

E. M. SMITH.
Lighting Picture Galleries.

No. 80,570.

Patented Aug. 4, 1868.

Fig. 1.

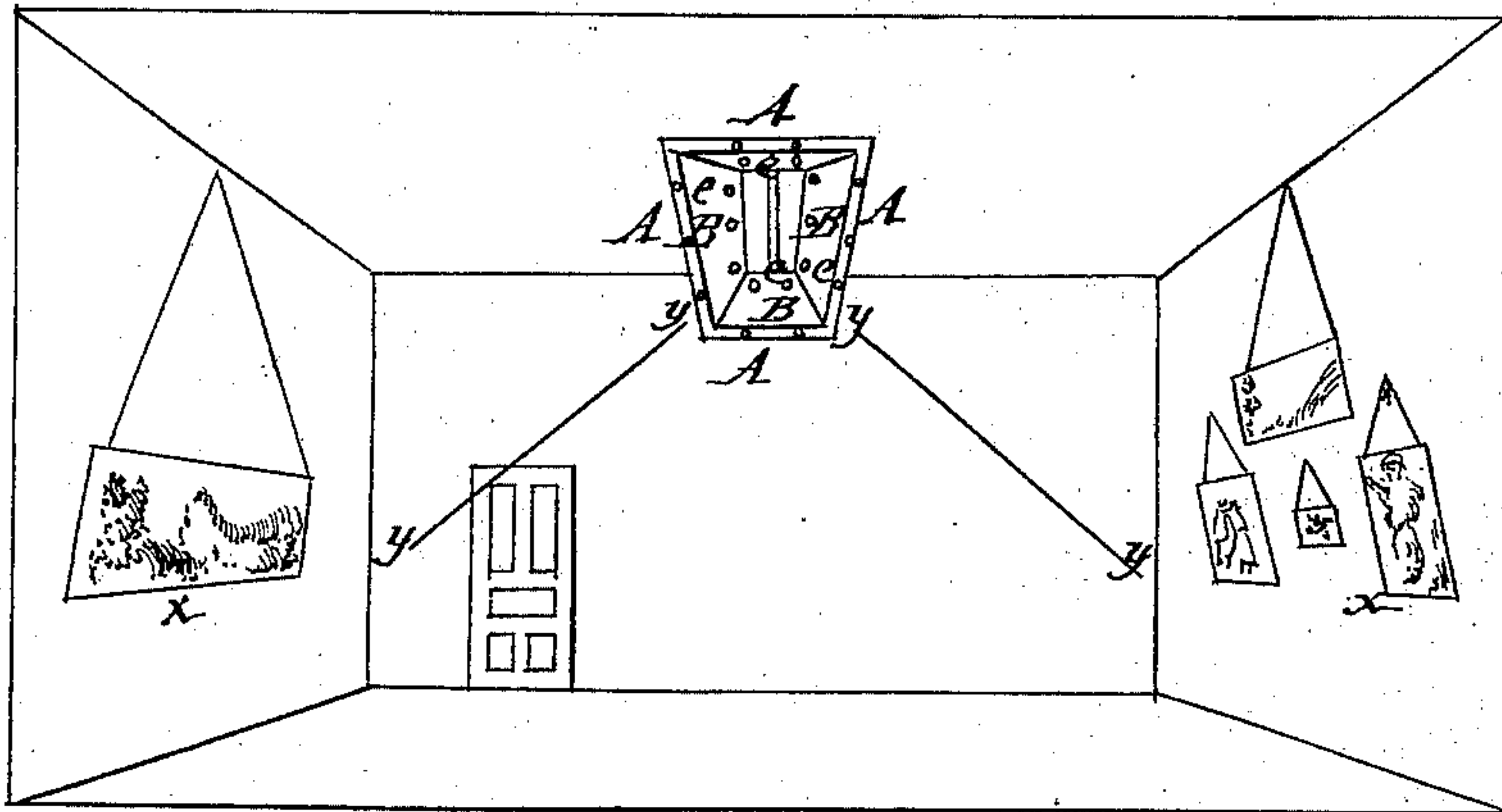


Fig. 2.

