

(No Model.)

J. H. IDEN.
PHOTOGRAPHIC KIT.

No. 474,833.

Patented May 17, 1892.

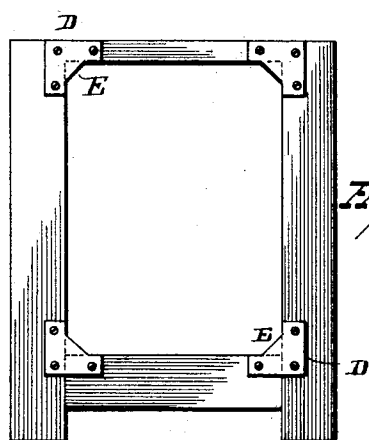
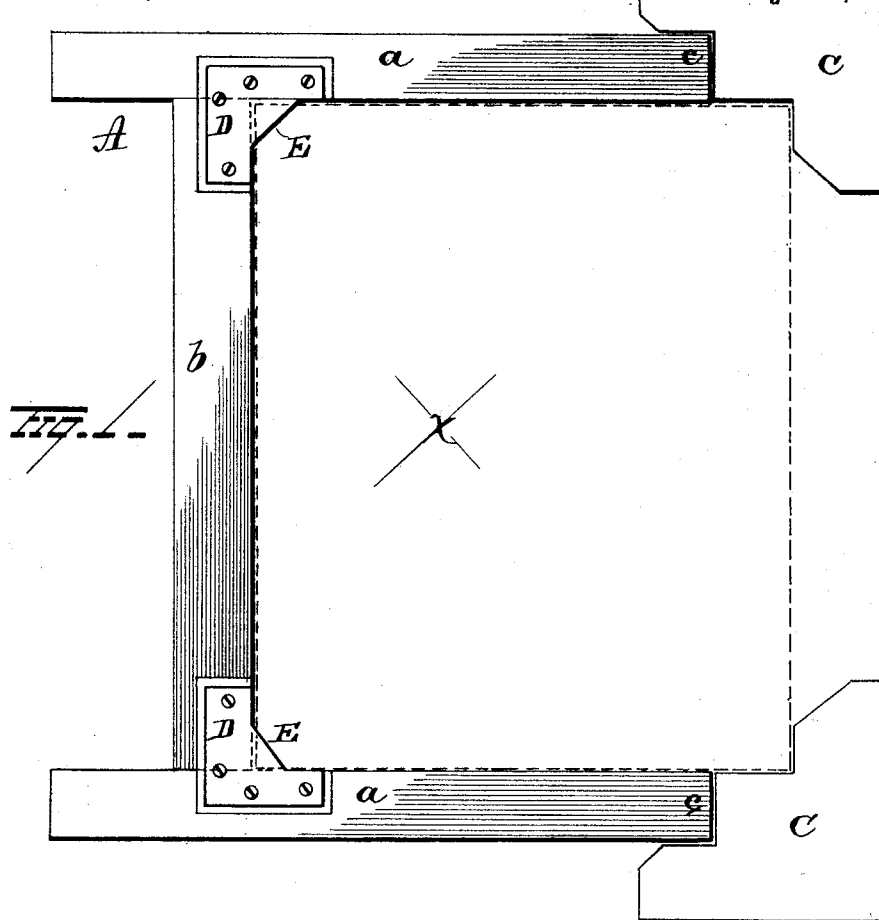
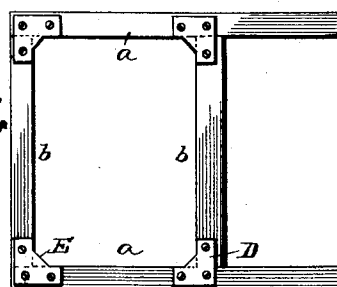


Fig. 3.

Fig. 2.



Witnesses
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PHOTOGRAPHIC KIT.

SPECIFICATION forming part of Letters Patent No. 474,833, dated May 17, 1892.

Application filed April 13, 1891. Serial No. 388,621. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. IDEN, of Bourbon, in the county of Marshall and State of Indiana, have invented certain new and useful
5 Improvements in Kits; 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 ap-
10 pertains to make and use the same.

My invention relates to an improvement in kits or inside holders for photographic cam-
15 eras.

