(No Model.)

H. MADER.

BOX FOR CHANGING PHOTOGRAPHIC PLATES.

No. 307,559. Patented Nov. 4, 1884.

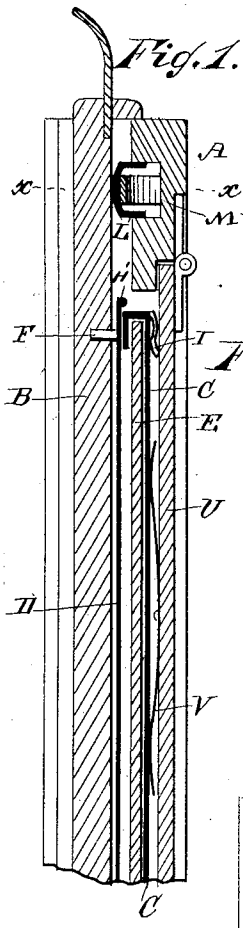


Fig. 1.

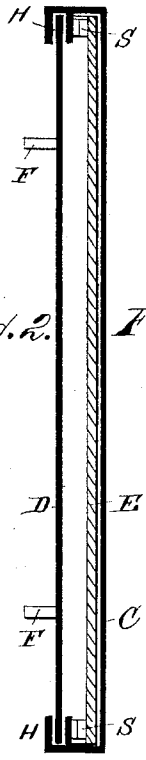


Fig. 2.

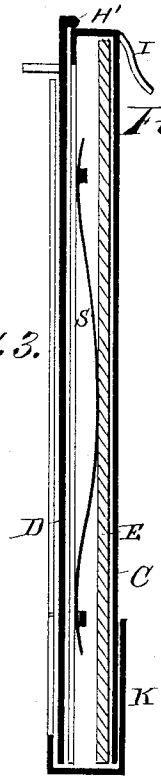


Fig. 3.

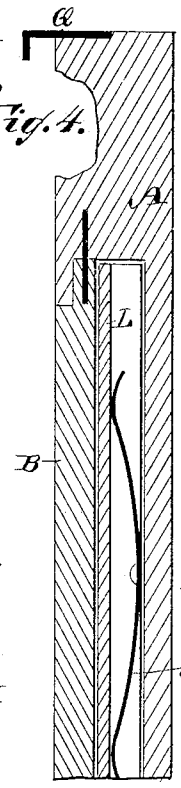


Fig. 4.

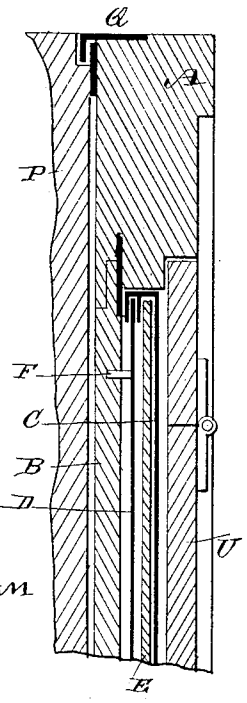


Fig. 5.

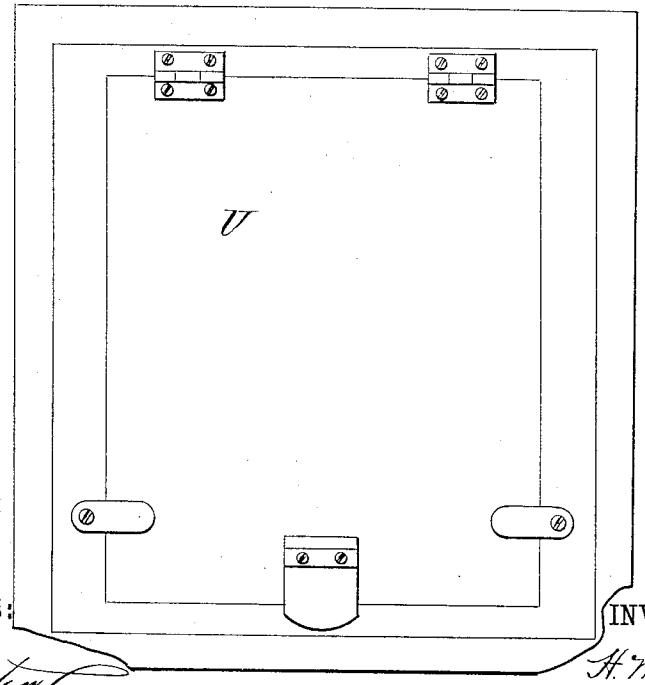


Fig. 6.

WITNESSES:

Theo. G. Hoster.

C. Sedgwick

INVENTOR:

H. Mader

BY Munn & Co

ATTORNEYS.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

HIERONIMUS MADER, OF ISNY, WÜRTEMBERG, GERMANY.

