(Model.)

G. E. HART.

WATCH PLATE.

No. 293,018. Patented Feb. 5, 1884.

Fig. 1.

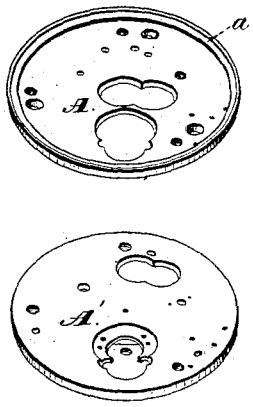


Fig. 2.

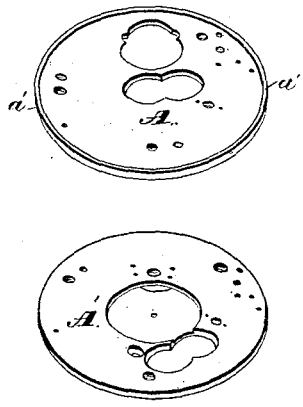


Fig. 3.

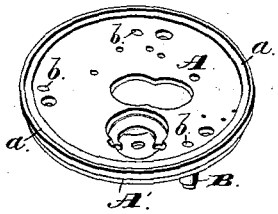


Fig. 4.

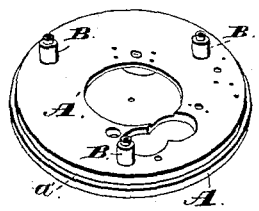
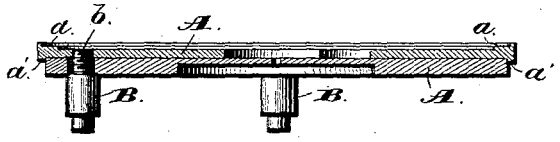


Fig. 5.



Witnesses.
Jas. E. Hutchinson.
Henry C. Hazard.

Inventor.
Geo. E. Hart, by
Pindle and Russell, his attys

UNITED STATES PATENT OFFICE.

GEORGE E. HART, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE WATERBURY WATCH COMPANY, OF SAME PLACE.

WATCH-PLATE.

SPECIFICATION forming part of Letters Patent No. 293,018, dated February 5, 1884.

Application filed November 3, 1883. (Model.)

To all whom it may concern:

Be it known that I, GEORGE E. HART, of Waterbury, in the county of New Haven, and in the State of Connecticut, have invented certain new and useful Improvements in Watch-Plates; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the outer sides of my plate-sections before they are combined. Fig. 2 is a like view of the inner sides of the same. Fig. 3 is a perspective view from the dial side of said sections combined. Fig. 4 is a like view of the same from the train side, and Fig. 5 is a central cross-section upon lines *x x* of Figs. 3 and 4.

Letters of like name and kind refer to like parts in each of the figures.

In the construction of watches it has heretofore been customary to form the bottom or pillar plate from a solid piece of metal, which was first turned to thickness and diameter and recessed from opposite sides for the various pinions, wheels, click, click-spring, &c., each recess requiring the separate chucking of the plate, and rendering necessary as many distinct operations as there were recesses. To obviate such an amount of manipulation and to correspondingly lessen the expense of the completed plate is the design of my invention.

It consists, principally, as an article of manufacture, in a watch-plate constructed of two sections separately formed, pierced, and recessed, and then secured together by screw end pillars, substantially as and for the purpose hereinafter described.

It consists, further, in a watch-plate composed of two separate plates superimposed one upon the other, and united together so as to form one plate, substantially as hereinafter shown and described.

It consists, further, in a watch-plate composed of two separately-formed full sections, which are united by means of the pillars, substantially as and for the purpose hereinafter set forth.

It consists, finally, as an improvement in the setting of jewels, in a watch-plate composed of two separately-formed full plates which are superimposed one upon the other and fastened together, and have their contiguous faces recessed to receive and contain the jewels, substantially as and for the purpose hereinafter shown and described.

In the annexed drawings, A represents the outer section of my pillar-plate, which section has its outer face recessed to the usual depth below its edge, and is provided immediately within said edge with the usual rabbet, *a*, for the reception of the dial. The inner face of said section is plane, except that at its edge is an annular flange, *a'*, which projects slightly above said face, and has an interior diameter that corresponds to the exterior diameter of the ordinary casing-shoulder of a pillar-plate.

Fitted loosely within the flange *a'* and against the inner face of the section A is a disk, A', which forms the inner section of my watch-plate. Said disk or section has plane faces, and has such peripheral dimensions as to enable it to fit into a case in the usual manner. Each of the sections A and A' is pierced with the necessary holes, and has cut within or through it the recesses required for the reception of the hour-wheel, minute-wheel, dial-wheels, and winding-wheels, after which said sections are secured together and in the proper relative positions by means of the usual pillars, B, each of which has its threaded end *b* passed through the inner section, A', and screwed into the outer section, A. The openings *a²*, for the passage of said threaded ends *b*, have with relation thereto such diameters as to cause said pillars to hold said sections in their proper relative circumferential positions, while the shoulder formed by the junction of the body of each pillar with its said threaded part bears upon the outer face of said section A', and causes said section to be drawn firmly against and securely held upon said section A, the result being the production of a pillar-plate which is in all respects the substantial equivalent of the solid plate heretofore employed.

When jewels are to be set within the plate, the requisite pivot-holes are pierced in the sections and within the contiguous faces of the same. Around each hole are formed re-

cesses which correspond to and are adapted to receive the desired jewel. Before said sections are united, the jewels are placed in position, where they are securely held by the operation of the pillars. Jewels thus inserted can be readily placed in or removed from position, and enable repairs to be made without injury to or defacement of parts, and in a fraction of the time usually required.

Where cap-jewels are used, they may easily be secured in place, and the end shake adjusted by means of a screw, C, tapped into the pivot-hole of the outer section.

By my construction of a watch-plate nearly all of the recesses for the reception of wheels can be formed by punching-dies, as most of such recesses have a depth equal to the thickness of one of the sections, and its sides are formed by making a plain opening through one section, and its bottom by the inner face of the opposite section, the result being a considerable saving in time and expense.

Another saving is effected in forming the periphery of the plate, as each section can be accurately sized by shaving-dies instead of being turned in a lathe.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

1. As an article of manufacture, the watch-plate constructed of two sections separately formed, pierced, and recessed, and then secured together by screw end pillars, substantially as and for the purpose described.

2. A watch-plate composed of two separate full plates superimposed one upon the other, and united together so as to form one plate, substantially as shown and described.

3. A watch-plate composed of two separately-formed full sections, which are united by means of the pillars, substantially as and for the purpose set forth.

4. As an improvement in the setting of jewels, a watch-plate composed of two separately-formed full plates, which are superimposed one upon the other and fastened together, and have their contiguous faces recessed to receive and contain the jewels, substantially as and for the purpose shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 6th day of October, A. D. 1883.

GEORGE E. HART.

Witnesses:
GEO. E. TERRY,
CHARLES S. CHAPMAN.