

UNITED STATES PATENT OFFICE.

PHILIP BOGLER, OF SALIDA, COLORADO.

MAGAZINE PLATE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 670,321, dated March 19, 1901.

Application filed March 10, 1900. Serial No. 8,237. (No model.)

To all whom it may concern:

Be it known that I, PHILIP BOGLER, a citizen of the United States, residing at Salida, in the county of Chaffee and State of Colorado, have invented a certain new and useful Improvement in Plate-Holding Attachments for Cameras, of which the following is a specification.

My invention relates to a new and useful improvement in plate-holding attachments for cameras, and has for its object to provide an attachment whereby a series of plate-holders having unexposed plates therein can be stored, exposed, and then stored after exposure without the necessity of opening the attachment and removing the plate-holders.

With this end in view the invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a longitudinal section of a camera with my attachment applied thereto; Fig. 2, a section of my attachment, taken at the line $x-x$; Fig. 3, a plan view of my attachment, and Fig. 4 a face view of one of the plate-holders.

In carrying out my invention as here embodied, A represents the bellows frame of a camera.

B is an elongated box consisting of three compartments B^1 , B^2 , and B^3 . Upon this box is secured a hood portion C, which fits over the top and the two sides of the bellows frame A and hangs thereon by means of the oblique slots D upon each side fitting over the pins E. An extension F extends out from the center compartment B^2 into the bellows frame A, thus guarding against any light leaking into the interior of the box or the camera.

Plate-holders G have extending up from their upper end the extension H, said extension having an enlarged head, which is adapted to slide within the guideway I. The form of said guideway is shown in dotted lines in Fig. 3. In the center of the lower end of the

plate-holder G is a shank J, having upon its lower end the handle J' . Said handles are adapted to protrude through an opening K in the bottom of the box, and said opening K has the same form as the guideway I and is directly below the same. The plate-holders G are introduced in the compartment B^1 by opening the door B^4 , and the extension H is introduced in the guideway I and the shank J in the opening K, which also forms the guideway, and are passed inward until they come within those portions of the guideways which are at right angles to the length of the box and therein stored until it is desired to expose a plate, when by means of the handles J' , extending to the outside of the box, the plate-holder is passed through the opening L into the compartment B^2 , wherein the plate is exposed. Then after exposure the plate-holder is passed through an opening M into the compartment B^3 , wherein it passes into the portion of the guideways running at right angles to the length of the box, and is stored therein until it is desired to remove the plate-holder, which can be done upon opening the door B^5 , communicating with the compartment B^3 . Of course it is well known that no light can be admitted to the interior of these compartments while the plates are therein, and I provide against this by covering the opening K throughout its length by the elastic flap N, which in its normal position will lie flat over the opening K, thereby closing the same, when the shanks J of the plate-holders are within the opening the flap N will be raised at that particular point, but hug the shank so closely that it will prevent any light leaking therearound after the passing of the shank.

To guard against light leaking from the center compartment to either of the end compartments, I provide the flaps O, which in their normal positions close the openings M and L, but yield to pressure when the plate-holder is passed from one compartment to the other and instantly regain their normal position after the plate-holder has passed.

To guard against the accidental passage of the plate-holders from one compartment to the other, I provide the stops P. Said stops extend across the openings M and L, thereby preventing the plate-holders from passing either way until the stops are withdrawn,

which is accomplished from the outside of the box by means of an extension from the stop bending at an angle thereto, pivoted at the point Q, and extending to the outside of the box, wherein it terminates in the handle R. The stop is held in its normal position across the openings M and L by the spring S, and by pressing upon the handles R the stop is withdrawn. Upon releasing the pressure the spring instantly returns it to place. A hood T is placed over the slot necessary for the working of the stop to prevent any light leaking therethrough.

A ground glass U is secured to the box back of the compartment B³ for use in focusing. The plate-holders G are preferably made of sheet metal and formed of a solid back and upon the front side have ledges g turned over upon three sides for the insertion of the plate beneath the same. The other side is made with a hinged ledge V, adapted to be closed after the plate is inserted, thereby holding the same in place, and springs X hold this ledge V in place after it is so closed.

The advantages of my invention are obvious in that it allows for the carrying of a number of plates and for the exposing of the same in quick succession and allows for the removal of any of the plates without having to wait until the whole number are exposed, as is the case with the magazine-cameras now in use.

Of course it is understood that any number of plate-holders can be used, the number being limited only by the size of the box.

Having thus fully described my invention, what I claim as new and useful is—

1. In a plate-holder attachment for cameras, a box adapted to be removably secured to the bellows frame, a compartment located in one end of said box for the reception of unexposed plates, a center compartment for exposing plates, a compartment located in the other end of said box for the reception of exposed plates, a series of plate-holders, attach-

ments secured to said plate-holders and extending to the outside of said box for the proper manipulation of the plate-holders for the transferring of said plate-holders from one compartment to another, and means for automatically closing and rendering light-tight all openings between the compartments and from inside to outside of the box after the passage of the plate-holders, as specified.

2. In a plate-holding attachment for cameras, a box adapted to be removably secured to the bellows frame, ground glass secured in the proper position in said box, a compartment located in one end of said box for the reception of unexposed plates, a center compartment for exposing plates, a compartment located in either end of the box for the reception of exposed plates, a series of plate-holders, adapted to slide between the center compartment and both of the end compartments, elastic flaps for automatically closing said openings after the passage of the plate-holder, spring-actuated stops for preventing the accidental displacement of the plate-holders, means upon the outside of the box for withdrawing said stops, guideways secured to the upper end of the plate-holders, and adapted to slide in said guideways, an opening in the bottom of the box corresponding to the said upper guideway, handles secured to the lower end of the plate-holders and adapted to protrude through said opening for the proper manipulation of said plate-holders, an elastic flap adapted to automatically close said opening after the passage of said handle along the same, and doors hinged upon each end of the box for the insertion or removal of the plate-holders, substantially as shown and specified.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

PHILIP BOGLER.

Witnesses:

JOHN FRIDERICI,
W. F. OWEN.