(No Model.) 2 Sheets—Sheet 1.

J. CARBUTT.

PHOTOGRAPHIC LANTERN.

No. 256,974. Patented Apr. 25, 1882.

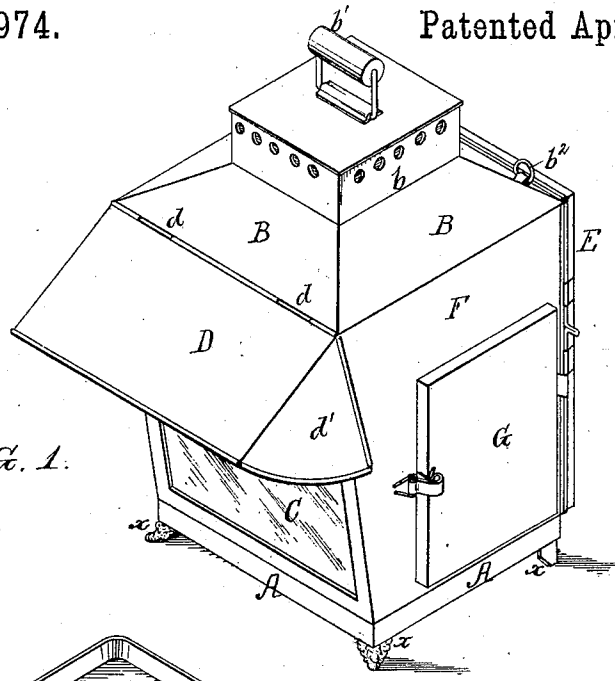
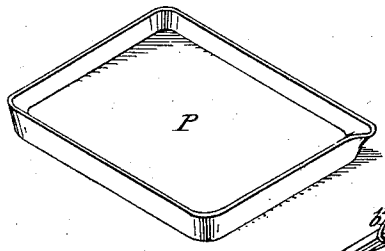


FIG. 1.



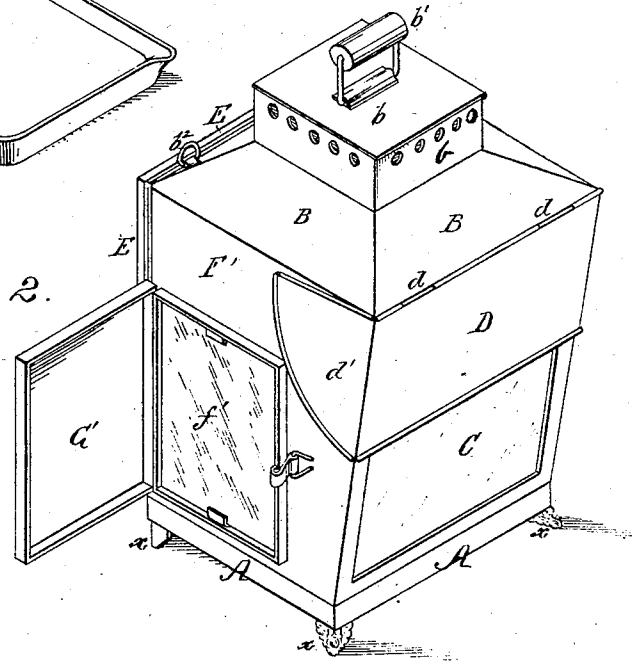
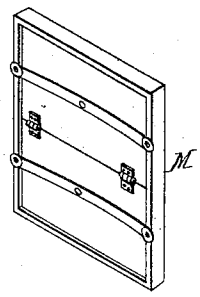


FIG. 2.



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(No Model.)

2 Sheets—Sheet 2.

J. CARBUTT.

PHOTOGRAPHIC LANTERN.

No. 256,974. Patented Apr. 25, 1882.

FIG. 3.

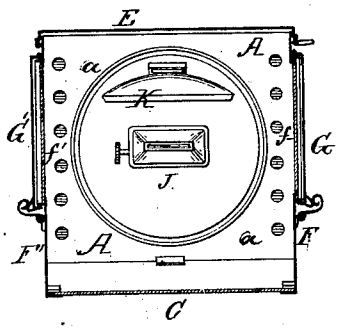


FIG. 4.

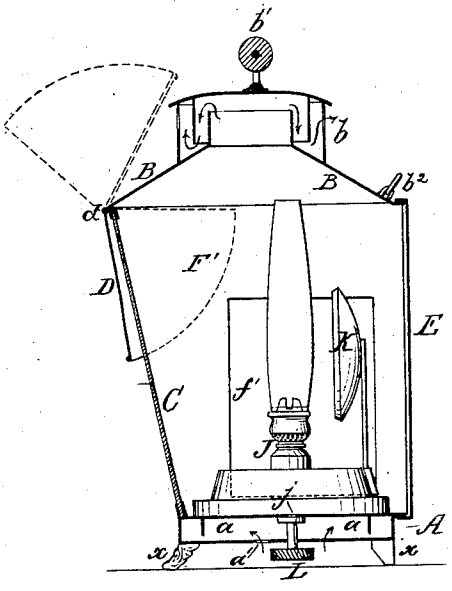
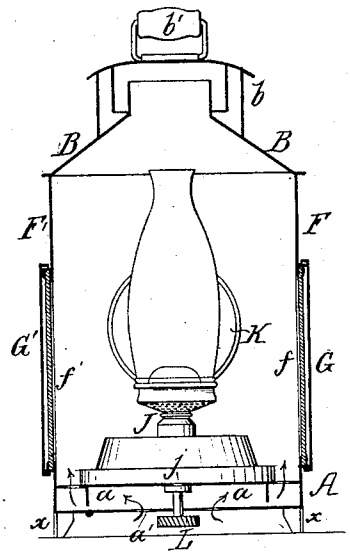


FIG. 5.



