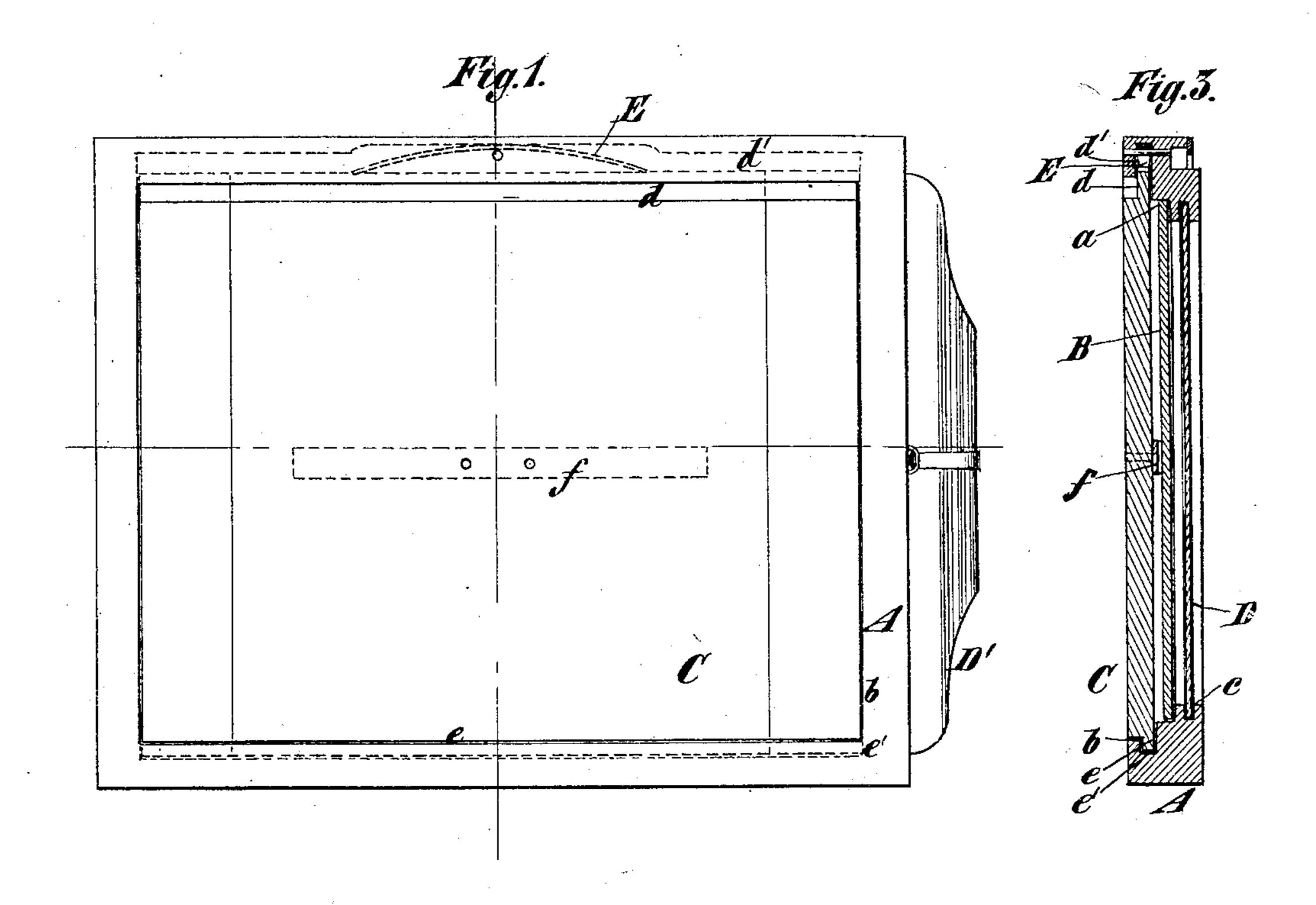
(No Model.)

