

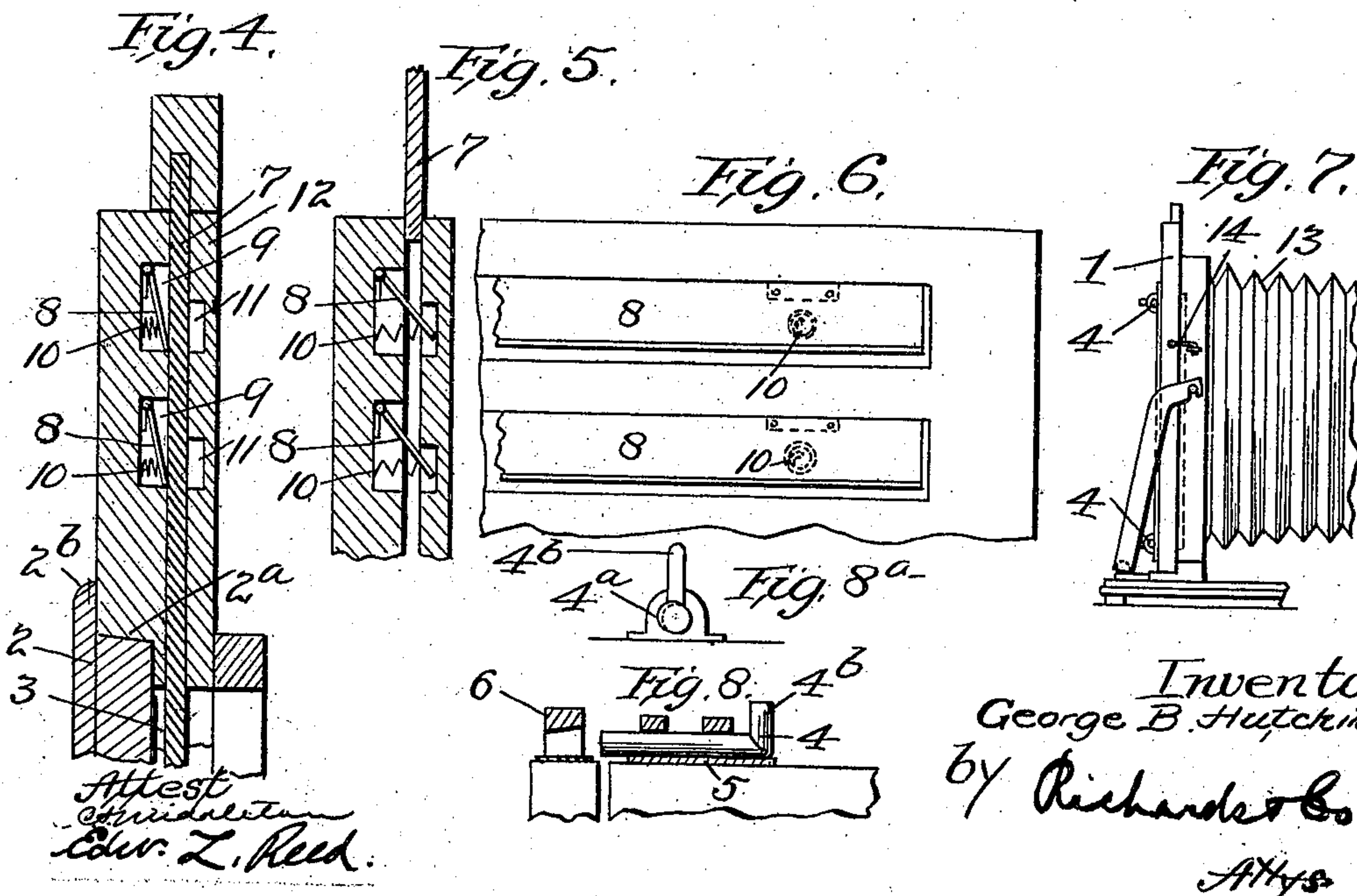
