

(No Model.)

C. C. SPALSBURY.
PHOTOGRAPHIC PLATE HOLDER.

No. 512,914.

Patented Jan. 16, 1894.

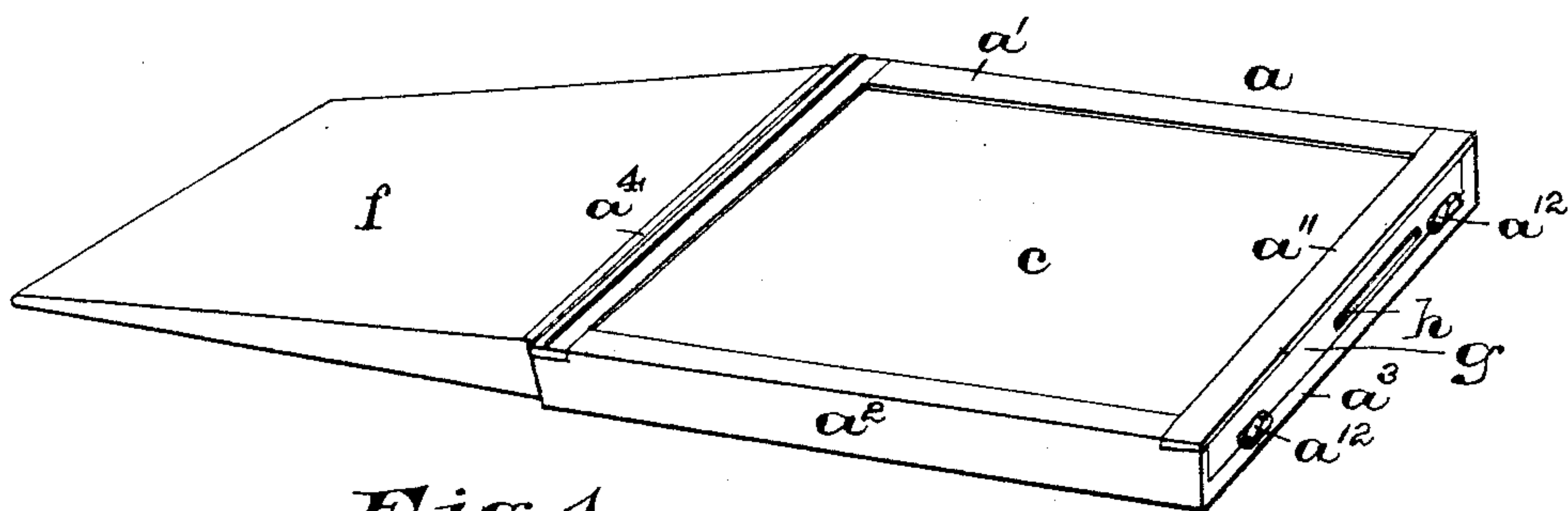


Fig. 1

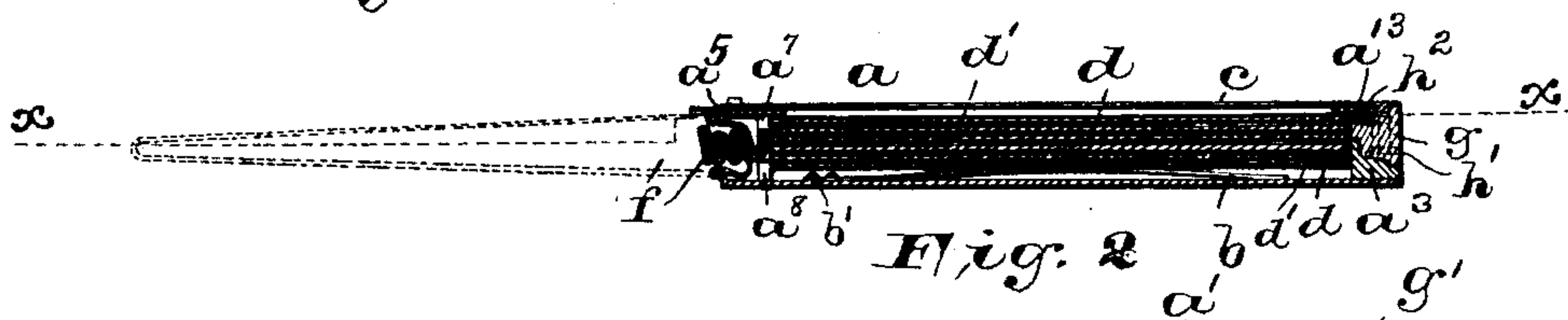


Fig. 2

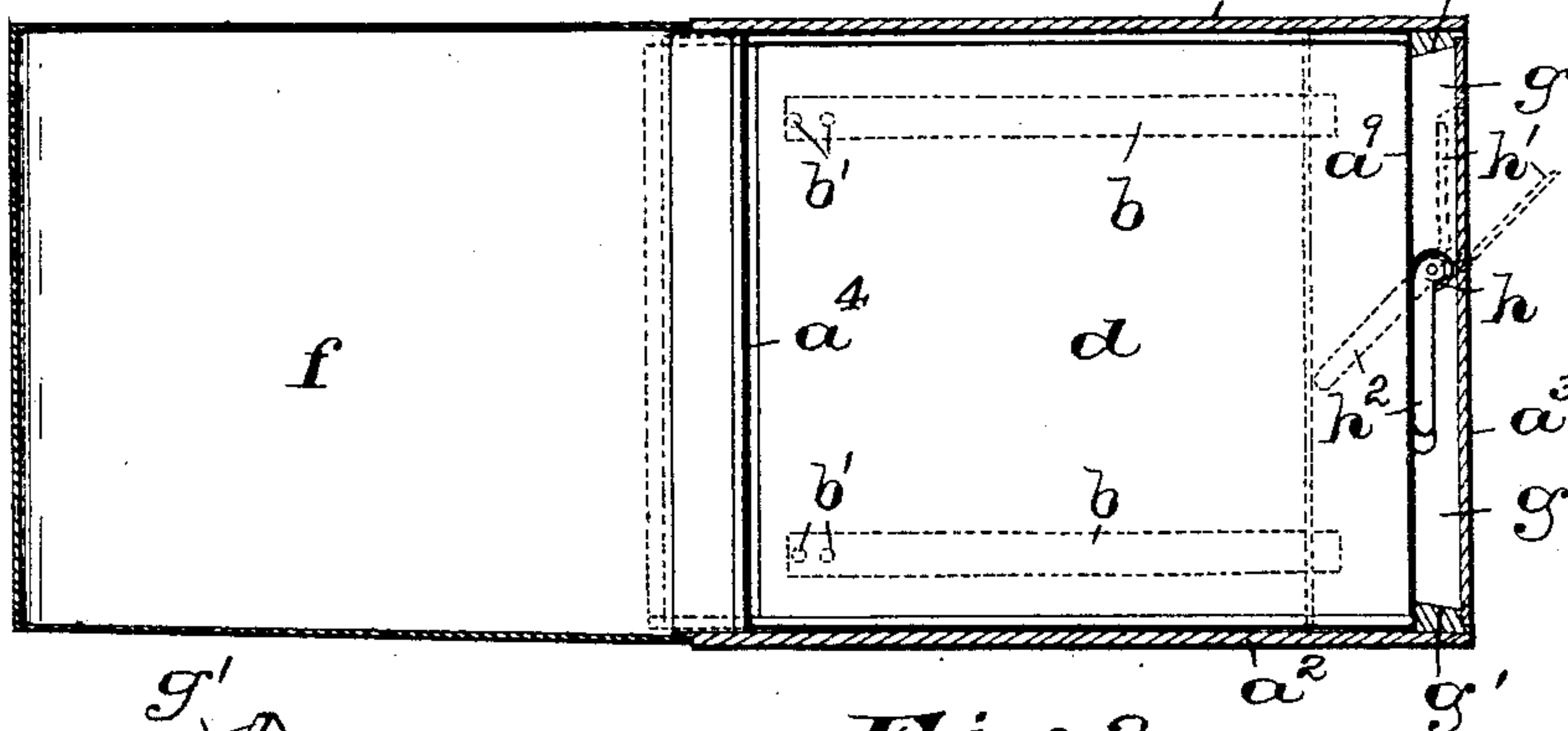