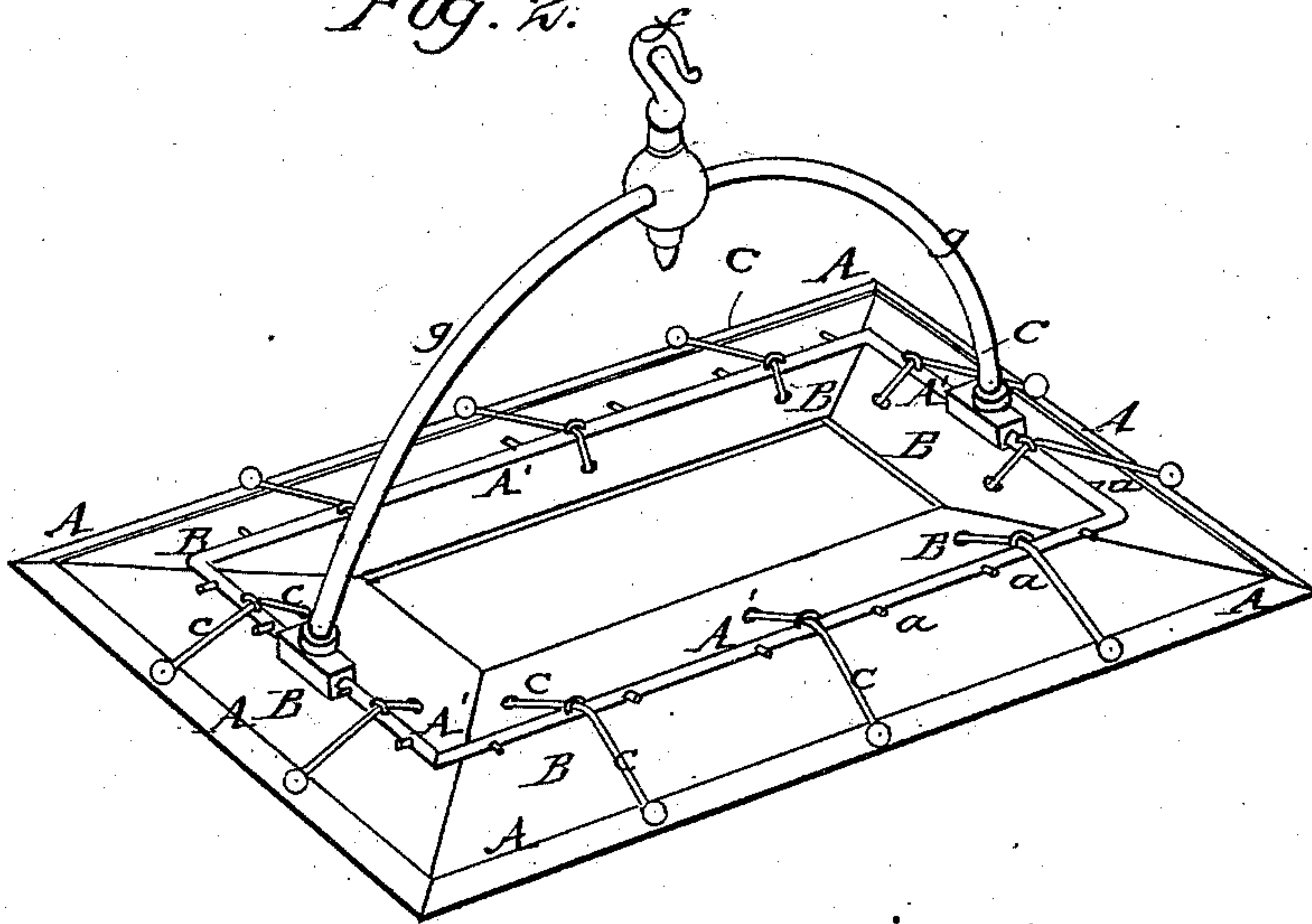
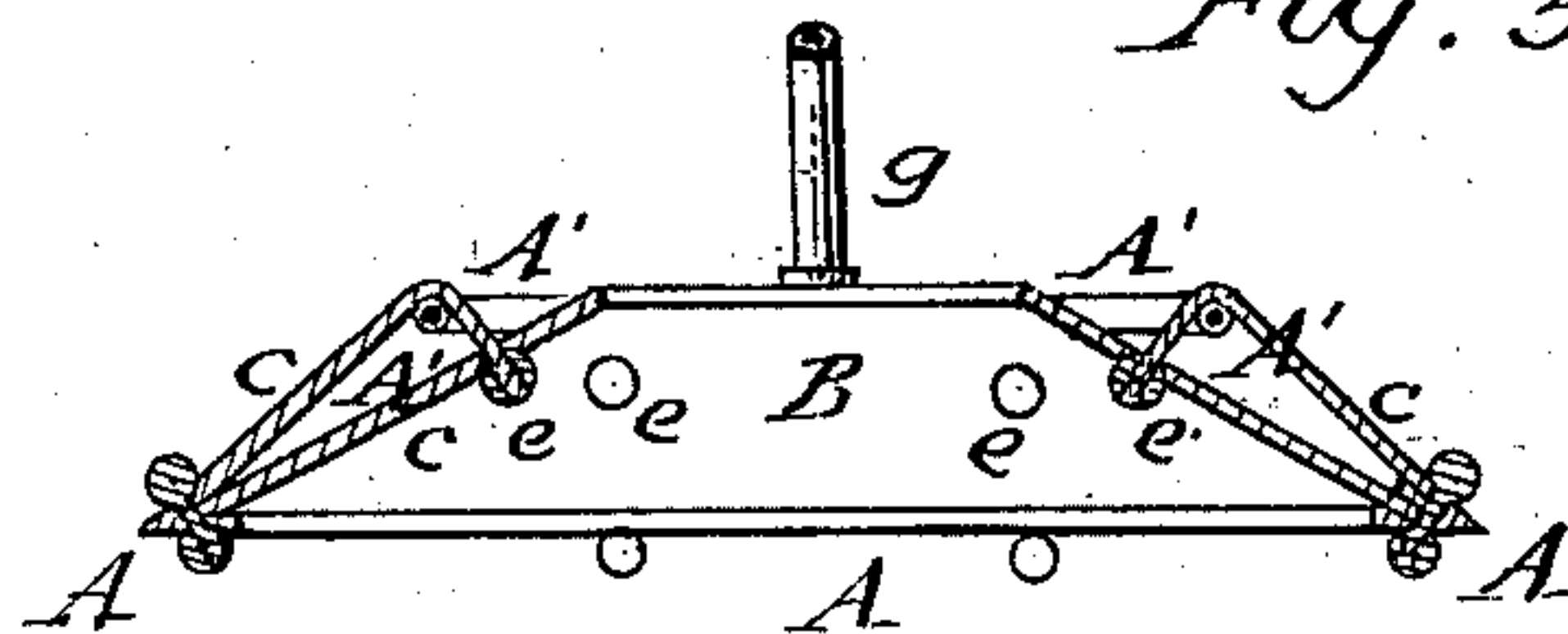


