(No Model.)

E. H. RIEDEL.

PHOTOGRAPHIC DARK CHAMBER.

No. 380,136. Patented Mar. 27, 1888.

Fig. 1.

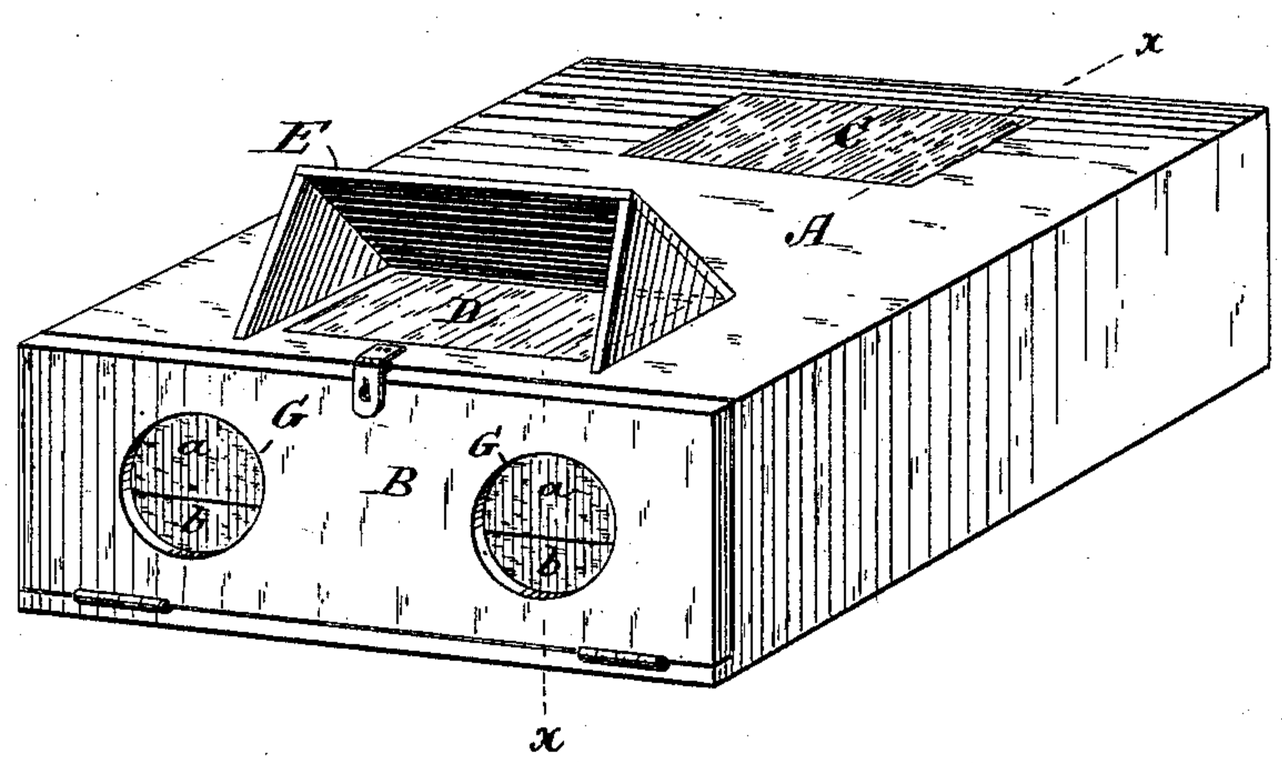


Fig. 2.

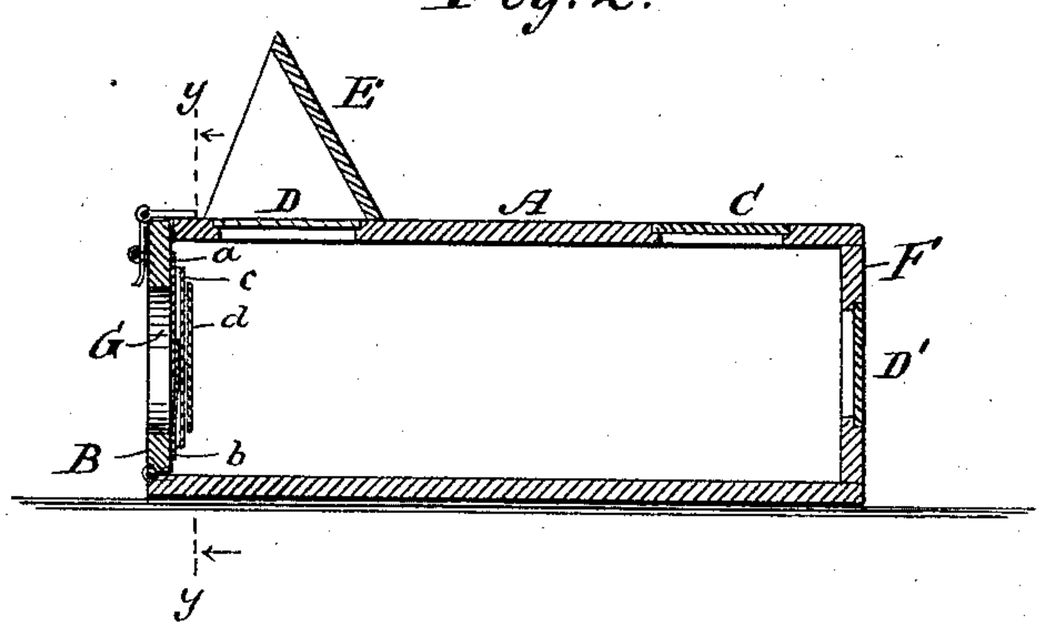
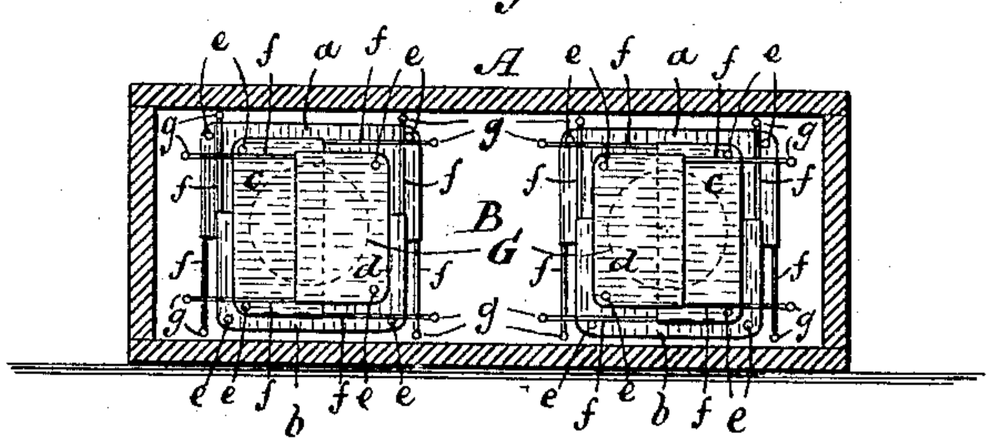