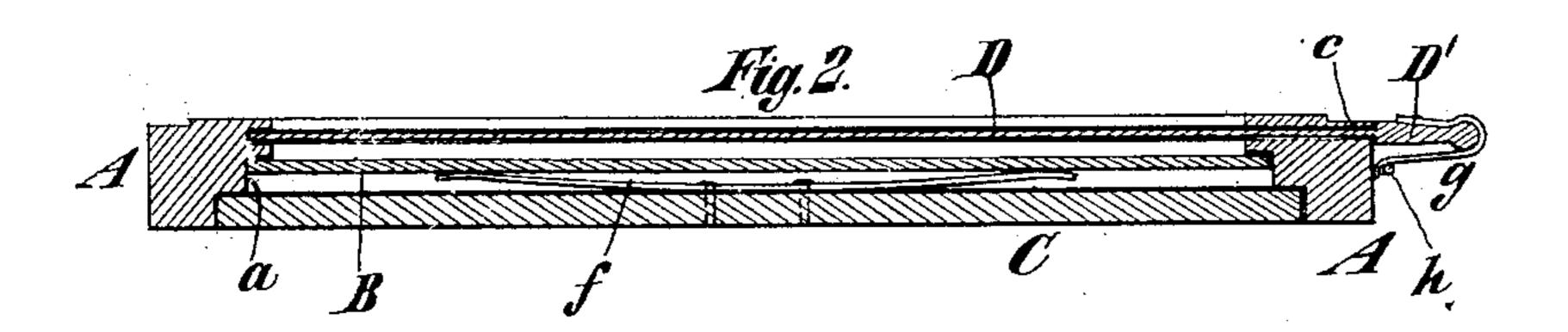
## M. FLAMMANG.

PLATE HOLDER FOR PHOTOGRAPHIC CAMERAS.

No. 271,826.

Patented Feb. 6, 1883.





Witnesses James R. Bowen. Ashias Flammana Byhis atti

## United States Patent Office.

MATHIAS FLAMMANG, OF NEWARK, NEW JERSEY.

## PLATE-HOLDER FOR PHOTOGRAPHIC CAMERAS.

SPECIFICATION forming part of Letters Patent No. 271,826, dated February 6, 1883.

Application filed December 28, 1881. (No model.)

To all whom it may concern:

Be it known that I, MATHIAS FLAMMANG, of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Plate-Holders for Photographic Cameras, of which the following is a specification.

The object of my present improvements is to produce a photographic-plate holder neat and compact, and having as few projections as possible, so that it may be conveniently carried in the pocket of a photographer.

To this end the improvements consist in the combination, with the frame and dark-slide of a photographic-plate holder and a head or stopper attached to its outer end, of a spring-catch adapted to be operated by the hand in grasping the head or stopper and a device on the frame of the holder for engaging the catch.

They also consist in a photographic - plate holder frame, a door fitting snugly within the same at opposite edges, a tongue and groove or recess for securing said door to the frame at one of the intermediate edges, and means, 25 which do not project beyond the side of the door and frame, for securing the door at the other of the intermediate edges, all being so combined and organized that the door may be detached without any edgewise movement, ex-30 cept in the direction of the depth or width of said tongue and groove or recess. Both intermediate edges of the door are preferably secured by tongues or their equivalents and grooves or recesses, and in such case one of 35 the tongues and its groove or recess may be deeper or wider than the other, so that the door may be engaged with the frame by first

placing the deeper tongue or equivalent in its groove or recess, then pressing the door into its frame, and finally sliding the door edgewise to effect the engagement of the opposite tongue or its equivalent with its groove or recess, as more fully hereinafter described.

They also consist in the combination, with the frame and door of a photographic plate holder, of means for fastening opposite edges

of the door to opposite edges of the frame and a spring acting against the inner face of the door, whereby when the door is released at 50 one edge it will be pushed outward from the

frame, so that it may be easily grasped.

In the accompanying drawings, Figure 1 is a back view of a photographic-plate holder embodying my improvements. Fig. 2 is a horizontal section of the same, and Fig. 3 is a 55 transverse section thereof.

Similar letters of reference designate corre-

sponding parts in all the figures.

