

G. A. HARMOUNT.
Clock-Dial.

No. 212,220.

Patented Feb. 11, 1879.

Fig. 1.

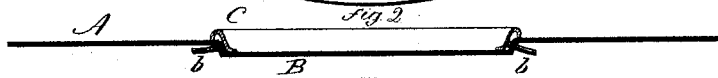
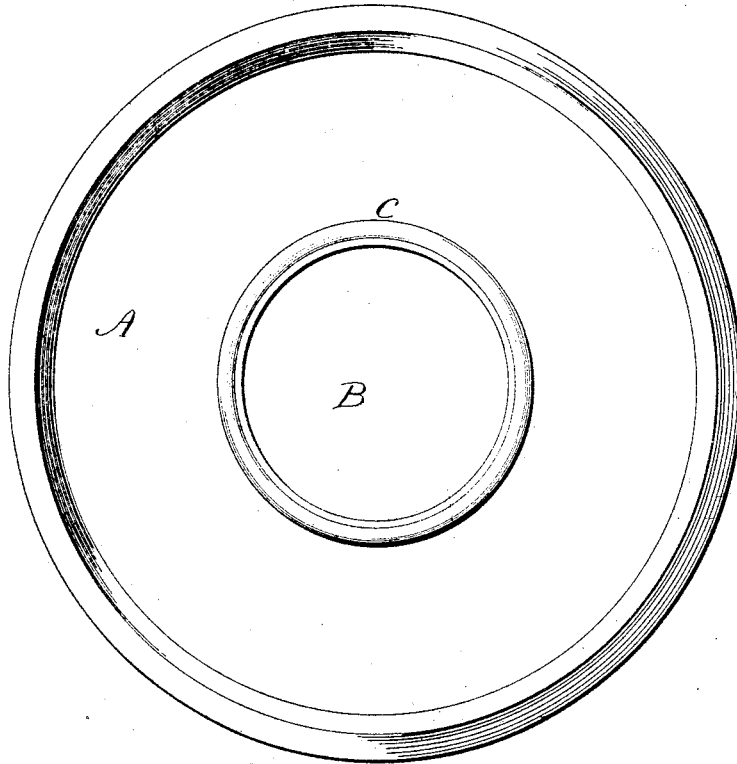
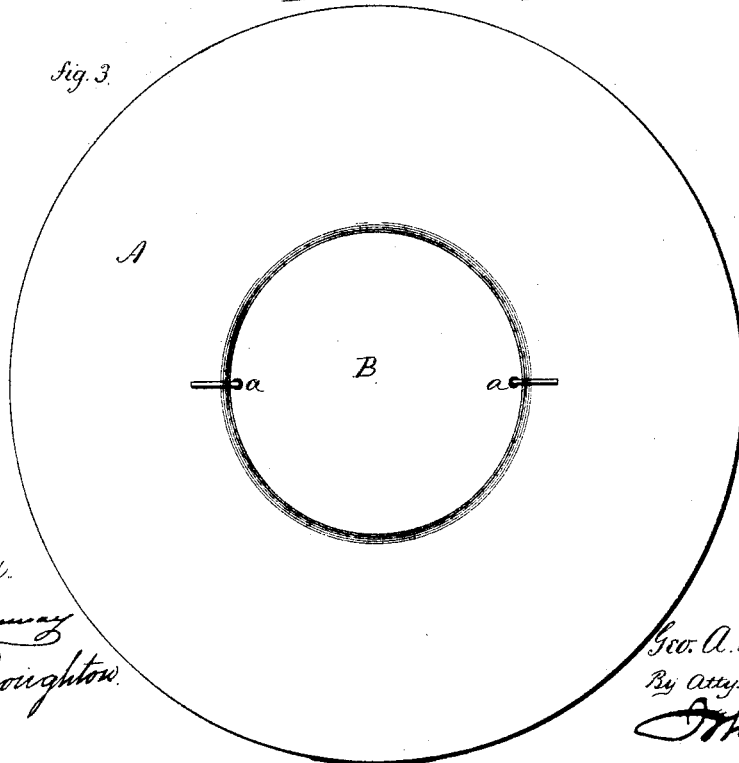


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE A. HARMOUNT, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE
NEW HAVEN CLOCK COMPANY, OF SAME PLACE.

IMPROVEMENT IN CLOCK-DIALS.

Specification forming part of Letters Patent No. **212,220**, dated February 11, 1879; application filed
September 23, 1876.

To all whom it may concern:

Be it known that I, GEORGE A. HARMOUNT, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Clock-Dials; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, which said drawings constitute part of this specification, and represent, in—

Figure 1, a front view; Fig. 2, a transverse section, and in Fig. 3 a rear view.

This invention relates to an improvement in the manufacture of that class of clock-dials known as "French dials," or such as are made with a central concentric recess. This recess is desirably bordered with a gilt molding, raised above the principal dial, and extending inward to the depressed portion of the dial.

Various devices have been employed to cheaply produce this class of dials; but until this improvement the requisite cheapness of construction has not been attained to adapt these dials to the cheaper classes of clocks.

This invention consists in constructing the dial-plate with a central depression, and then introducing the mat or molding, and securing it by means of perforations through the dial, as more fully hereinafter described.

The dial-plate has usually been made by cutting the center from a disk of zinc, soldering a mat to the ring, and then a central disk to the inner edge of the mat. In this improvement I make the center and outer ring in one and the same piece.

From a disk of zinc or other suitable metal the dial-plate A is cut, and in its center the required depression B is formed, and at two or more points near the angle of the depression a perforation, *a*, is made through the disk. A molded mat, C, is formed by spin-

ning or striking a ring into the required shape, so that its outer edge will lie upon the outer portion, A, and the inner edge extend inward toward the center onto the depression, as seen in Fig. 2. This mat has attached to it, upon the rear side, pieces of wire or pins *b*, corresponding to the perforations *a* through the dial-plate, and so that when the mat C is placed in position these pins will pass through the said perforations, and then bent down upon the rear surface of the dial, as seen in Fig. 2, and so as to firmly hold the mat or molding in place; or, if preferred, a drop of solder may be dropped upon the perforations *a*, and, flowing through, unite with the inner surface of the mat, and thereby secure the mat in place; but the pins are preferable, because they avoid the liability of discoloring the dial or mat by the heat of the solder.

It is not essential that the central portion, B, of the dial should remain, as that may be cut away, as for alarm-clocks. The method of attaching, however, will remain the same.

I do not broadly claim constructing the central or molded mat independent of, and securing the same to, the dial-plate, as such, I am aware, is not new.

I claim—

The dial having a plane surface, on which are designated the hours of the day, and provided with a sunken center inside of said plane surface, and of same piece with the same, in combination with the ornamental ring provided with fastening-prongs, which extend through the dial at the junction of the said plane surface and sunken center, substantially as described, and for the purpose specified.

GEO. A. HARMOUNT.

Witnesses:

J. H. SHUMWAY,
CLARA BROUGHTON.