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UNITED STATES PATENT OFFICE.

JOHN CARBUTT, OF PHILADELPHIA, PENNSYLVANIA.

PHOTOGRAPHIC LANTERN.

SPECIFICATION forming part of Letters Patent No. 256,974, dated April 25, 1882.

Application filed March 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN CARBUTT, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Photographic Lanterns, of which the following is a specification.

The object of my invention is to construct a lantern for photographic use, more especially for the working of the "dry-plate" process, so that the same lantern can be used for furnishing the required non-actinic rays of light for the coating, manipulation, and development of the plates, or a white diffused light, by which the condition of a developed plate may be examined, or, finally, a clear bright light for the printing of positives. This object I attain by constructing the lantern as shown in the accompanying drawings, in which—

Figures 1 and 2 are perspective views of the apparatus. Fig. 3 is a sectional plan; Fig. 4, a vertical section; and Fig. 5 a transverse section, showing a modified form of lighting apparatus.

The body of the lantern is preferably rectangular, with a flat base, A, which may be mounted on feet *x*, and a roof, B, sloping upward toward the hood *b*, which has the usual draft-openings, but is provided with interior deflecting-plates, preventing the passage of rays of light, while permitting a free draft for the lamp. The front of the lantern is preferably inclined, as shown more clearly in Fig. 4, and is closed by a sheet, C, of orange-colored or ruby glass or paper, while the back of the lantern is closed by a hinged door, E, which has an overlapping flange to make the joints as light-proof as possible. The opposite side walls, F F′, of the lantern are provided with windows *f f′* respectively, closed by corresponding flanged shutters, G G′, hinged to the walls and provided with suitable catches. The window *f* is fitted with porcelain or ground glass or similar semi-transparent material, while that *f′* is left open or is provided with clear glass.

The base A has a false bottom, *a*, and air-supply openings *a′*, while deflecting-plates, Fig. 4, prevent the escape of rays of light from the interior of the lantern through these openings.

To the upper front edge of the lantern is hinged at *d* a deflector, D, with side wings, *d′ d′*, which deflector may be adjusted to the position shown in Fig. 1 to throw the light coming through the front window downward onto the work; or the deflector can be thrown back, as indicated by dotted lines in Fig. 4, to allow of a more general distribution of the light; or, again, may be shut down, as shown in Fig. 2, to cut off part of the front light while one of the side windows is in use, or whenever desired.

Within the body of the lantern I place a lamp, J, which may be of any desired construction, and provided with a reflector, K, fixed to the lamp-body. This lamp is mounted on a pivot, *j*, so that it may be turned with the reflector to any desired position, and as a simple means of turning the lamp I affix to the pivot *j* or base of the lamp a handle, L, by turning which the lamp and reflector may be turned so as to direct the rays of light through the front window, C, or either of the side windows, *f* or *f′*.

The lantern is provided with a handle, *b′*, whereby it may be carried about, and may also have hooks b^2, by which it can be suspended from a wall or other support. In the latter case the window *f′* should be without glass and have a simple opening closed by the shutter G′, so that the lamp may be lighted and trimmed through said opening without disturbing the rear door, E.

When it is desired to use the lantern for any of the usual dark-room operations—preparing emulsions, coating, manipulating, or developing plates—the shutters G G′ are closed when the lamp has been duly lighted and turned to such a position that the reflector K directs the rays of light through the colored glass or paper onto the work—say a plate in the developing-pan P—the deflector D having been turned to the position shown in Fig. 1.

When it should be desired to examine the density of a newly-developed plate all that will be necessary will be to open the shutter G and turn the lamp to the proper position, when the white diffused light coming through the semi-transparent window will permit the careful examination of the developed plate.

When it is desired to make a positive from a negative the lamp is turned to throw the light through the window *f′* (the shutter G′ being open) onto the plate exposed in a frame, M, opposite, as shown in Fig. 2.

Instead of having a lamp to furnish the light, a gas-jet may be substituted therefor, the burner with the reflector in that case having a swivel-connection with the gas-tube to permit the turning of the reflector to the desired position.

I claim as my invention—

1. A photographic lantern having on one side a window of colored glass or other material, and on another side a window of semi-transparent material with a movable shutter.

2. A photographic lantern having on one side a window of colored glass or other material, and on another side a window of semi-transparent material with a movable shutter, and containing a light and reflector adapted to be turned to throw the light through either window.

3. A photographic lantern containing a movable light and reflector, and having three windows, one with colored glass or other material, another semi-transparent, and a third of clear glass or open, the latter two windows being provided with shutters, all substantially as described.

4. A photographic lantern having windows on three sides, two provided with shutters, and a lamp and reflector on the inside mounted on a pivot in the base of the lantern, and means for turning the lamp on its pivot.

5. A photographic lantern having two or more windows and shutters for one or more of the windows, with a lamp and reflector mounted on a pivot, and a device on the exterior of the lantern for turning the lamp and reflector.

6. A photographic lantern having a window and a hinged deflector, D, with wings d', substantially as described.

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

JNO. CARBUTT.

Witnesses:

HARRY SMITH,

HUBERT HOWSON.