

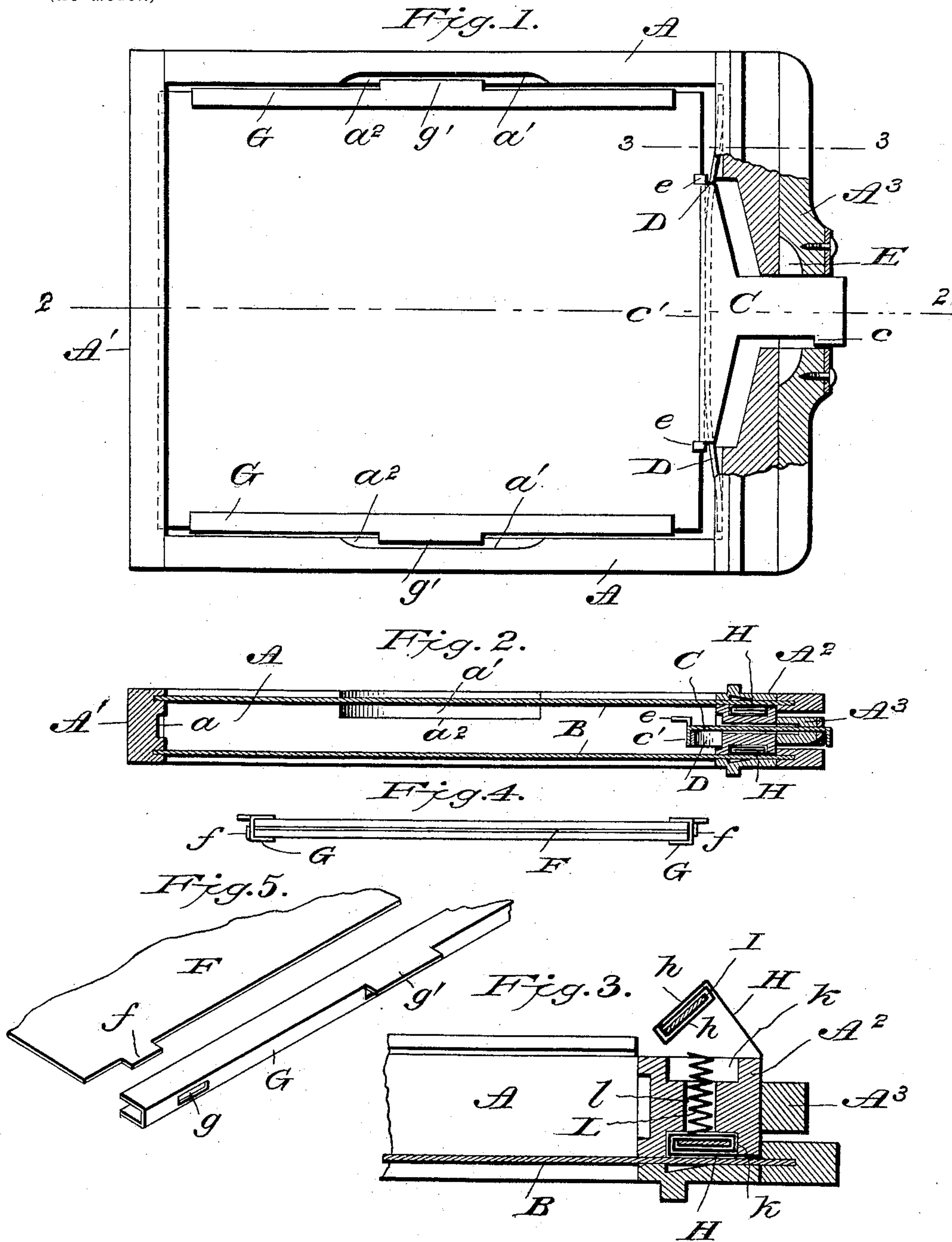
No. 607,054.

Patented July 12, 1898.

J. C. KIMSEY.
PHOTOGRAPHIC PLATE HOLDER.

(Application filed Mar. 24, 1898.)

(No Model.)



WITNESSES

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UNITED STATES PATENT OFFICE.

JAMES C. KIMSEY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE PHILADELPHIA CAMERA COMPANY, LIMITED, OF SAME PLACE.

PHOTOGRAPHIC-PLATE HOLDER.

SPECIFICATION forming part of Letters Patent No. 607,054, dated July 12, 1898.