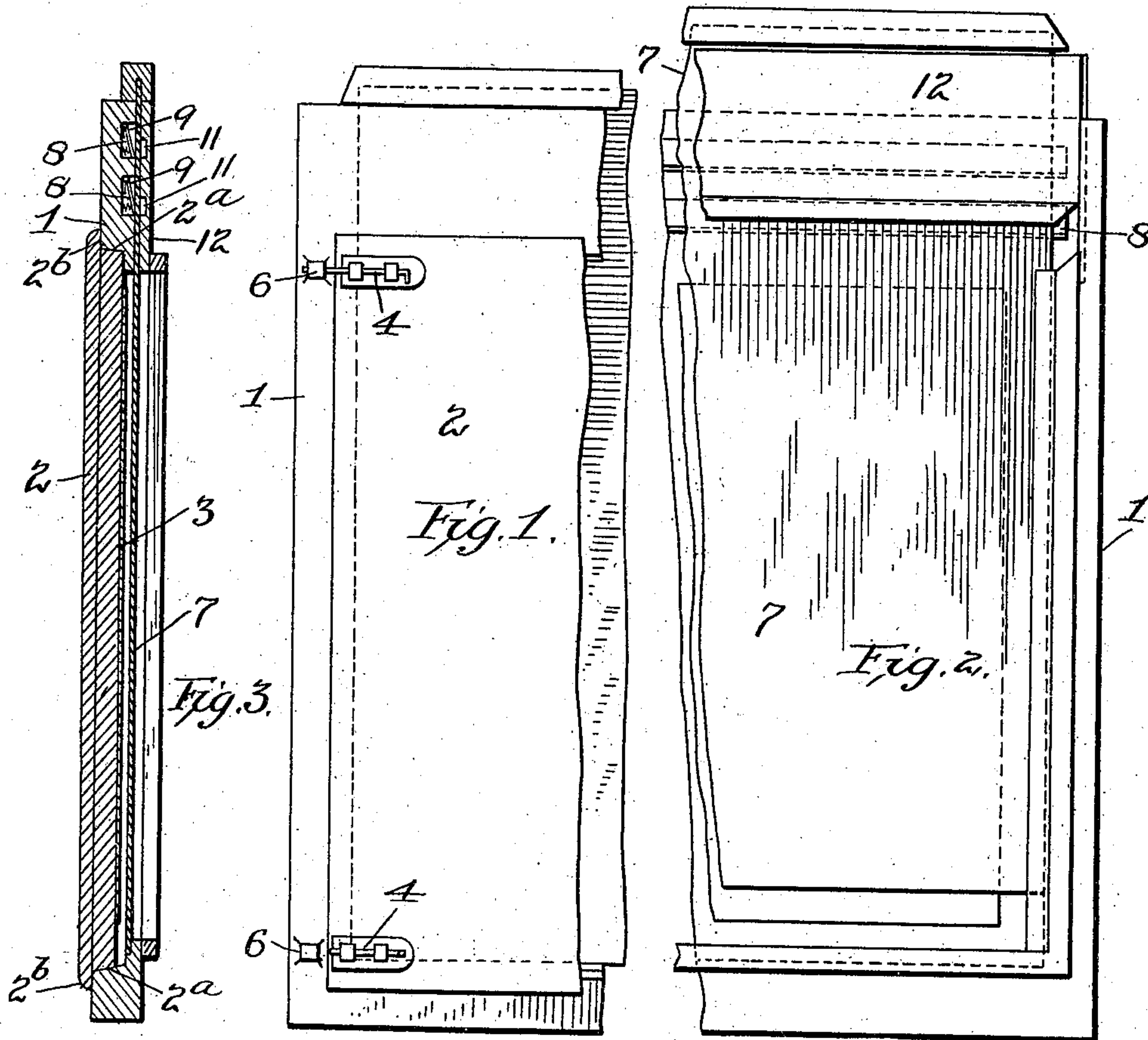
No. 693,714.

