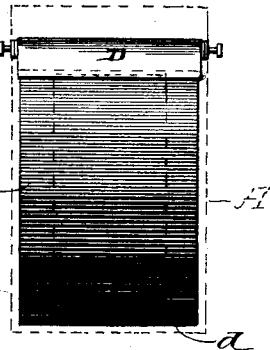
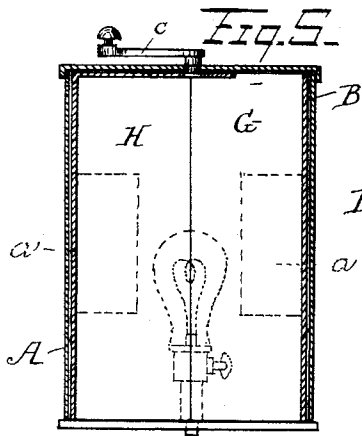
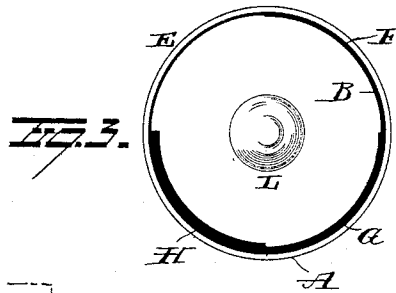
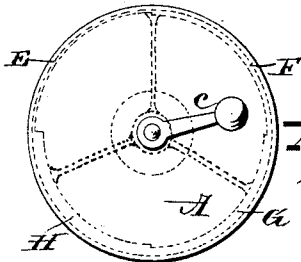
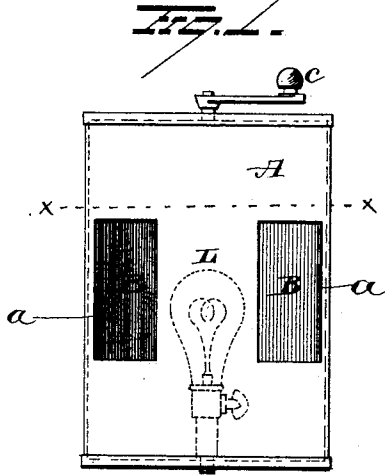


(No. Model.)

G. W. STOCKLY
LANTERN OR LAMP.

No. 400,140.

Patented Mar. 26, 1889.



Witnesses
E. A. Nottingham
G. F. Downing

Inventor
G. W. Stockly
By *his* Attorney
H. A. Sumner

UNITED STATES PATENT OFFICE.

GEORGE W. STOCKLY, OF CLEVELAND, OHIO.

LANTERN OR LAMP.

SPECIFICATION forming part of Letters Patent No. 400,140, dated March 26, 1889.

Application filed September 18, 1888. Serial No. 285,666. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. STOCKLY, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and
5 useful Improvements in Lanterns or Lamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the
10 same.

My invention relates to lanterns or lamps for photographic dark-rooms, to be used in furnishing a proper amount of light for the various stages in the operation of developing
15 negatives. The utility of such a lantern or lamp, capable of instantaneous manual adjustment to give any desired variation in the quantity of illumination furnished by it, will be apparent to all who have worked in photographic dark-rooms.

In the use of modern dry-plates, especially those that are exceedingly sensitive and rapid in action, a very small amount of light is all that can be safely used in the dark room
25 while taking such plates out of their wrappings and placing them in the plate-holders previous to an exposure in the camera. Similar care and an equally small light are necessary in taking the plates out of the holders
30 after an exposure and while placing them in the developing-pans ready for the application of the developers. No more light should be used up to this point than is absolutely necessary to enable the operator to do the work.
35 As soon, however, as the developer has been applied to the dry-plate and the process of development has fairly commenced, a little more light can safely be used, and as the process of development advances more and more
40 light can safely be used without injury to the plates. This increased amount of light is necessary to enable the operator to determine the progress of the development of the latent image and to check this development at just
45 the proper moment. After the development is completed and the fixing process which follows is under way, still more light may be let into the dark-room.