Application filed March 24, 1898. Serial No. 675,009. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. KIMSEY, a citizen of the United States of America, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Photographic-Plate Holders; 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 is an improvement in photographic-plate holders; and the object of my said invention is to provide a double plate-holder of such construction that the filling or loading of the same can be accomplished more readily and accurately than with the ordinary plate-holder comprising hinged sections into which the plates and septum are introduced separately, fitting in recesses therefor.

The invention contemplates a construction and arrangement for handling the plates in pairs by connecting them together with a septum or opaque partition between and includes the particular construction of the plate-holder which is adapted to receive the plates so connected and hold them from becoming displaced when the slides are removed during exposures in a camera.

The plate-holder and devices connecting the plates are especially adapted for use in connection with a carrying and transferring case for the plates set forth in an application for patent filed March 24, 1898, and bearing Serial No. 675,008.

The present invention consists in the particular construction of the plate-holder and devices connecting the plates together, all as hereinafter fully described, and particularly set forth in the appended claims.

In the accompanying drawings, which form a part of this specification, Figure 1 is a plan view of a plate-holder constructed in accordance with my invention, the front cross-piece being partly broken away to disclose details of construction. Fig. 2 is a longitudinal sectional view on the line 2 2 of Fig. 1. Fig. 3 is a detail sectional view on the line 3 3 of Fig. 1. Fig. 4 is an end view of the photographic plates and devices connecting the

same. Fig. 5 is a detail perspective view of said devices.

The body or frame of the plate-holder is made up of the longitudinal side pieces A A, rear cross-piece A', and forward cross-piece A², the latter having an extension or handle A³, forming an open rectangular frame similar to the ordinary double plate-holder, with the exception that being designed to receive the plates through one side it is not divided longitudinally into sections. This frame is provided with slits in the forward cross-piece and guideways in the side and end pieces to receive the upper and lower slides B B, which cover the plates to protect them and are withdrawn in making an exposure. In the inner side of the rear cross-piece A' is a longitudinal recess *a*, while the side pieces A A are provided with recesses *a'*, extending below the upper slide to form shoulders *a*², for the purpose hereinafter specified.

The inner side of the front cross-piece of the frame is recessed to receive a movable cross-piece or sliding plate C, having an extension that passes through the handle A³, and is bent abruptly at its outer end to present a grasping portion and also limit the inward movement of the plate. The inner portion of the extension of the sliding plate is reduced in width to form a hook *c*, which engages the outer edge of the handle A³, and holds the said plate against the action of flat springs D D, which are attached to the cross-piece of the frame and bear upon a depending flange *c'* at the inner edge of the plate. Where the extension of the sliding plate passes through the handle A³, the latter is provided with a bushing E, which serves to prevent light passing into the plate-holder. At the ends of the sliding plate or cross-piece C are formed projecting fingers *e*, which are adapted to engage the photographic plates and hold them against movement in the plate-holder, the said fingers being located on a line with the shoulders *a*², hereinbefore referred to.

The plate-holder hereinbefore described is adapted to receive two photographic plates at a time, and to this end the said plates are provided with means for securely connecting them together and which coact with certain

features of the plate-holder to hold the plates firmly therein. These means consist of a septum or opaque plate F, separating the photographic plates, and strips G, which are U-shaped in cross-section and embrace the edges of the plates and septum, the said strips being held in place by tongues *f*, projecting from the septum through slots *g*, formed in the strips and bent upon said strips. It will be understood, of course, that the plates are placed against the septum with the composition side outward, and said septum being of opaque material prevents the light passing through to the plate in the rear during the exposure of the one in front, being similar to the septum in an ordinary plate-holder. The plates can be slipped into and out of engagement with the binding-strips G, so that after the plates have been exposed in a camera they may be readily removed and others substituted. The binding-strips are provided centrally with projecting lips or flanges *g'*, which are adapted to enter the recesses *a'* in the plate-holder and rest upon the shoulders *a*² when the plates are placed therein, said lips being on a line with the upper edge of the binding-strips.