Heretofore all kits of the reversible and non-reversible patterns so supported the plate
15 or film or other material carrying the sensi-
tized coating that the center of the plate was in direct line with the axis of the lens, thus causing the center of focus to fall on the cen-
20 ter of the sensitized plate and causing the field curvature of the lens to be brought equally in contact with said plate around the center of focal axis. This is objection-
25 able on account of the inability of the photog-
rapher, owing to the insufficient depth of focus, to use floor-space in front of and be-
30 yond the focal axis and prevents him from arranging his group or groups to harmonize with the feeling or spirit he wishes to portray, or, in other words, not producing sufficient
35 depth of focus to enable him to photograph a number of children playing in a circle from a point giving the proper perspective of the view. A number of devices have heretofore
40 been used to produce an increase in the depth of focus, such as the sliding front and single and double swing-backs. With the sliding front a small addition to the depth is gained; but such addition is insufficient to properly
45 produce a group arranged as above described. The swing-back gives the greatest depth; but it distorts the features and forms in the di-
50 rection of the swing of the plate from a right angle with axis of lens.

The object of my invention is to support the
45 plate or sensitized coating at right angles to the axis of the lens and with a greater part of the plate or sensitized coating to one side of the focal axis or in the field curvature of said lens, thereby enabling the photographer
50 to arrange his groups over from three to eight

times more floor-space than can be utilized under the methods now in use.

In the accompanying drawings, Figure 1 represents one form of kit, showing the sensi-
55 tized plate in dotted lines. Fig. 2 is a view of another form of kit, and Fig. 3 represents still another modification.

A represents the kit, which in Fig. 1 is composed of the top and bottom strips *a* and one side strip *b*, the said strips being secured together,
60 as shown, with the top and bottom strips projecting on opposite sides of the side strips *b*. The space partly surrounded by the side strip *b* and the longer sections of the top and bot-
65 tom strips is for the plate or sensitized film, the free ends *c* of the arms *a*, when in position within the plate-holder, resting against the corner-pieces *B* of the plate-holder *C*.

D represents the metallic or hard-rubber corner sections or braces, designed to both
70 strengthen the kit and at the same time form lips *E*, on which the corners of the sensitized plate or film rest. It will thus be seen at a glance that when a kit constructed as above
75 and carrying a plate or film is introduced into a holder and the latter placed in a camera the greater part of the sensitized plate or film will be to one side of the center of the focal axis. In other words, the focal axis will
80 fall on the center of the kit, as at *X*, and not on the center of a plate, the larger part of the surface of which is to one side of the center of the kit. This form of kit is designed to
85 carry the sensitized plate or film with its greatest length in a vertical plane and at right angles with the lens, and at the same time in the right or left field curvature of said lens, as the form of the group demands. When a
90 group is so arranged that the nearest person or object composing the group is at the nearest right-hand corner of the floor-space on which said group is arranged and the most dis-
95 tant person or object approaches the more distant left-hand corner of said floor-space, the camera should be so placed that a line drawn through the center of the lens would come in
100 contact with the more distant person or object, thus throwing the group in the right-hand field curvature of lens. For such a grouping the plate or film when in position in the kit and

plate-holder should occupy the left-hand rear field curvature of the lens. From the foregoing it will be seen that instead of taking straight or focusing on the central figure or
5 object of the group by my improvement I take diagonally through the lens, and I have found from actual experiments that I can use from three to eight times more floor-space in
10 arranging groups than can be utilized by any of the devices now in operation.

The construction disclosed in Fig. 2 differs from the form shown in Fig. 1, in that the frame is provided with two side strips instead of one and is arranged to hold the plate or
15 film wholly in the rear field curvature of the lens instead of partially so, as in Fig. 1.

Fig. 3 discloses a form necessary for supporting a plate so that its greatest length is extended toward the outside of the field curvature
20 of the lens.

It is evident that the construction of the kit can be varied in numerous ways, can be designed for any size of plate-holder, and be arranged to support the plate in any position
25 relative to the focal axis of the lens. Hence I would have it understood that I do not con-

fine myself to any size or shape of kit, but consider myself at liberty to vary size, shape, or construction, as necessity demands.

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

1. A kit or inside holder for photographic cameras, comprising a frame composed of parallel strips or arms and a connecting-strip
35 secured to the parallel strips or arms at a point between their ends and centers, substantially as set forth.

2. A kit or inside holder for photographic cameras, comprising top and bottom strips
40 and side strips secured to the top and bottom strips at a point between the ends and centers of said top and bottom strips, substantially as set forth.

In testimony whereof I have signed this
45 specification in the presence of two subscribing witnesses.

JOHN H. IDEN.

Witnesses:

JOHN PASCHALL,
GRANT BELTZ.