It will be obvious from this brief statement
50 that a dark-room lantern or lamp which can be instantly adjusted to give a light varying all the way from the dimmest possible light

to a comparatively bright but non-actinic light must be of value; and it is the object of my present invention to accomplish this
55 important result; and to this end it consists, generally speaking, in a screen of non-actinic material, so arranged that various degrees of quantities of light may be transmitted through its several parts, these changes in the position
60 of the screen being made by manual means.

In the accompanying drawings, Figure 1 is a view in side elevation of my device, portions of its interior being indicated in dotted lines. Fig. 2 is a top plan view. Fig. 3 is a sectional
65 view on line *x x*, Fig. 1. Fig. 4 is a modification; and Fig. 5 is a view in section on line *Y Y*, Fig. 1.

Obviously, there are many ways of embodying my invention in practical form, and the
70 following constitutes the most feasible.

A represents a practically light-tight box, square or round, as desired, of either wood or metal, and provided with openings *a*, such openings being placed so that light from the
75 inside will be projected in any desired direction. I have found it convenient in constructing lanterns of this character to have two openings at right angles to each other, making it possible to throw a light on the devel-
80 oping apparatus in front of the lantern, and also on one side of it. The main feature of my invention consists, however, in a screen, B, of non-actinic colored paper, or any other material which admits the passage of light.
85 This screen is preferably of cylindrical form, so arranged that it will revolve close to the inner wall of the outer casing, A, a crank or handle, *c*, being furnished this screen and projecting through the box A, whereby motion
90 may be applied. This non-actinic screen is made in such a way that at one point in its circumference, or on one side of it, as at E, Fig. 3, there is only one thickness of paper or other material, or not much obstruction to the penetra-
95 tion of light, and therefore at this point a comparatively large amount of light will be transmitted through the screen from the candle, lamp, or incandescent electric light L. (Shown in dotted lines in Fig. 1.) Starting from
100 this point, the paper itself is either gradually increased in thickness, darkened in color, treated so that it will admit a greater or less amount of light in places, or additional layers

may be used, as shown at points F, G, and H, Fig. 3, where two, three, and four layers are indicated, so that less and less light is transmitted through the openings *a a* as the screen is revolved, until finally, when the four thicknesses, as at H, are over the opening or openings, there is very little if any light transmitted. If an electric light, L, is used in the interior of the lantern as the source of light, the entire outside case can be made light-tight except at the openings referred to, and where such a light can be obtained it is by far the best method for this purpose. If a candle or lamp is to be used as the source of light in the lantern, suitable arrangements must be made for the supply of air and the escape of products of combustion.

Another way of embodying my invention would be to construct the screen B of various colors or various thicknesses or layers of glass or similar material, arranged in panels on the side of a square or hexagonal lantern, which can be turned in any desired position.

Still another method of embodying the invention would be to provide an outside case for the lantern, having on one or more sides of it fixed non-actinic colored screens of any suitable material, as shown in Fig. 4, arranged so that, say, at the bottom *d* the screens would transmit the least amount of light and at the top the greatest amount, and intermediate amounts between, and vice versa, and I then provide an outside curtain, D, or shutter that

can be manually raised or lowered, so as to vary the transmission of light, as desired. 35

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

1. In a photographic dark-room lamp or lantern, a frame having an opening therein, and a non-actinic screen made in sections differing in degrees of transparency or translucency to the passage of light. 40

2. In a photographic dark-room lamp or lantern, the combination of a source of light, a screen of non-actinic colored material arranged to interpose two or more different degrees of transparency or translucency to the passage of light, and an outside case or body provided with one or more openings through which light can be transmitted from within, substantially as set forth. 45

3. The combination, with a box or casing having one or more openings, of a movable cylinder therein, portions of the outside of which are made up of from one to several different layers of non-actinic material, and a source of light within the cylinder, substantially as set forth. 55

In testimony whereof I have signed this specification in the presence of two subscribing witnesses. 60

GEORGE W. STOCKLY.

Witnesses:

A. D. DORMAN,
L. S. NOEL.