The photographic dry-plates connected to each other in pairs, as hereinbefore described, are placed in the plate-holder by withdrawing the upper slide thereof and moving the sliding plate C into the recesses in the front cross-piece, the photographic plates being turned to bring the flanges or lips *g'* at the upper edge thereof, in order that when the plates are passed into the plate-holder said lips will enter the recesses in the side pieces and rest upon the shoulders *a*². The plates are then pushed rearward into the recess *a* either manually or by the sliding plate C, which is released to engage the forward end of said plates, the fingers *e* overlapping the upper edge to prevent an outward movement of the plates, while the opposite movement is prevented by the lips *g'* engaging the shoulders *a*². The plates are thereby held firmly in the plate-holder, and after replacing the slide the device is ready for use in connection with a camera.

In order to more effectually prevent the entrance of light through the slits which received the removable slides, particularly when a corner of the slide is introduced during the operation of inserting the same, I have devised a flexible shutter, actuated by springs, to close the slit by closely fitting the edges of the slide. This shutter consists of a piece of fabric H, which is cemented to the forward edge of the cross-piece A² of the plate-holder and the ends formed into a double fold *h h*, between which is held a strip of paper, felt, or other flexible material, (designated by the letter I,) the said strip being preferably cemented to the fabric. To receive these shutters, the forward cross-piece of the plate-holder is provided with recesses *k*, communicating with the slits, and to force said shut-

ters across the slits against the opposite wall thereof holes *l* are drilled through the cross-piece A² and helical springs L inserted therein to bear at their ends against the shutters. There are a number of springs which bear against the shutters at intervals along its length, in order that they will be pressed around the edges of the slide when a corner thereof is inserted, the flexible nature of the shutter thereby insuring an effectual closing of the slit.

The devices hereinbefore described provide an improved plate-holder, the loading of which is greatly facilitated, more particularly under conditions which do not afford the services of a "dark room," for the recesses *a'* will guide the operator in arranging the plate-holder, while the lips *g'* serve as guides to insure the plates being properly passed into the holder. It will be noted that the operation of the sliding plate C to engage and disengage the plates can be effected while the slides B B are in place, this being especially desirable when the plate-holder is used in connection with the carrying and transferring case.

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

1. A photographic-plate holder, comprising an open frame having shoulders therein at opposite sides, a sliding plate mounted in the frame and provided with projecting fingers; in combination with binding-strips for the photographic plates, said binding-strips having projecting flanges, the frame being provided with the usual slides, substantially as shown and for the purpose set forth.

2. A photographic-plate holder, comprising a frame having a longitudinal recess in the rear cross-piece and recesses in the side pieces thereof, upper and lower slides mounted within the frame, and a sliding plate provided with projecting fingers; the recesses in the sides of the frame extending slightly below the upper slide; in combination with strips for the photographic plates, said strips having projecting flanges, substantially as shown and for the purpose set forth.

3. A photographic-plate holder, comprising a frame having a longitudinal recess in the rear cross-piece and vertical recesses in the side pieces, a sliding plate located in the plate-holder and having an extension passing through the same, fingers projecting from said sliding plate, and springs actuating the latter; in combination with binding-strips for the photographic plates provided with projecting flanges, the plate-holder having the usual slides, substantially as shown and for the purpose set forth.

4. A photographic-plate holder, comprising a frame having a longitudinal recess in the rear cross-piece and vertical recesses in the side pieces, a sliding plate located in the plate-holder and having an extension passing through the same, a handle portion and hook at the outer end of the extension, fingers pro-

jecting from the sliding plate, and springs actuating the latter; in combination with binding-strips for the photographic plates provided with projecting flanges, the plate-holder having the usual slides, substantially as shown and for the purpose set forth.

5. In combination with a plate-holder constructed substantially as shown, said plate-holder having slits to receive the slides and recesses communicating with said slits, of a shutter composed of a fabric secured to the plate-holder, and folded upon itself, a felt strip inclosed within the folds, and a plurality of springs bearing against the folded part of the shutter along its length, substantially as shown and for the purpose set forth.

6. In combination with a plate-holder constructed substantially as shown and described, of a septum adapted to separate the photographic plates, binding-strips attached

to the septum, and flanges projecting from said binding-strips, substantially as shown and for the purpose set forth.

7. In combination with a plate-holder constructed substantially as shown and described, of a septum adapted to separate the photographic plates and provided with projecting tongues, binding-strips overlapping the edges of the plates and having recesses through which the tongues are passed and bent upon said strips, and flanges projecting from one edge of the binding-strips, substantially as shown and for the purpose set forth.

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

JAMES C. KIMSEY.

Witnesses:

MAURICE G. BELKNAP,
WM. P. ROWLAND.