(No Model.)

C. H. FARLEY.

Lamp Reflector.

No. 231,159. **Patented Aug. 17, 1880.**

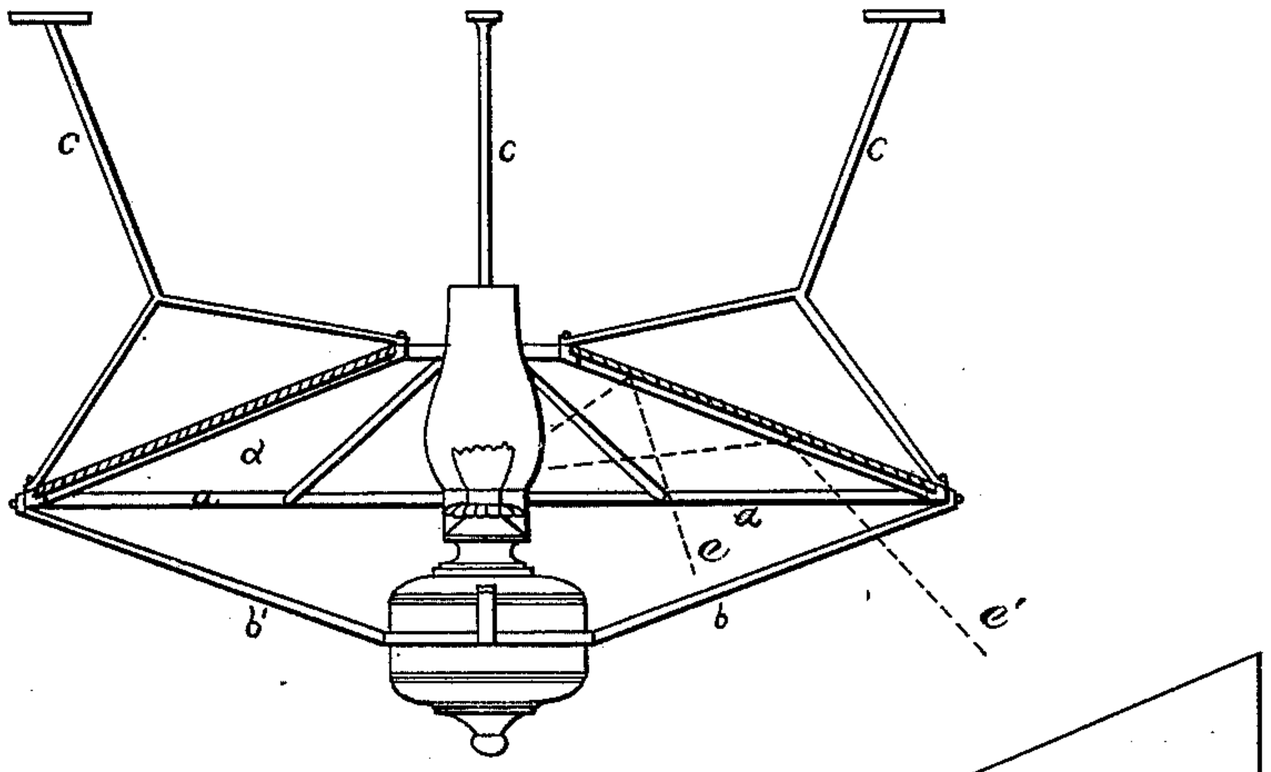

FIG. 1.

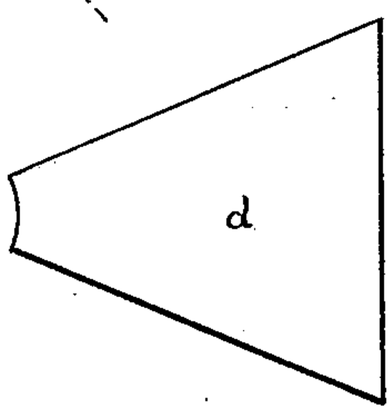

FIG. 3.