Fig. 3

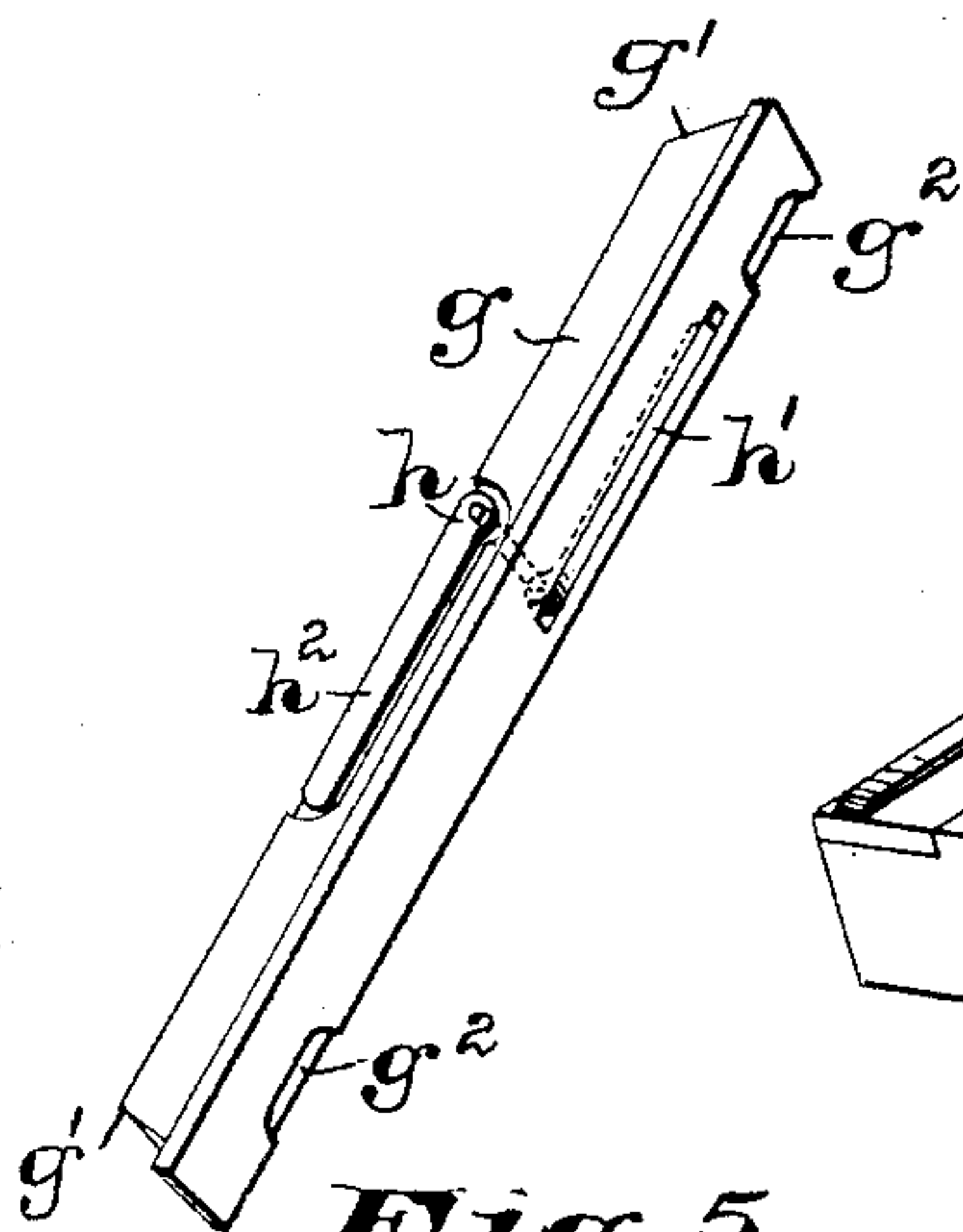


Fig. 4

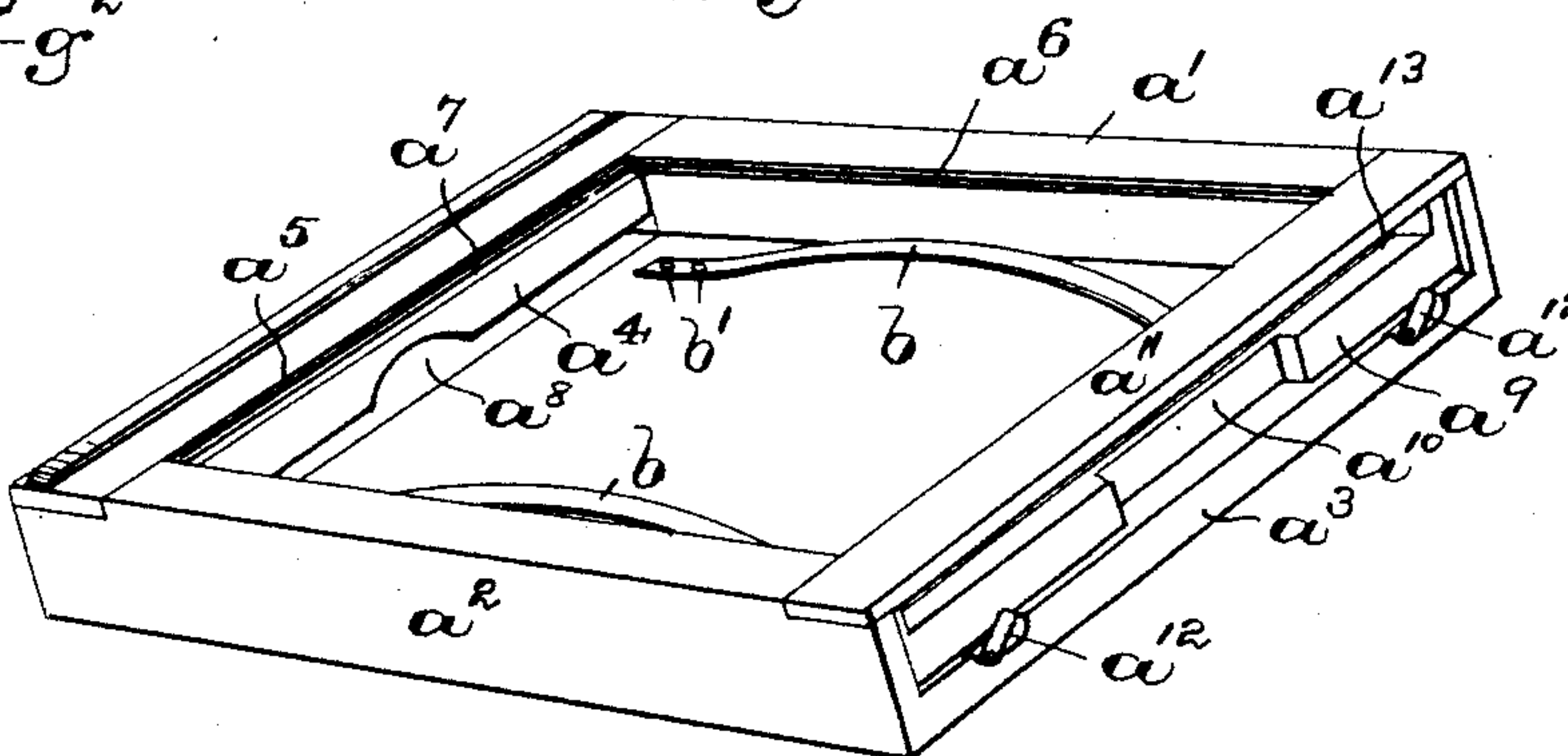


Fig. 5

WITNESSES:

Wm. B. Campfield, Jr.
Walter A. Edward

INVENTOR:

Charles C. Spalsbury,

BY Fred C. Fraentzel, ATT'Y.