BOX FOR CHANGING PHOTOGRAPHIC PLATES.

SPECIFICATION forming part of Letters Patent No. 307,559, dated November 4, 1884.

Application filed June 13, 1883. (No model.) Patented in Germany September 6, 1882, No. 22,569; Belgium January 16, 1883, No. 60,184; in France February 14, 1883, No. 153,704, and in Austria-Hungary April 20, 1883, No. 5,045 and No. 16,709.

To all whom it may concern:

Be it known that I, H. MADER, of Isny, Kingdom of Würtemberg, in Germany, have invented a new and useful Improvement in Boxes for Changing Photographic Plates, of which the following is a specification.

The object of this invention is to provide a new and improved device for facilitating the exchanging of dry-plates within or outside of the studio, and without necessitating the use of complicated appliances, such as portable dark-rooms, &c.

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

Figure 1 is a sectional plan view of my improved shield. Fig. 2 is a cross-sectional elevation of the plate-holder. Fig. 3 is a sectional plan view of the same. Fig. 4 is a cross-sectional elevation on the line $x\,x$, Fig. 1. Fig. 5 is a sectional plan view of the shield, showing it held on the camera. Fig. 6 is a rear face view of the shield.

The shield A, made of wood, is provided in front with a slide, B, which can be withdrawn from the side, and on the rear the shield is provided with a hinged door, U, on the inner surface of which the usual spring, V, is provided, which presses against the back of a plate-holder, C, placed into the cavity or recess formed by the frame of the shield. The said plate-holder C is provided in the top and bottom edges with guide-grooves H, for receiving the top and bottom edges of a slide, D, which is provided on its outer surface with a series of pins or studs, F, adapted to pass into corresponding apertures in the inner surface of the slide B of the shield. The slide D is provided on one edge with a ledge, H′, which is to prevent rays of light, &c., from passing into the plate-holder C. A prepared plate, E, is placed in the plate-holder C through an opening in the side edge of the holder, which opening is then closed by a cap, K, and the plate E is held in the plate-holder by springs S, held on the guides H at the top and bottom of the plate-holder, the springs pressing the plate E against the back of the plate-holder C. Then the door U of the shield is opened, and the plate-holder containing the plate E is placed in the shield, the studs F pass into the apertures in the inner surface of the slide B, so that when the slide B is withdrawn from the shield the slide D will be withdrawn from the plate-holder, and the plate E will be exposed, and if then the slide B is pushed back the slide D will be pushed back into the plate-holder, which will be closed, and if the door U is opened the closed plate-holder can easily be removed. A dry-plate can thus be placed into the shield, then exposed and removed from the shield without being injured by light, and without necessitating this to take place in a dark room. The plate-holder is provided on its back with a handle, I, for holding it while passing it in and out of the shield. A grooved plate, L, is pressed against the inner surface of the slide B, in the outer edge of the same, by a spring, M, contained within the grooved strip, for the purpose of preventing the light from passing into the plate-holder. The plate L is pushed back by the ledge H′ when the slides B D are pulled out. The shield A is provided on its edges with an angle-plate, Q, which extends over the edges, and is adapted to catch on a plate fastened to the back of the camera P for the purpose of sliding the shield on the camera and holding it in place thereon.

The plate-holder is to be made of metal, wood, india-rubber, or any other like material, and will be made to fit very exactly and with close joints, so that no light can enter.

A photographer can carry a large number of plates with him, each plate being contained in a plate-holder, and then when he wishes to take a picture all that is necessary is to pass one of the plate-holders into the shield in the manner described above.

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

1. The combination, with a shield and its slide, of a plate-holder fitting in the shield, and pins projecting from the outer surface of the slide of the plate-holder, the said pins being adapted to pass into apertures in the inner surface of the slide of the shield, substantially as herein shown and described, and for the purpose set forth.

2. The combination, with the shield and its slide, of a door in the back of the shield, and

a plate-holder provided with a slide having devices for holding it to the slide of the shield, substantially as herein shown and described, and for the purpose set forth.

3. The combination, with the shield A, provided with the door U and its slide B, of the plate-holder C, and the slide D, provided with pins F, entering sockets in the inner face of the slide B, substantially as herein shown and described.

4. The combination, with the shield A, the slide B, and the plate-holder C, of the spring-pressed slide D, substantially as herein shown and described.

5. The combination, with the shield A and the slide B, of the plate-holder C, the slide D, provided with the ledge H′ and the pins F, the slide L, and the spring M, substantially as herein shown and described.

6. The combination, with the plate-holder C, provided with the guide-grooves H, and the slide D, provided with the ledge H′, of the cap K and the springs S, substantially as herein shown and described.

H. MADER.

Witnesses:
CARL BAUER,
LUKAS MÜLLER.