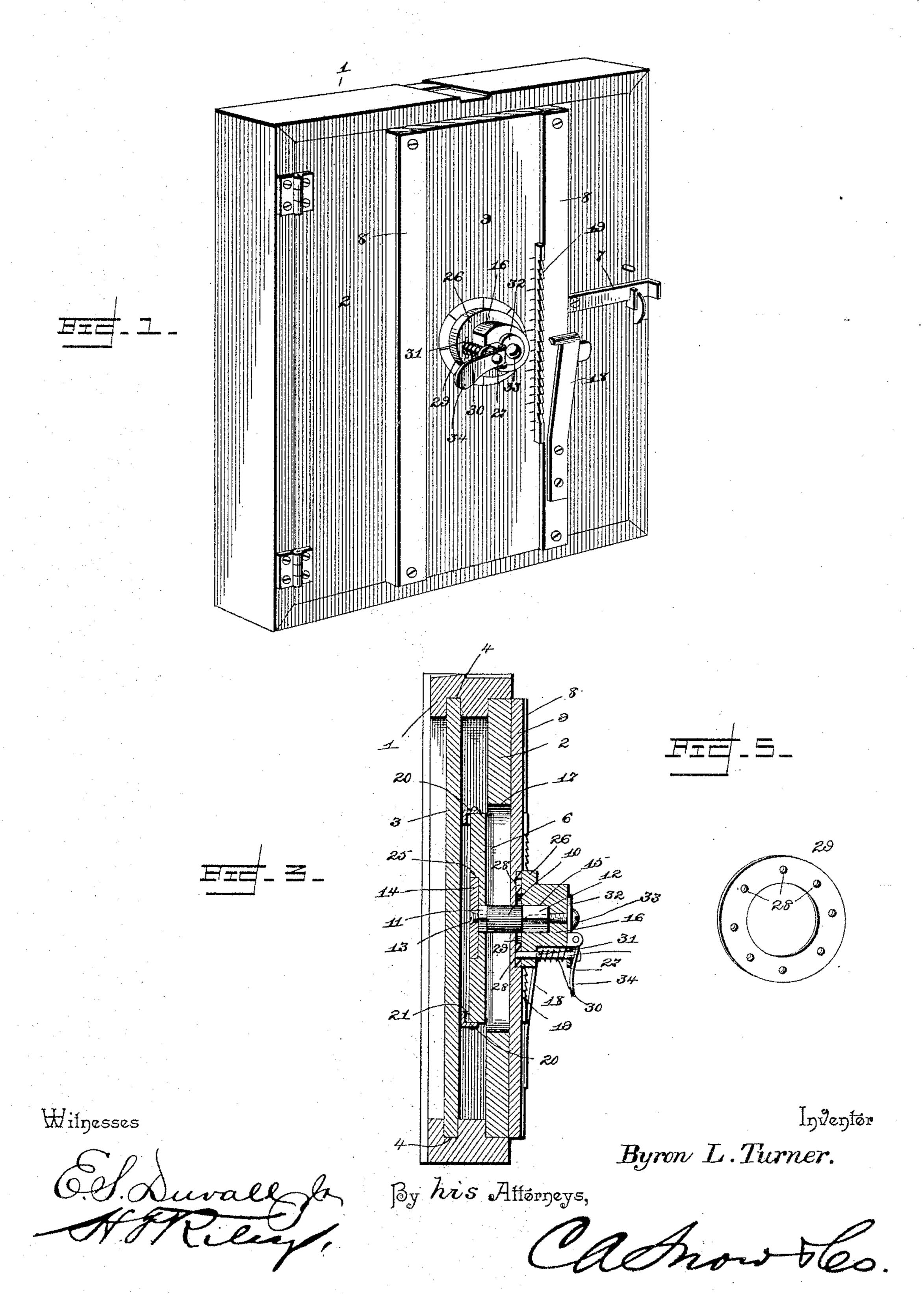
B. L. TURNER.

PLATE HOLDER ATTACHMENT FOR CAMERAS.

No. 489,512.

