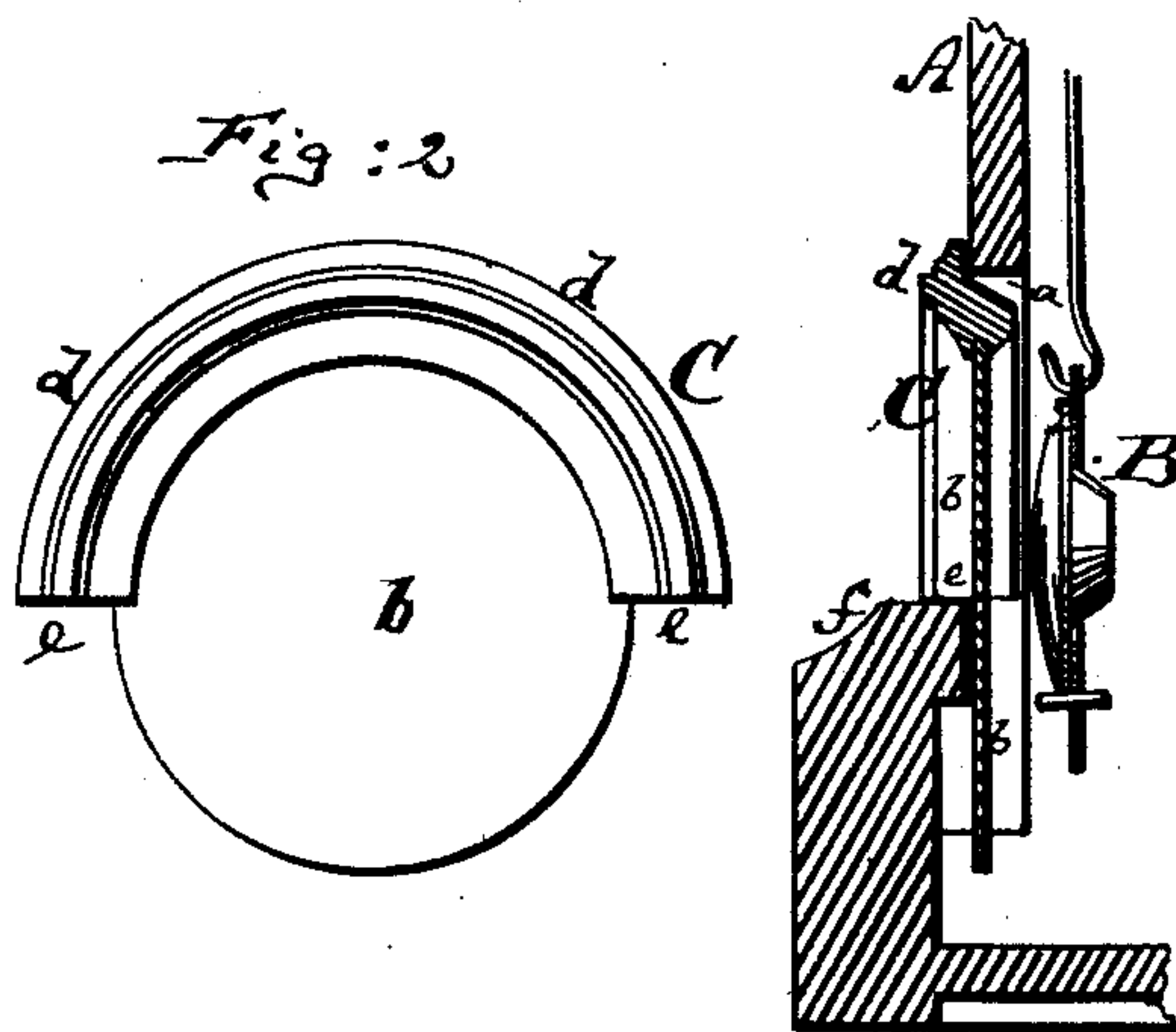
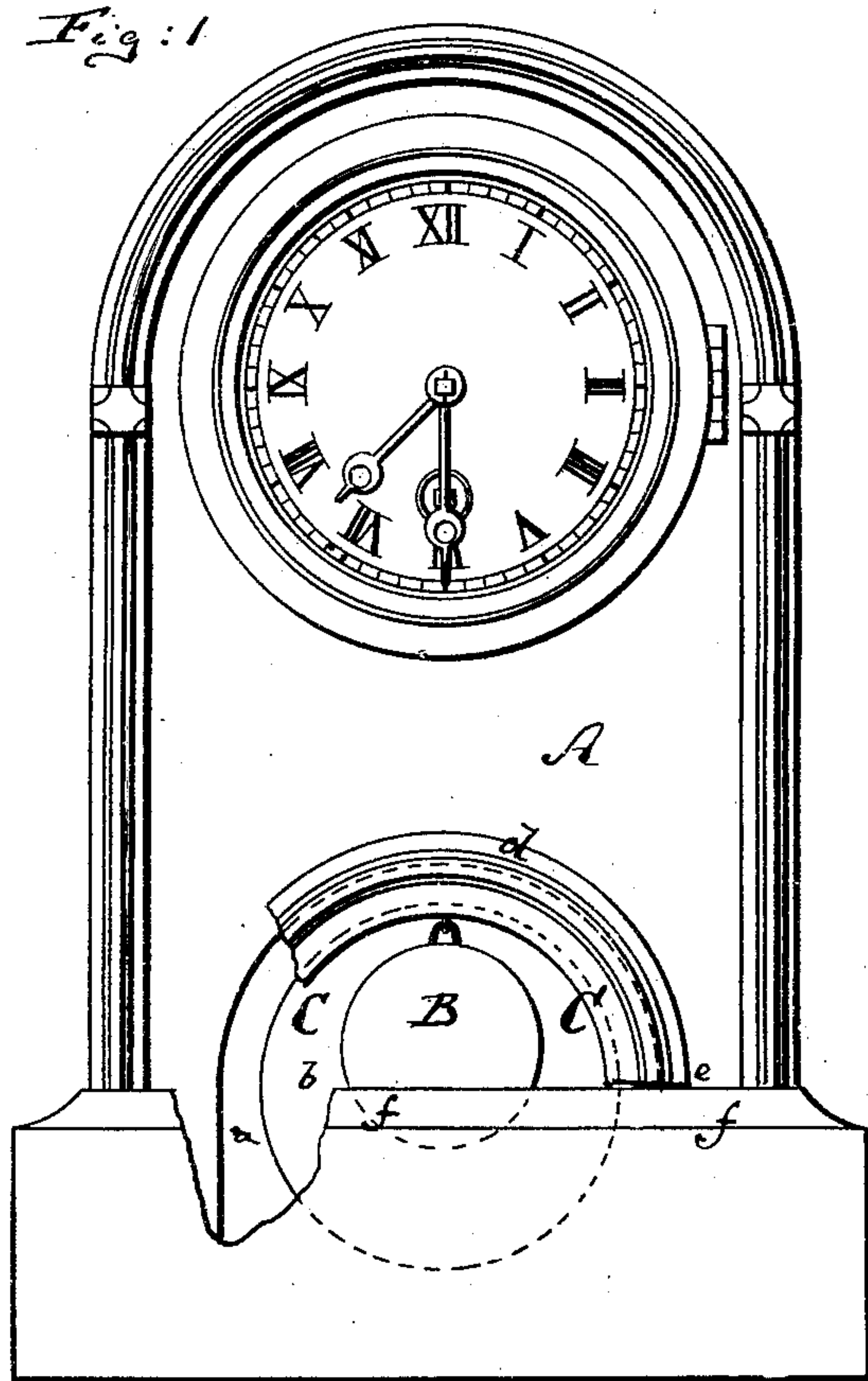


