surface, with the regulating-indicator *d*, and also on its inner surface with the small lug *e*, through which lug is the threaded hole *f*. The ring D is not continuous, but is slotted through at a point directly opposite the indicator *d*. The ring D, by pressing it together, can be inserted into the annular hole *c* of the dust-cap A, and when the pressure is removed it will conform closely to the walls of such hole. To secure such close conformation of the ring D to the hole *c*, I form such ring D with the wall *d'* and flange *e'*, so that when the ring D is in position the flange *e'* fits closely against the upper surface of the cap, and the outside of the wall *d'*, being convex, passes under the lower surface of the cap A, so that it cannot shake out or become dislodged. Through the threaded lug *e* passes a screw, *g*, the point of which is reduced in size and shouldered against the threaded part thereof. Through the regulating-arm *i* of the watch I form the small hole *o*, into which I pass the shouldered point of the screw *g;* then, by moving the indicator *d* to the right or left, the ring D also turns, and the screw *g*, being fastened in the lug *e*, and also connected with the regulator-arm of the watch, moves such regulator as desired.

C is a lid to close the hole *c*, and has on its inner surface the rim *t*, which, like the outer wall of the ring, is outwardly convex, and springs into and firmly fits the inner side of the ring D, the rim *t* being deep enough to entirely close the opening made by the slot in the ring D.

The dust-cap here shown is intended for stem-winding watches only, and when used, as it easily can be, for a key-winding watch it is provided with a key-hole covered by a spring-slide. It can also be raised in the center so as to admit an elevated train, as is used in some watches.

It has long been a desideratum in the art of watch-making to provide some plan to keep the works of a fine watch free from dust and dampness, and when such a result is reached the usefulness of the watch is greatly increased.

I am aware that a great many inventions are in use to accomplish this object; but some of them are signal failures and others too expensive on account of their complicated structure. Some watches are manufactured with a plate which almost covers the entire works of the watch, and are also provided with a rim or ring around the works; but experience has taught that every avenue must be closed against dust, and no crack or crevice be permitted to reach the works.

What I claim as my invention, and desire

to secure by Letters Patent of the United States, is—

The dust-cap A, provided with the flange or side *b*, and hole *c*, the latter having concave walls, in combination with the open ring D, provided with the indicator *d* and lug *e*, and having its exterior fitted to conform to the sides of the hole *c*, and its interior walls slightly concave, and the lid C, having its periphery slightly convex to fit in and be held by the interior walls of the ring D, and slightly enlarged vertically on a portion of its outer edge, to fill the interval in the open ring D, whereby the ring D is sprung into the hole *c* and held therein by its own elasticity, and the lid C clamped within such ring D, and such hole effectually closed, substantially as shown and for the purpose described.

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

CASPER KISTLER.

Witnesses:

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