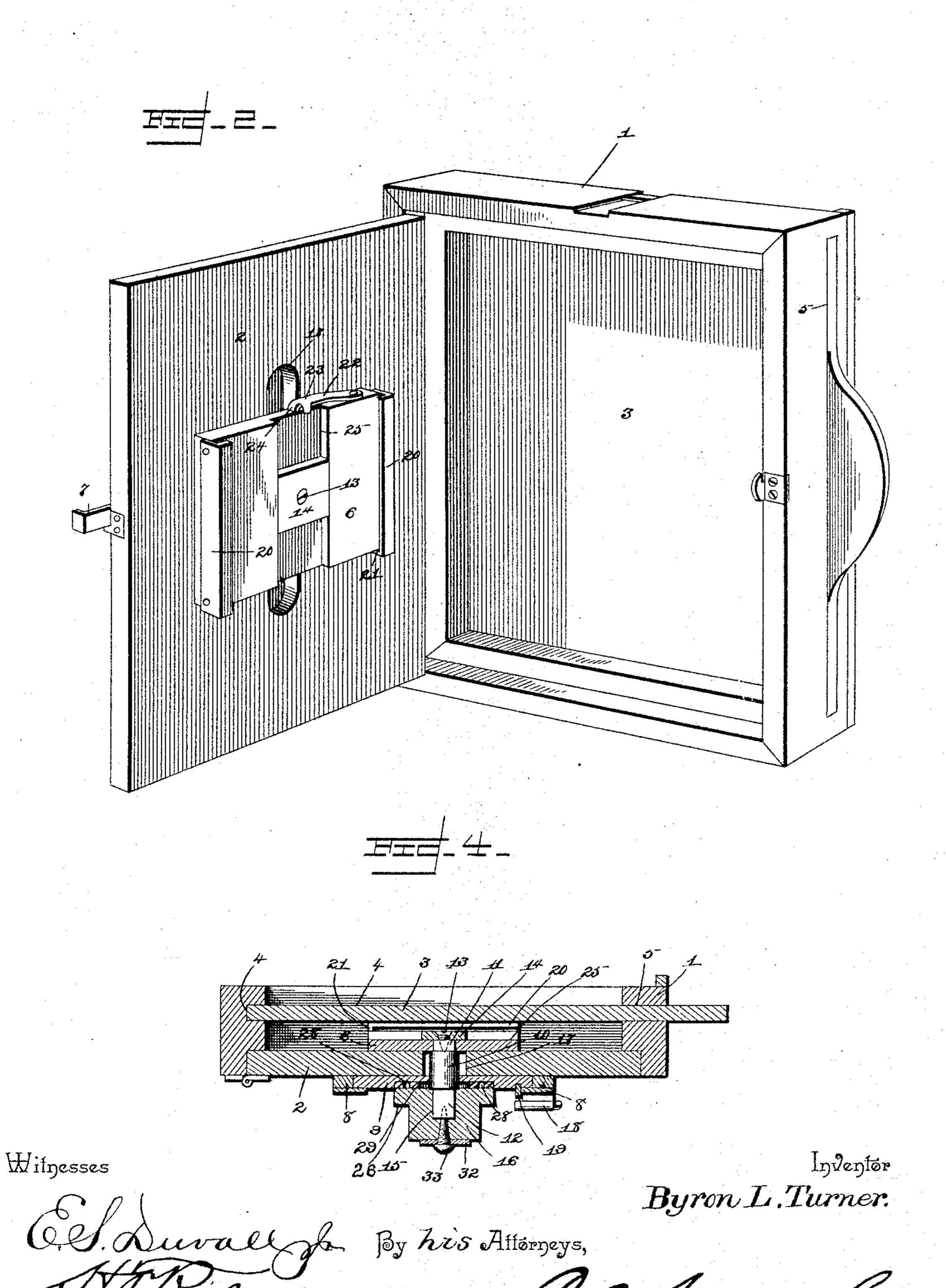
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HE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

## United States Patent Office.

BYRON LEE TURNER, OF PITTSFORD, MICHIGAN.

## PLATE-HOLDER ATTACHMENT FOR CAMERAS.

SPECIFICATION forming part of Letters Patent No. 489,512, dated January 10, 1893.

Application filed December 11, 1891. Serial No. 414,717. (No model.)

To all whom it may concern:

Be it known that I, Byron Lee Turner, a citizen of the United States, residing at Pittsford, in the county of Hillsdale and State of Michigan, have invented a new and useful Plate-Holder for Cameras, of which the following is a specification.

The invention relates to improvements in

plate holders for cameras.

The object of the present invention is to provide for cameras a plate holder by which a plate may be turned, moved longitudinally and moved laterally to expose the surface of the same by successive exposures, and which will enable a plate to sustain the proper relation to the lens.

A further object of the invention is to enable a plate to be exposed a number of times, and to arrange the figures of such exposures in the form of a circle or in straight lines extending longitudinally or transversely of the plate.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described illustrated in the accompanying drawings and pointed

out in the claims hereto appended.

In the drawings—Figure 1 is a perspective view of a plate holder constructed in accordance with this invention. Fig. 2 is a similar view, the door being open. Fig. 3 is a vertical sectional view, the plate carrier being turned at right angles to the position shown in Fig. 2. Fig. 4 is a horizontal sectional view.

