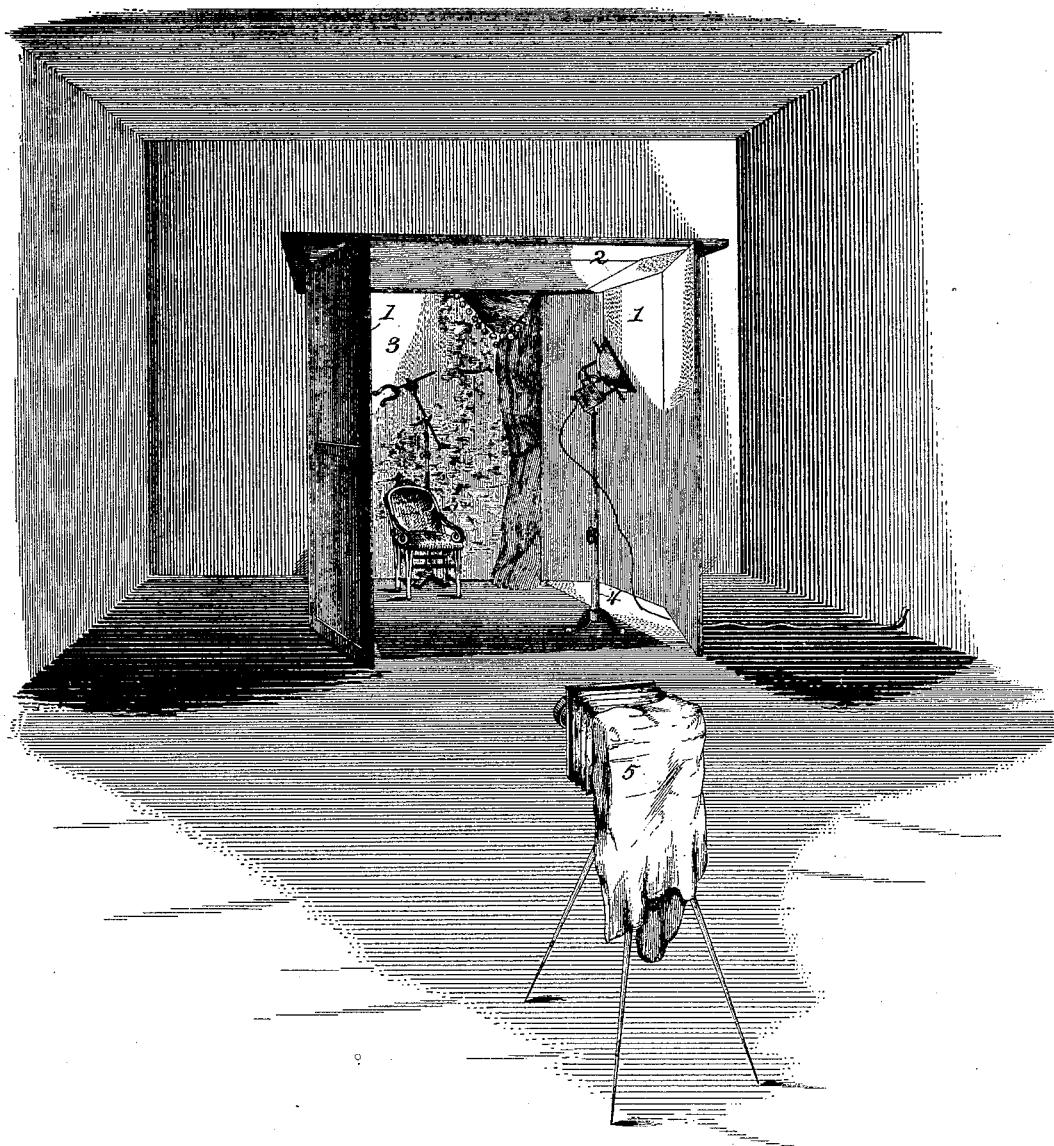


(No Model.)

B. M. CLINEDINST, Jr.  
PHOTOGRAPHY BY ARTIFICIAL LIGHT.

No. 523,323.

Patented July 24, 1894.



Witnesses:

*Edwin L. Bradford*  
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# UNITED STATES PATENT OFFICE.

