

(Model.)

G. E. HART.
WATCH DIAL.

No. 293,170.

Patented Feb. 5, 1884.

Fig. 1.

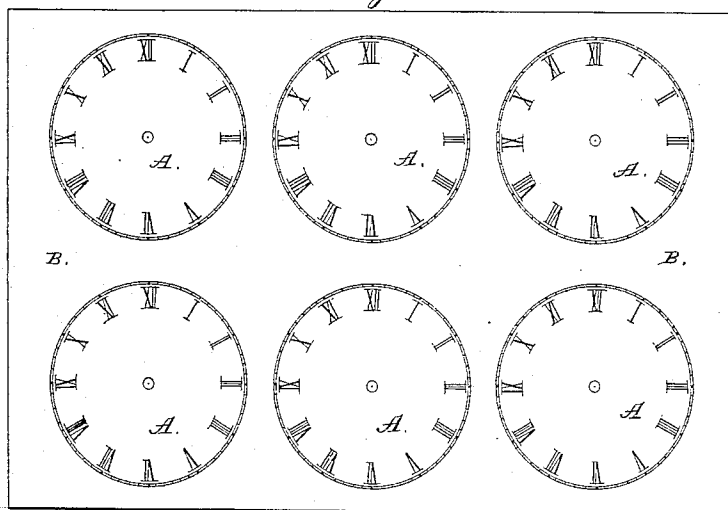


Fig. 2.

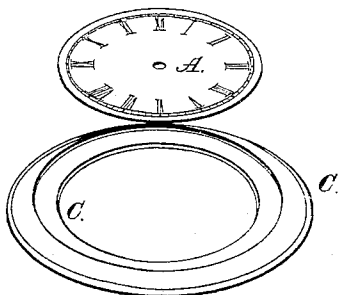
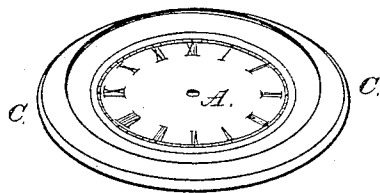


Fig. 3.



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

Inventor.
Geo. E. Hart, by
Cindler & Russell, his Attys.

UNITED STATES PATENT OFFICE.

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

WATCH-DIAL.

SPECIFICATION forming part of Letters Patent No. 293,17C, dated February 5, 1884.

Application filed September 10, 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-Dials; 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 plan view of a sheet of watch-dials constructed by my new process. Fig. 2 is a perspective view of the parts of my dial separated from each other, and Fig. 3 is a like view of said dial completed and ready for use.

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

The design of my invention is to improve the quality and to lessen the cost of watch-dials; to which end said invention consists, as a new article of manufacture, in a watch-dial composed of a metal base or body covered with paper which has printed upon its surface the necessary letters, figures, or characters, and time-division marks, and such surface then coated with and protected by means of celluloid, substantially as and for the purpose hereinafter specified.

In the construction of my dials A, a sheet of suitable paper, B, is subjected to the action of an engraved plate, and upon its surface produced the necessary division-marks, letters, figures, or characters for a number of dials, after which said sheet is coated upon its printed surface with a water-proof material, preferably

a solution of celluloid dissolved in alcohol and ether, and said sheet then passed between rollers or subjected to the action of a press for the purpose of giving a finish to said surface thus coated. Each dial is now cut from the sheet and is applied to a metal plate, C, and caused to adhere thereto by means of any suitable adhesive preparation. A dial thus constructed costs but a fraction of the expense necessary for the production of an enameled dial. Its durability is greater in consequence of the flexibility of its surface and the impossibility of injuring the same by any ordinary usage, and it is more accurate in its time divisions and figuring than would be possible to any other kind of dial.

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

As a new article of manufacture, a watch-dial composed of a metal base or body covered with paper which has printed upon its surface the necessary letters, figures, or characters and time-division marks, and such surface then coated with and protected by means of celluloid, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 20th day of July, 1883.

GEORGE E. HART.

Witnesses:

E. L. BRONSON,
GEO. S. PRINDLE.