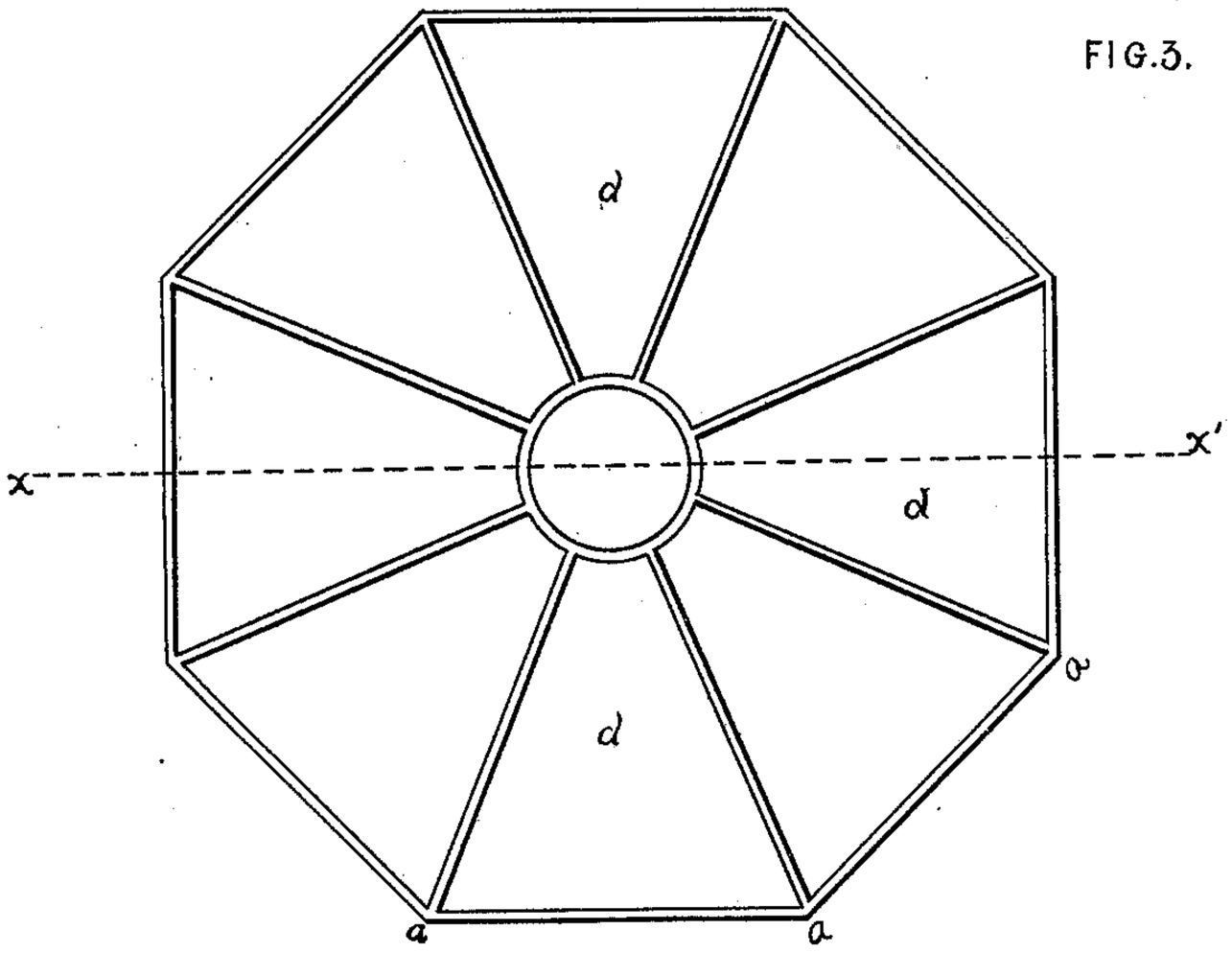

FIG. 2

WITNESSES.

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CYRUS H. FARLEY, OF PORTLAND, MAINE.

LAMP-REFLECTOR.

SPECIFICATION forming part of Letters Patent No. 231,159, dated August 17, 1880.

Application filed May 3, 1880. (No model.)

To all whom it may concern:

Be it known that I, CYRUS H. FARLEY, of Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Reflectors for Lamps; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The nature of my invention relates to a new and useful improvement in the manufacture and construction of lamp-reflectors, and is chiefly intended for use with lamps which are suspended or placed in such positions that it is desirable to reflect the rays of light downward, as is the case in railway-cars, house-chandeliers, &c.

The object of my invention is to collect the greatest number of rays radiating in any direction above the horizontal plane of the lamp-flame, and to reflect said rays to a lower plane without directing them into or across the flame or lamp.

In order that this object may be amply and completely obtained, I make use of the following simple parts and ingenious arrangement of said parts. A skeleton-frame suspended by branching arms and panels of silvered glass inserted in the open spaces of the frame, said panels so inclined in relation to the flame as to spread the reflected rays of light over any desired area.

In the accompanying drawings, Figure 1 shows the device cut in the line of *x x'*, Fig. 2. Fig. 2 represents a top-plan view of the reflector. Fig. 3 is one of the panels of the reflector.

Similar letters of reference indicate corresponding parts.

a represents the skeleton-frame. This frame is so constructed as to leave a circular hole in its center, through which the lamp-chimney projects. Attached to the outer rim of the frame are the arms *b b'*, which support the lamp. *c c c* are the branching arms by which the frame *a* is suspended. The inclined reflecting silvered-glass panels are seen at *d*.

The skeleton-frame *a* is constructed similar to a window-sash—that is, the bars forming the frame are provided with rabbets or longitudinal recesses, which support the silvered-glass panels *d* and keep them from falling through.

The reflector-frame is made as near horizontal as the nature of the work which it has to do will permit, and under ordinary circumstances the weight of the panels resting upon the rabbets will be sufficient to keep them in their proper positions in the frame. Although it is not absolutely necessary to have any special appliance for holding the panels in place, still, to prevent accidents, the frame may have attached to it any convenient snap or catch for holding the panels firmly down upon the rabbets.

If the outside rim of the frame *a* is placed on the same plane as the lamp-flame, as shown in Fig. 1, all the rays of light proceeding from the lamp-flame in a direction above the horizontal plane will strike on the panels *d* and and be reflected downward, as indicated by the dotted lines *e e'*, without being directed into the flame.

As hereinbefore stated, I construct my reflector as nearly horizontal as possible. This form of construction is used in order to avoid too much concentration of the reflected rays upon the lamp, so that the rays shall not be thrown back upon the lamp and flame in any great measure and be lost for illuminating purposes; also to spread the rays over the greatest possible area.

What I claim as my invention, and desire to secure by Letters Patent, is—

The reflector-frame *a*, supporting a lamp by means of the arms *b b'*, and having the silvered-glass panels *d* inserted in the open spaces of the frame *a*, said panels extended and inclined substantially as and for the purposes herein set forth and described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

CYRUS H. FARLEY.

Witnesses:

IRA BERRY, Jr.,

BENJAMIN R. DOLLIFF.