BARNETT M. CLINEDINST, JR., OF WASHINGTON, DISTRICT OF COLUMBIA.

## PHOTOGRAPHY BY ARTIFICIAL LIGHT.

SPECIFICATION forming part of Letters Patent No. 523,323, dated July 24, 1894.

Application filed June 11, 1894. Serial No. 514,224. (No model.)

*To all whom it may concern:*

Be it known that I, BARNETT M. CLINEDINST, Jr., a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Photography by Artificial Light; 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 same.

My invention relates to improvements in the art of making photographic negatives and photographic appliances or apparatus therefor, the object being the production of photographic negatives by artificial light of a higher character than have been hitherto attained:

Artificial lights, such as flash lights produced by the combustion of magnesium wire or ribbon, or by the explosion of a combustible powder containing magnesium, and the electric light, have been employed in the art of photography without satisfactory results in all particulars, because suddenly produced lights startle animate objects and result in frightened expressions, and, in those cases where the rays of light impinge the subject, a strained or weary expression results. Direct rays across and through the cabinet also cause excessively high lights and deep shadows in the image and thus prevent artistic results.

It is the object of my invention to avoid the objections enumerated, and this object is attained by the means illustrated in the accompanying drawing, in which the view is a perspective of a cabinet or inclosed space illustrating my invention.

Referring to the drawing, 1—1 are the side walls of an inclosed space or cabinet, and 2 is the top or roof thereof. As shown, each of the side walls may be formed of three frames hinged together in the manner of screen frames. These frames as well as that of the roof frame are covered on the inside with white muslin or other light colored fabric. The back-ground 3 may consist of drapery connected with the rear of the frames or may be connected with a separate frame or attached to a wall or other support outside or beyond the side walls of the cabinet.

I have shown the roof as pitched or inclined inwardly from its edges and ends to assist in deflecting and diffusing the light throughout the cabinet.

The wings or outer frames of the side walls being movable afford convenient means of deflecting the light to diffuse and equalize it in the cabinet when reflected from one of the walls or wall and roof of the same.

Obviously a cabinet may be built as a permanent structure and secure some of the benefits of my invention, but I prefer such a portable cabinet as herein shown and described.

4 is a movable stand carrying a vertically adjustable reflector and a suitable artificial light which may be a powerful electric lamp. The stand is arranged toward one side of the cabinet, the reflector is directed toward the adjacent wall or wall and roof, and throws the direct rays of light from the lamp away from the subject to the wall or wall and roof from which it is diffused throughout the cabinet. The reflector by preference has a dead white unpolished surface.

5 is an ordinary photographic camera mounted upon a stand in the usual way. By preference I employ an arc lamp by means of which a light of from three to five thousand candle power is developed. By the construction of cabinet and the arrangement of the lamp and reflector, the light is first directed to one side, or to one side and roof, of the cabinet, and not across it, when the rays are broken up and diffused into and throughout the inclosed space.

An essential characteristic or result of my invention is that I fill the cabinet with strong but subdued or completely diffused light and that I obtain effects equal or superior to sky and side light effects of daylight.

Having described my invention, I claim as new—

1. The method of making photographic negatives which consists in placing an artificial light of large candle-power within a cabinet having light colored interior surfaces or walls, preventing the direct rays of light from the lamp from reaching the subject, and directing them to the walls or surfaces of the cabinet adjacent to the face of the reflector, and

reflecting or diffusing the light from such walls or surfaces throughout the cabinet and upon the subject.

2. In apparatus for making photographic negatives, the combination of a cabinet having light colored walls and roof, an artificial light of large candle-power arranged within the cabinet, and a reflector so arranged as to reflect the direct light to the adjacent interior surfaces of the cabinet, but entirely away from the subject, where it is diffused throughout the cabinet, and upon the subject as set forth.

3. A cabinet for photographic purposes con-

sisting of the combination of jointed portable sides, and roof clothed in light colors, an artificial light with a dead white surface reflector, the reflector being so arranged as to divert the light entirely away from the subject and against adjacent surfaces from which it is diffused through the cabinet, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

B. M. CLINEDINST, JR.

Witnesses:

EDWIN L. BRADFORD,  
THEO. L. GACHEL.