UNITED STATES PATENT OFFICE.

CHARLES C. SPALSBURY, OF EAST ORANGE, NEW JERSEY.

PHOTOGRAPHIC-PLATE HOLDER.

SPECIFICATION forming part of Letters Patent No. 512,914, dated January 16, 1894.

Application filed August 4, 1893. Serial No. 482,345. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. SPALSBURY, a citizen of the United States, residing in East Orange, in the county of Essex and State of New Jersey, 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The purpose of this invention is to provide a photographic plate holder, in which any number of sensitized plates may be arranged, from one to a dozen or more, and the upper plate, after being exposed to receive the print, being adapted to be removed to a position back of the last plate, still unexposed, without removing the dry plate from the frame, whereby any desirable number of photographic prints may be taken successively on different plates without first removing the plate from the frame and thereby exposing it to the light.

A further object of this invention is to provide a frame for this purpose, which is of a simple and cheap construction and by the arrangement and construction of the several parts of the frame, a perfectly light and dust proof plate holder is the result.

The invention therefore consists essentially in the herein described photographic plate holder, as a new and improved article of manufacture, and also in certain details of construction such as will be hereinafter more fully described and finally embodied in the clauses of the claim.

The invention is illustrated in the accompanying sheet of drawings, in which similar letters of reference are employed in each of the described views to indicate corresponding parts.

In said drawings, Figure 1 is a perspective view of my novel form of photographic plate holder, with its slide closed to prevent the light from striking the upper photographic plate in the holder. Fig. 2 is a longitudinal vertical section of the plate holder or frame,

clearly illustrating the general construction of the same, and showing the arrangement of a number of dry-plates within the holder. Fig. 3 is a horizontal section of the plate holder, taken on line x in Fig. 2, and Fig. 4 is a perspective view of the plate holder with the slide removed, to more clearly illustrate the inner construction of the main frame portion of the plate holder. Fig. 5 is a perspective of a bar and lever arrangement used in connection with the plate holder.

In said drawings, a is a suitable photographic plate holder or frame of any size, provided, as will be seen more especially from Fig. 4, with the four sides a' , a^2 , a^3 and a^4 and a base, to the inner side of which is secured by means of pins or screws b' a suitable spring or springs b . Near the upper edge of the one side a^4 of the said frame or holder a is a narrow slot or opening a^5 , while the sides a' and a^2 are provided with suitable grooves a^6 . Through said slot a^5 is forced a slide c , (see Figs. 1 and 2,) which is adapted to be moved backward or forward in said grooves a^6 , and whereby the upper photographic plate d can be covered or exposed as may be desired. Said side a^4 of the holder is also provided with the slots or openings a^7 and a^8 , as will be clearly seen from Figs. 2 and 4, and connected with the outer surface of said side a^4 is a suitable receptacle f , which may be a flexible bag, adapted to be folded against the plate holder a , when the same is not in use, as clearly indicated in Fig. 2. The side a^3 , which may be provided with a suitable cross-piece a^{11} , forming with said side a^3 the openings a^9 and a^{10} , into which is forced a removable bar g , provided with the inclined edges g' , as will be seen from Fig. 5. Said bar g may be provided with suitable recesses g^2 , into which suitable twin buttons a^{12} on the side a^3 of the holder a can be turned to prevent said bar from dropping out of its position in the frame or holder a .

As will be seen from Fig. 4, the cross-piece a^{11} is arranged in such a manner on the side a^3 , as to form an opening or slot a^{13} . The sensitized plates d are passed through this opening into the plate holder a causing them to rest upon each other and upon the spring or springs b , as illustrated in Fig. 2, and when

the slide *c* is closed and the bar *g* is put in position, the photographic plates are perfectly intact from the light rays.