Fig. 3.



WITNESSES:

Jno D. Patterson
S. M. Pool

INVENTOR:

Edgar M. Smith,
By atty A. B. Stoughton.

United States Patent Office.

EDGAR M. SMITH, OF NEW YORK, N. Y.

Letters Patent No. 80,570, dated August 4, 1868.

IMPROVEMENT IN LIGHTING UP PICTURE-GALLERIES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, EDGAR M. SMITH, of the city, county, and State of New York, have invented certain new and useful Improvements in Lighting up Picture-Galleries, or other rooms or buildings where a bright light is required in some portions of the room, and a dim light required in other portions thereof; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents, in perspective, a room with the lighting-apparatus therein, and the lighted portions and shaded or dimly-lighted portions shown therein.

Figure 2 represents a perspective view, on an enlarged scale, of the lighting-apparatus.

Figure 3 represents a vertical cross-section through the lighter.

Similar letters of reference, where they occur in the separate figures, denote like parts in all of the drawings.

In picture-galleries, it is desirable to have a bright light upon the pictures hanging on the walls, and a dim light where the observer stands, and no flame visible, or flaring in the eye of the beholder.

To accomplish these objects and purposes is the aim of my invention; and my invention consists in a burner or lighter that will throw a bright light all through the room, except that portion of it at and below the line of vision of an ordinary person, and without any flame visible that would dazzle the eye of the beholder, and detract from the pictures which are in a bright light.

And my invention further consists in making the lighter or burner so that the line of bright and dim light may be varied when desired.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

The frame A A' of the lighter is made to correspond to the shape of the room, gallery, or apartment it is to be used in, and may be square, oblong, round, oval, or many-sided. And this frame may be composed of two pieces, viz, the one, A, of flanged or angled metal, to hold the ground-glass plates in, and the other, A', may be the gas-pipe, through which gas is furnished to the burners *a a*.

The lower edges of the ground or otherwise dimmed glass, B, are caught in a groove or flange in the frame A, and the plates incline upwards, so as to form a section of a flat hollow pyramid, cone, or other shape, depending on the shape of the room or gallery to be lighted. Bent rods, *c c c*, are fastened at their lower ends to the frame A, and pass over the gas-pipe or other portion of the frame A, and thence downward through a hole made in each of the plates, and a ball, knob, or nut, *e*, (which may be ornamental,) is run into a screw cut on the end of said rods, so that by means of balls, nuts, or other device, the plates of glass, at their higher portions, can be raised or lowered, to change the height of the dim light in the room, or the bright light on the walls. There is nothing below the dimmed plates that obstructs the light, no opaque material. The burners cannot be seen from below. The bright light is thrown and reflected upon the walls, whilst the occupant of the room is in a dim light, with no burners visible from any point that he can occupy.

In fig. 1, the shaded line at *x* is supposed to be the height of the eye of an ordinary observer, the red lines *y y* showing the line of bright light thrown down from the lighter, so that in a picture-gallery, the entire walls, above the height of the eye of an ordinary-sized person, would be in bright light, whilst the person would always be in a dim light, and in no position on the floor of the room could he perceive any burning flame or dazzling light.

The lines of deflected light thrown down, as shown by the lines *y y*, can be varied by running up or down the nuts *e*, as above stated.

The gas may be conveyed through the suspension-hook or ring *f* and the brackets *g*, in the usual well-known way.

Having thus fully described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

A lighter, so constructed with dimmed plate-glass underneath the burners, as that all that portion of a room or gallery above the line of vision shall be in bright light, and all that portion below the ordinary line of vision be in dim or obscured light, substantially as and for the purpose set forth.

I also claim, in combination with the dimmed plate-glass, the bent rods and knobs, or their equivalents, for changing the height of the bright light, and the dimmed light in the room or gallery, substantially as and for the purpose described.

EDGAR M. SMITH.

Witnesses:

WILLIAM H. REYNOLDS,

CHAS. S. BORMOR.