A designates the frame of the photographicplate holder. It is provided with a rabbet, a, 60 for the reception of a photographic plate, B, a rabbet, b, in rear of the former, for the reception of the door C, and a slideway, c, forward of the rabbet a, for the reception of the darkslide D. The door C may be made of any suit- 65 able material, and fits snugly between the ends or opposite upright edges of the frame. At one intermediate or longitudinal edge it is provided with a deep or wide tongue, d, and at the opposite intermediate or longitudinal edge 70 with a shallower or narrower tongue, e. The corresponding edges of the frame have grooves or recesses d' e', corresponding with the said tongues. To fasten the door in the frame, the tongue d is inserted in the groove d', and the 75 door is pressed into its rabbet b. Then the door is moved edgewise transversely to the length of the tongues and grooves or recesses to cause its tongue e to engage with the groove e'. The tongue d and groove d' are deep or So wide enough to remain in engagement after the tongue e and groove e' have thus been engaged. It will be observed that in removing or replacing the door no movement thereof lengthwise of the tongues and grooves or re- 85 cesses is necessary.

E designates a spring, which acts directly between the frame and door to force the latter in such direction as to effect and maintain the engagement of the tongue and groove ee'. 90 It is obvious that the grooves may be in the door and the tongues on the frame with like results. On the inner side of the door is a spring, f, which bears on the photographic plate and holds it snugly in its rabbet. This spring 95 acts against the inner face of the door and subserves the additional purpose of pushing the door outward when it is slid transversely in such direction that its tongue e will be disengaged from the groove e'. When this takes 100 place the door may be easily grasped to lift it out. It will be observed that I thus provide

means for fastening the door which do not project beyond the side of the plate-holder. This is very desirable, as the plate-holder may then be carried more conveniently in the pocket of 5 the photographer. The same result may be obtained, at least to some extent, by providing the door with countersunk catches, buttons, or bolts, which may be manipulated through indentations in the door; but the 10 tongues and grooves are more desirable, as they form lap-joints, whereby light is effectually excluded.

The dark-slide D is provided at the outer end with a head or stopper, D'. This head or 15 stopper is provided with a spring-catch, g, whose free end is adapted to engage with a staple, strap, or like device, h, on the frame. By pressing the tree end of this catch toward the head or stopper when the latter is grasped 20 it may be disengaged from the staple, strap, or other device, h. The end of the catch may be rounded, so as to automatically engage with the said device when the head or stopper is pushed toward the frame. This fastening is 25 much preferable to one which projects beyond the sides of the frame, as it better adapts the plate-holder to be carried in the pocket of the photographer, and it is often very desirable to so carry a plate-holder when dry-plates are 30 used.

I do not wish to claim broadly the combination, with the frame and dark slide of a photographic-plate holder, of a self-acting spring catch or lock, whereby the slide will be auto-35 matically locked when inserted in the frame.

What I claim as my invention, and desire to

secure by Letters Patent, is—

1. The combination, with the frame and darkslide of a photographic-plate holder and a head 40 or stopper attached to its outer end, of a springcatch adapted to be operated by the hand in |

grasping the head or stopper and a device on the frame of the holder for engaging the catch, substantially as specified.

2. The combination, with the frame A of a 45 photographic-plate holder, provided with a staple or strap, h, of a dark-slide, D, provided with a head or stopper, D', and a spring-catch,

g, substantially as specified.

3. A photographic-plate-holder frame, a door 50 fitting snugly within the same at opposite edges, a tongue and groove or recess for securing said door to the frame at one of its intermediate edges, and means, which do not project beyond the outer side of the door and 55 frame, for securing the door at the other of the intermediate edges, all being so combined and organized that the door may be detached without any edgewise movement, except in the direction of the depth or width of said tongue 60 and groove or recess, substantially as specified.

4. The combination of the frame A, provided with grooves or recesses d'e', the former being deeper or wider than the latter, the door C, provided with tongues de, or their equivalents, 65 the former being deeper or wider than the latter, and the door being made to fit snugly between the sides of the frame, which are unprovided with grooves or recesses, substantially

as specified.

5. The combination, with the frame and door of a photographic-plate holder, of means for fastening opposite edges of the door to opposite edges of the frame and a spring acting against the inner face of the door, whereby 75 when the door is released at one edge it will be pushed outward from the frame, so that it may be easily grasped, substantially as specified.

M. FLAMMANG.

Witnesses:

T. J. KEANE, James R. Bowen.