F. KROEBER.

CLOCKS.

No. 180,138.

Patented July 25, 1876.



*Witnesses:*  
*A. Moraga.*  
*J. Turk.*

*Inventor*  
*F. Kroeber*  
*by his attorney*  
*Ch. Briesen*

# UNITED STATES PATENT OFFICE.

FLORENCE KROEBER, OF HOBOKEN, NEW JERSEY.

## IMPROVEMENT IN CLOCKS.

Specification forming part of Letters Patent No. **180,138**, dated July 25, 1876; application filed July 3, 1876.

*To all whom it may concern:*

Be it known that I, FLORENCE KROEBER, of Hoboken, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Clocks, of which the following is a specification:

Figure 1 is a face view, partly in section, of my improved clock. Fig. 2 is a detail face view of the improved transparent drop-gate devised by me; Fig. 3, a vertical transverse section of the same.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to a new drop-gate placed in clock-cases in front of the pendulum, to give access thereto. My invention consists in making the same of glass, of which the upper part is set in a frame, that supports the gate upon the base of the clock-case.

The letter A represents the case of the pendulum-clock. In front of this case an aperture, *a*, is left, to allow access to the pendulum B, and to allow its height to be regulated, and its motion to be arrested or started. This aperture *a* is closed by my improved removable drop-gate C, which is constructed of a plate, *b*, of glass, and of a projecting border or rim, *d*, that embraces the upper part of said glass. The ends or shoulders *e e* of said bor-

der *d* serve to support the drop-gate in a vertical position on the projecting base or molding *f* of the clock-case, and in this position the lower part of the glass *b* extends behind the base, as in Fig. 3, and aids in holding the gate in position, leaving it, however, freely removable. The upper part of the glass closes the aperture *a*, and yet allows the pendulum to be seen, so that one can always know whether the clock-work is in motion or not.

By using glass in the drop-gate, as stated, I attain the additional advantage of clearing the pendulum, as the glass is comparatively thin and strong. Wood could not be made so thin without danger of warping, and, if thicker, is apt to come in contact with the pendulum and stop the work.

I claim as my invention—

The transparent drop-gate C, constructed of the glass plate *b* and of the border *d*, which forms the shoulders *e e*, substantially as specified.

The foregoing description of my invention signed by me this 30th day of June, 1876.

FLORENCE KROEBER.

Witnesses:

ERNEST C. WEBB,  
A. V. BRIESEN.