35 Fig. 5 is a detail view of the perforated ring.

Like numerals of reference indicate corresponding parts in all the figures of the draw-

ings.

1 designates a rectangular frame or casing having a door 2, and provided at the opposite face with a removable slide 3 which is arranged in grooves 4, and is withdrawn through an opening 5 to expose a plate designed to be arranged within a plate-support 6. The door 2 is hinged at one side; it is provided at the opposite side with a latch 7, and it has intermediate its sides vertical ways 8 in which is arranged a slide 9 adapted to move vertically in the ways 8 to raise and lower the plate-support 6. The ways 8 are formed by strips and plates secured to the strips and projecting inward therefrom; and the slide is con-

nected with the plate-support by a stem 10, which is cylindrical and is journaled in a circular opening of the slide, and has its ends 11 55 and 12 squared. The stem 10 is adapted to turn in the circular opening of the slide to rotate the plate-support 6; its squared end 11 is secured in a central rectangular opening of the plate-support 6 by a screw 13, and a small 60 plate 14; and its end 12 is secured in a rectangular socket 15 of a knob 16 arranged on the outer face of the slide, and adapted to be grasped by the operator to manipulate the plate-support. The vertical movement of the 65 slide 9 is limited by a vertical opening 17 of the door, and it is retained at any desired adjustment by a spring catch 18 mounted on one of the ways 8 and a tooth bar 19 secured to the slide, and arranged to be engaged by the 70 spring catch which is provided with a lip for that purpose.

The plate-support 6 is arranged on the inner face of the door 2, and consists of a plate provided at its ends with plates 20 which are 75 L-shaped in cross-section, and have their flanges projecting inward and forming ways adapted for the reception of the plate to be exposed in a camera. The ways are closed at one side of the carrier by flanges 21, and a 80 plate is retained at the opposite side of the plate-support by a pivoted spring catch 22 having its free end 23 bent inward and provided with a lip 24. At the middle the carrier 6 is provided with a transverse groove 25, 85 which forms a depressed or sunken portion to enable the operator to readily take hold of the dry plate, and in which the small plate 14 is

arranged.

The knob 16 is provided with an annular 90 flange 26 in an opening of which is mounted a spring actuated pin 27, arranged to engage openings 28 of a ring 29 secured to the slide 9 and arranged around the circular opening of the same, whereby the plate-support 6 when 95 turned, is retained securely at any desired adjustment. The pin 27 is actuated by a spiral spring 30 arranged on the pin and interposed between a projecting piece 31, and a plate 32 secured to the top of the knob by a screw 33 secured to the knob.

end of a lever 34, which enables the spring actuated pin to be readily withdrawn from

the openings 28 from the ring 29.

In exposing a plate successively for the purpose of arranging the same person or object in various positions on the same plate or to arrange a number of objects on a plate and pose such persons or objects successively it is necessary to employ a black back ground to prevent the exposed plate fogging or becoming cloudy at an exposure.

It will be readily understood by those skilled in the art that by placing objects in front of a black back ground a plate may be successively exposed to get the persons in different positions. By the construction of the plate holder it will be seen that a plate may be rotated and moved vertically, whereby any portion of a plate may be brought opposite a person to be photographed so that the entire sur-

face of a plate may be utilized.

The plate holder is applied to the back of a camera similar to the ordinary plate holder.

What I claim is—

1. The combination of a plate-holder adapted to be attached to the back of a camera and provided on its back wall with ways and having an elongated opening between the ways, a slide mounted in the ways and arranged on the outside of the plate-holder, a plate-support arranged within the plate-holder on the inner side of the rear wall and a stem secured

to the plate-support and passed through the opening and journaled in the slide whereby the plate-support is adapted to be rotated and 35 to slide vertically, substantially as described.

2. The combination of a plate-holder provided on the outer face of its back wall with vertical ways and having an elongated opening arranged between the ways, a slide mounted 40 in the ways, a plate-support connected with the slide and located within the plate-holder on the inner face of the back wall, a notched bar mounted on the slide, and a spring eatch secured to the plate-holder and arranged to 45 engage said bar whereby the slide is secured in its adjustment, substantially as described.

3. The combination of a plate-holder, provided with a slide having a stationary circular series of openings, a plate-support, a stem 50 journaled in the slide and having its inner end secured to the support, and a revoluble knob arranged on the outer end of the stem and provided with a spring actuated pin arranged to engage said openings, and rotate 55 with the knob substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

BYRON LEE TURNER.

Witnesses:
BENJAMIN TURNER,
WILSON A. CASLER.