

T. DICKINSON.
Device for Illuminating Clock-Dials, Signs, &c.

No. 196,972.

Patented Nov. 13, 1877.

Fig. 1.

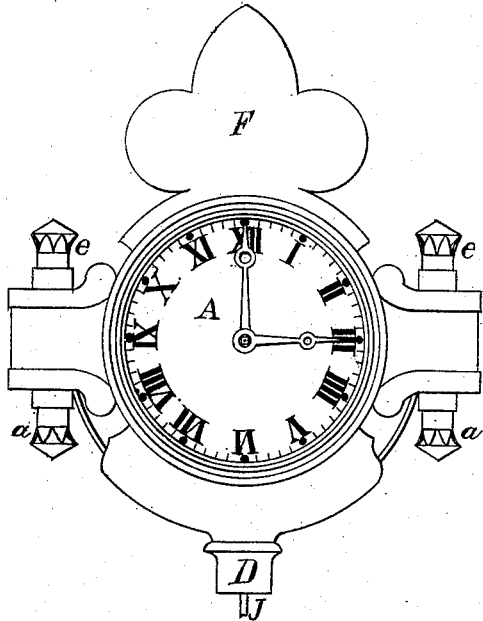


Fig. 2.

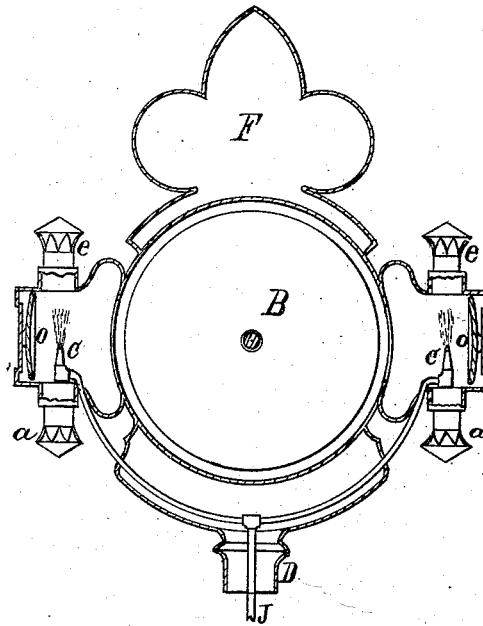
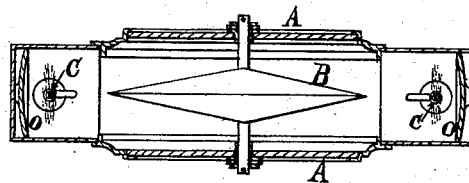


Fig. 3.



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Witnesses

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN DEVICES FOR ILLUMINATING CLOCK-DIALS, SIGNS, &c.

Specification forming part of Letters Patent No. **196,972**, dated November 13, 1877; application filed September 27, 1877.

To all whom it may concern:

Be it known that I, THOMAS DICKINSON, of the city of Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Illuminating Dials for Street Clocks and Signs; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention has for its object a cheap, simple, and far more perfect means of illuminating the dials of street and tower clocks, also signs, so they will appear far more brilliant than by any other method that has hitherto been employed.

The nature of this invention consists chiefly in the combination of a reflector, a reflecting-deflector, and gas-jets, by which means all the rays of light are thrown upon the dial in the night, so that the time or hour of night may be readily read.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure I represents a front elevation of a street-clock without a pedestal. Fig. II represents a longitudinal vertical sectional elevation, showing one side of the deflector and gas-jets on each side. Fig. III is a central horizontal section of Fig. I.

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

A represents the dial of a clock, figured in the ordinary way, which is made of transparent material—ground glass being the best, it being opaque in the day and transparent in the night. It may be of any desired dimensions. B represents the reflecting-deflectors, that are conical in form, and are placed base to base, with apexes coincident with the axis of the clock-hands.

C C represent gas-jets at each edge of the deflectors. At *aa* are several orifices made in the jacket which surrounds and incloses the gas-burners, for the purpose of admitting oxygen to the burners to facilitate combustion; and at *ee* are also orifices, provided for the purpose of ventilation. D represents the socket by which the dial is secured to the pedestal, and J shows a section of gas-pipe, through which the gas is conducted to the burners. F F are ornaments, that may be made of any suitable design. O O are reflectors of suitable size and form, set in a position so that their faces are at right angles with the base plane of the deflectors, and their centers in a horizontal line with the latter.

The operation or result produced by this invention is very effective and simple, and easily understood. The light is radiated in every direction from the burners, and those rays which fall upon the reflector O are thereby thrown upon the deflector B, and aid in illuminating the clock-dial or sign, as the case may be. Any color of light may be thrown upon the dial by means of colored shades or chimneys being placed over the burners.

My invention does away with all soot and smoke, that by any other plan, heretofore, could not be avoided, and which required cleaning daily in order to keep the dials transparent.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is—

The reflecting deflectors B B, reflectors O O, in combination with gas jets or burners C C and transparent dial-surface A, substantially as herein shown and described, and for the purposes set forth.

THOMAS DICKINSON.

Witnesses:

P. P. JOSEF,
W. T. GETTY.