In order to use the device, the frame or holder is placed in the camera, the slide *c* removed in the manner of the usual form of photographic plate holders and the upper plate *d* is exposed. When the picture has been taken, the slide *c* is slid back into position, and a small lever *h*, provided with the arms *h'* and *h²* and which is pivotally secured to said bar *g* in suitable slots therein, as shown in Fig. 5, is moved or turned to the dotted position, indicated in Fig. 3. The arm *h²* of said lever will engage with the end of the upper plate, which has just been subjected to the light, and forces said plate through the slot or opening *a⁷* into the receptacle or bag *f*. At the same time the spring or springs on the base of the holder force the pile of dry plates upwardly, while the operator without exposing the plate just operated upon to the light, forces said plate through the slot or opening *a⁸* back into the main portion of the plate holder and beneath the pile of dry plates therein. Thus it will be seen, that any number of dry plates can be arranged in the plate holder, and each one can be used and exposed to the light without removing or exposing the other plates from the plate holder. By this arrangement I have devised a simple and useful device for the purpose of a photographic plate holder, in which the dry plate can be easily and quickly manipulated and which is constructed to be both dust and light proof.

Of course it will be understood that certain changes in the details of construction may be made without departing from the scope of my invention and other means for forcing the dry-plate into the bag or receptacle *f* may be employed, and I therefore do not wish to be understood as limiting myself to the exact form of frame herein shown.

To prevent the light from passing through the upper photographic plate onto the second plate in the pile of photographic plates in the plate holder, when the slide or shutter *c* has been opened, each plate *d* may be provided with a suitable and solid backing which prevents the passage of light rays through said plate.

Having thus described my invention, what I claim is—

1. A photographic plate-holder, comprising therein, a main frame for holding a series of photographic plates, consisting of a base and its four sides, openings in two of the oppositely placed sides, through which a photographic plate can be placed within the frame, or removed therefrom, a slide *c* for closing said frame, a receptacle secured over one of

said openings in the side of the frame, a removable closing device or plug in the opening in the opposite side of the frame, and a lever pivotally arranged in said closing device or plug, constructed and arranged to engage with the upper photographic plate in said series, whereby said plate may be forced into said receptacle, substantially as and for the purpose set forth.

2. A photographic plate holder, comprising therein, a main frame for holding a series of photographic plates, consisting of a base and its four sides, a spring on said base, openings in two of the oppositely placed sides, through which a photographic plate can be placed within the frame or removed therefrom, a slide *c* for closing said frame, a receptacle secured over one of said openings in the one side of the frame, a removable closing device or plug in the opening in the opposite side of the frame, and a lever pivotally arranged in said closing device or plug, constructed and arranged to engage with the upper photographic plate in said series, whereby said plate may be forced into said receptacle, substantially as and for the purpose set forth.

3. The herein described photographic plate holder, consisting essentially of a main frame *a*, one side thereof having slots or openings *a⁷* and *a⁸*, springs *b* in said frame and a receptacle or bag *f* connected with said frame *a*, and openings or slots *a¹³* in the opposite side of said main frame, a plug or bar *g*, and means for forcing one of the photographic plates into said receptacle or bag *f*, without exposing it to the light rays, consisting essentially of a lever *h* in said plug or bar *g* having arms *h'* and *h²*, substantially as and for the purposes set forth.

4. The herein described photographic plate holder, consisting essentially of a main frame *a*, one side thereof having slots or openings *a⁷* and *a⁸*, springs *b* in said frame and a receptacle or bag connected with said main frame *a*, and openings or slots *a¹³* in the opposite side of said main frame, a plug or bar *g*, recesses *g²* in said plug or bar, twin buttons on said main frame adapted to engage with said recesses, and means for forcing one of the photographic plates into said receptacle or bag *f*, without exposing it to the light rays, consisting essentially of a lever *h* in said plug or bar *g*, having arms *h'* and *h²*, substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 1st day of August, 1893.

CHARLES C. SPALSBURY.

Witnesses:

FREDK. C. FRAENTZEL,
WM. H. CAMFIELD, Jr.