Fig. 3.



WITNESSES:

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EMIL H. RIEDEL, OF NEW YORK, N. Y.

PHOTOGRAPHIC DARK-CHAMBER.

SPECIFICATION forming part of Letters Patent No. 380,136, dated March 27, 1888.

Application filed December 15, 1887. Serial No. 257,996. (No model.)

To all whom it may concern:

Be it known that I, EMIL H. RIEDEL, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Photographic Dark-Chambers, of which the following is a specification.

This invention relates to certain improvements in portable photographic dark-chambers, the improvements which constitute my invention being pointed out in the following specification and claims, and illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view of my dark-chamber. Fig. 2 is a longitudinal vertical section in the plane *x x*, Fig. 1. Fig. 3 is a transverse vertical section in the plane *y y*, Fig. 2, and looking in the direction of the arrow opposite to that line.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates a box, which may be made of wood or of any other suitable material, and which is provided at one end with a door, B, through which easy access can be had to its interior.

In the top of the box are secured two panels of glass, C D, which are colored red, or of any suitable non-actinic color—such as green or orange—but I prefer to use a glass pane, C, of red color, and another glass pane, D, of orange color, the latter being protected by a screen, E, so that by placing the box in a suitable position said pane is protected against direct rays of light. Another pane, D′, of red-colored glass may be inserted into the end F of the box opposite to the door B.

In the door are two armholes, G G, which are closed on the inside or outside, each by means of four flaps, *a b c d*, of cloth or any other suitable flexible material. Each of these flaps is secured near one of its edges to the door B by tacks *e e*, or by any other suitable means, and to its free end, which extends beyond the center of the armhole, are secured elastic cords *f f*, the outer ends of which are fastened to the door by tacks *g g*, or by any other suitable means. By the action of these elastic cords the flaps *a b c d* are held in an extended position; but if the hands are pushed through the armholes from the outside the flaps yield, so that the hands and arms can be inserted to the desired extent, while at the same time the light is excluded.

The great advantage of my portable dark-chamber will be readily understood by those skilled in the art. After the sensitive-plate has been exposed, the negative produced by such exposure is introduced into the box A while being inclosed in the plate-holder, the door of the box being opened for this purpose. Into the box are also placed the requisite liquids for developing the picture. After the plate-holder with the negative has been placed in the box A, the door B is closed and the hands and arms are pushed through the armholes G G. As already stated, the flaps *a b c d* close up tight around the arms, so as to exclude the light, and at the same time sufficient freedom of motion is allowed to the hands, so that the negative can be readily removed from the plate-holder and subjected to the necessary treatment for developing the picture while being inclosed in the box A. The glass panes C D D′ admit sufficient light into the box, so that the progress of the developing process can be observed, and since it is sometimes difficult to follow the process through a red-colored glass pane, I have inserted into the top of the box the orange-colored glass pane D, which, however, is protected by the screen E, as stated, so that rays of light passing through this pane into the box A will not injure the negative, while by means of these rays the progress of the developing process can be clearly observed.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the box A, having a door, B, panes C D of non-actinic colored glass, and armholes G G, of the elastically-supported flaps *a b c d*, substantially as described.

2. The box A, having a red-colored glass pane, C, an orange-colored glass pane, D, a screen, E, protecting the orange-colored pane, armholes G G, and elastically-supported flaps for closing said armholes, substantially as described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

EMIL H. RIEDEL. [L. S.]

Witnesses:
W. C. HAUFF,
W. HAUFF.