Patented Feb. 18, 1902.

G. B. HUTCHINGS.
PAPER HOLDER FOR ENLARGING CAMERAS.

(Application filed Sept. 27, 1901.)

(No Model.)



UNITED STATES PATENT OFFICE.

GEORGE B. HUTCHINGS, OF GALVESTON, TEXAS.

PAPER-HOLDER FOR ENLARGING-CAMERAS.

SPECIFICATION forming part of Letters Patent No. 693,714, dated February 18, 1902.

Application filed September 27, 1901. Serial No. 76,767. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. HUTCHINGS, a citizen of the United States, residing at Galveston, in the State of Texas, have invented certain new and useful Improvements in Paper-Holders for Enlarging-Cameras, of which the following is a specification.

My invention relates to improvements in paper-holders for enlarging-cameras, and is designed more especially for use in connection with the enlarging-camera which forms the subject of my application filed in the United States Patent Office February 26, 1901, Serial No. 48,893.

The object of the invention is to provide a simple and convenient form of paper-holder in which the paper may be readily inserted and removed and from which the light will be effectually excluded.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a partial elevation of the rear face of the holder. Fig. 2 is a similar view of the opposite face, showing one of the panels partially moved out to show the manner in which the light-excluding flaps are rendered accessible. Fig. 3 is a central vertical section. Figs. 4 and 5 are enlarged detail sectional views showing more clearly the light-excluding flaps, the latter figure showing the position the flaps assume when the slide has been pulled out. Fig. 6 is a detail face view of the portion of the holder containing the flaps. Fig. 7 is a side elevation of a portion of an enlarging-camera, showing the holder applied thereto; and Figs. 8 and 8^a are detail views of the fastening means employed for securing the back or paper-carrying part of the holder to the frame.

In the figures I have designated the various parts by reference-numerals, the frame of the paper-holder being indicated at 1. This frame is open at front and back, its rear face being closed when in use by a plate or door 2, the front face of which is designed to carry the sensitive paper, as indicated at 3. The edges of the plate or door are preferably beveled, as shown at 2^a, to fit the correspondingly-beveled edges of the frame, and a flange 2^b overlaps the edge of the frame, thereby insuring a light-tight joint. After the paper has been secured to the face of the door the latter is

held in place in the frame by sliding bolts 4, carried in supports 5 and engaging eyes 6, secured to the frame. The bolts are preferably each provided with an eccentric portion 4^a and a handle 4^b, whereby after they have been engaged with the eyes they may be rotated to force the door more tightly into contact with the frame. The paper is protected from light from the front by a slide 7, of opaque material, of substantially the same construction as used in ordinary plate-holders, the slide fitting in grooves in the frame and being withdrawn when it is desired to expose the paper.

I have found that with slides of the size necessary in a paper-holder for an enlarging-camera there is great danger as the slide is drawn out of one edge being in advance of the other, so that ordinary light-excluding devices will not effectually prevent the entrance of light through the slot or opening left by the withdrawing of the slide. To obviate this, I have provided two light-excluding flaps 8, seated in parallel grooves 9 in the frame and pressed outwardly by springs 10 toward corresponding grooves 11 in the panel 12 of the frame. Thus as the slide is drawn out the outer flap will remain in contact with the face of the slide until the inner flap is completely cleared by the slide, and thus even if one edge of the slide is slightly in advance as it is drawn past the outer flap no light can enter, owing to the inner flap having been released and forced across the space by its springs. In order to render these flaps accessible, I make the panel 12 removable by dovetailing its ends into the side members of the frame, as indicated in Fig. 2. The paper-holder is secured against the rear end of the enlarging-bellows 13 by hooks 14, as shown in Fig. 7.

Having thus described my invention, what I claim is—

1. A paper-holder for enlarging-cameras, comprising an open frame, a paper-holding back, and a slide for closing the front, substantially as described.

2. The combination with an open frame having a removable back and a slide closing the front, of a pair of successively-acting flaps seated in grooves in one side of said frame, and a sliding panel opposite said flaps

having grooves to receive the edges of the flaps, substantially as described.

3. The combination, with an open frame having a removable back and a slide closing
5 the front, of a pair of successively-acting flaps seated in grooves on one side of the frame, and a panel located opposite said flaps, said panel having dovetailed ends engaging cor-

responding channels in the sides of the frame, substantially as described. 10

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

GEORGE B. HUTCHINGS.

Witnesses:

C. S. MIDDLETON,
HENRY E. COOPER.