(No Model.)

W. OHSE.

PHOTOGRAPHIC PRINTING DEVICE.

No. 494,022. Patented Mar. 21, 1893.

Fig. 1.

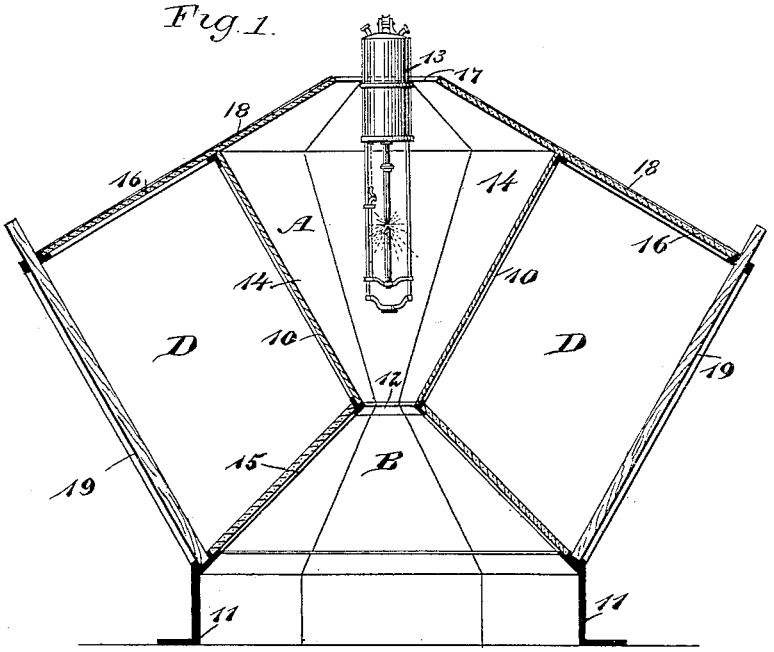
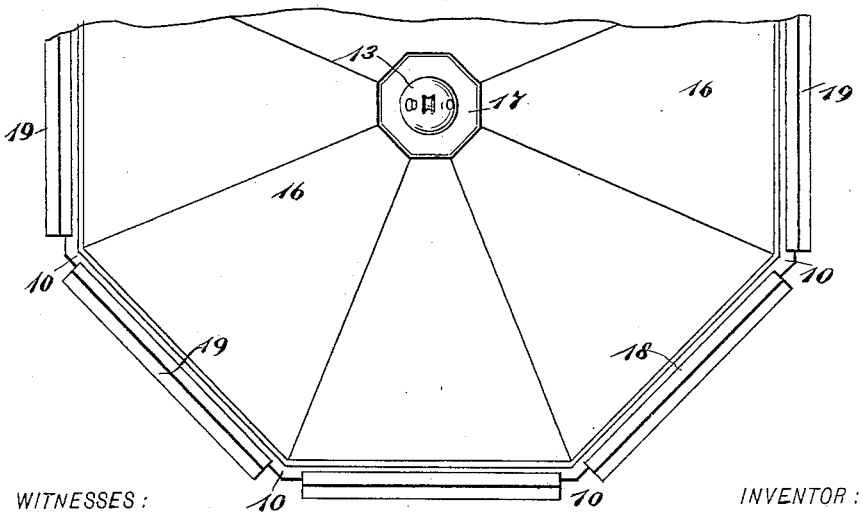


Fig 2.



WITNESSES:

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Fig 3

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UNITED STATES PATENT OFFICE.

WILHELM OHSE, OF DESSAU, GERMANY, ASSIGNOR TO FERDINAND HEUER, OF NEW YORK, N. Y.

PHOTOGRAPHIC-PRINTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 494,022, dated March 21, 1893.

Application filed April 21, 1892. Serial No. 430,073. (No model.)

To all whom it may concern:

Be it known that I, WILHELM OHSE, of Dessau, Germany, have invented a new and useful Apparatus for Producing Photographic Prints by Artificial Light, of which the following is a full, clear, and exact description.

My invention relates to an improved apparatus for producing photographic prints by artificial light, and has for its object to construct an apparatus in connection with which a lamp is used, and by means of which a light may be obtained equivalent to the best natural light at present employed for the printing of photographs from negatives; and the invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a central vertical section through the apparatus. Fig. 2 is a partial plan view thereof; and Fig. 3 is a section through one of the upper glasses and the curtains applied thereto.

In carrying out the invention a skeleton frame 10, is constructed in such manner and is so shaped as to form a polygonal figure when viewed from the top, as shown in Fig. 2. The frame comprises a series of connected, approximately triangular panels, and the frame is mounted upon a base 11. The bottom portions of all the panels are decidedly downwardly inclined as illustrated in Fig. 1. In securing the panels of the base their front or outer portions are given an inclination from the top downward and inward to the base; thus in the completed frame the top overhangs the base. A circular space 12, intervenes the inner lower portions of the grouped frames, creating two connecting chambers A and B, the lower portion of one and the upper portion of the other being essentially pyramidal and the two chambers connect at their narrow ends. Within the upper chamber A a lamp 13, preferably an electric arc lamp, is suspended in such a manner that it may be raised or lowered, the rays of the said light being adapted primarily to shine into the frames through the backs thereof. In the back of each frame a pane of glass 14 is inserted, this glass being translucent and preferably what is known as ground glass being employed. Each frame is provided with bottom and top colored walls 15 and 16. As shown the walls consist of plain finely transparent glass having on their outer faces strips 18 of paper, fabric or equivalent material of a violet color. The upper glasses extend upward and inward beyond the backs of the frames, as is best shown in Fig. 1, and terminate in such a manner as to form an upper opening 17, through which the lamp is introduced into the chamber A.

All of the glass employed is preferably of the clearest and whitest character. In front of each frame slide-ways are formed into which the negative, or the printing frame containing the negative, is introduced, as shown at 19 in Figs. 1 and 2.

The frames are not inclosed at the sides, and owing to this construction an outer polygonal continuous chamber D, is formed, which may be termed the printing chamber.

It has been demonstrated that the best light in which to print from photographic negatives is that emanating from a slightly overcast sky, and that the violet color in the rays of the sun is most conducive to a soft tint and good results in the production of photographic prints. Therefore, the light from the lamp is not delivered with its full power directly to the negative, but is made to pass through the ground glass, which gives to the light almost the same quality that is found in that emanating from a sky of the character above described; and the violet paper or curtain at the top and bottom of the polygonal chamber D, tints the light and renders it exceedingly effective for the purpose to which it is to be applied.

The light employed in printing is preferably of a violet cast; that is, the best results are attained when that character of light is used.

By means of an apparatus constructed as set forth, negatives have been printed from at night, and as good effects have been obtained from such printing as when negatives

of like character had been printed from in day light; and, in fact, negatives of a certain density may be better printed from in the apparatus above described than when submitted to sunlight.

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

1. An apparatus for photographic printing, comprising a frame having its back of translucent glass, and provided with colored walls in its top and bottom, the front of the frame being fitted to receive a negative, and a lighting device in rear of the translucent back of the said frame, substantially as described.

2. In an apparatus for printing photographs, the combination, with a frame provided with a back of translucent glass, the top and bottom being formed of a clear glass backed with a colored strip, of a holder adapted to receive a negative and located at the front of the frame opposite the translucent glass, and a lighting device located back of the translucent glass, substantially as and for the purpose specified.

WILHELM OHSE.

Witnesses:
CARL BORNGRAEBER,
RICHARD OEHME.