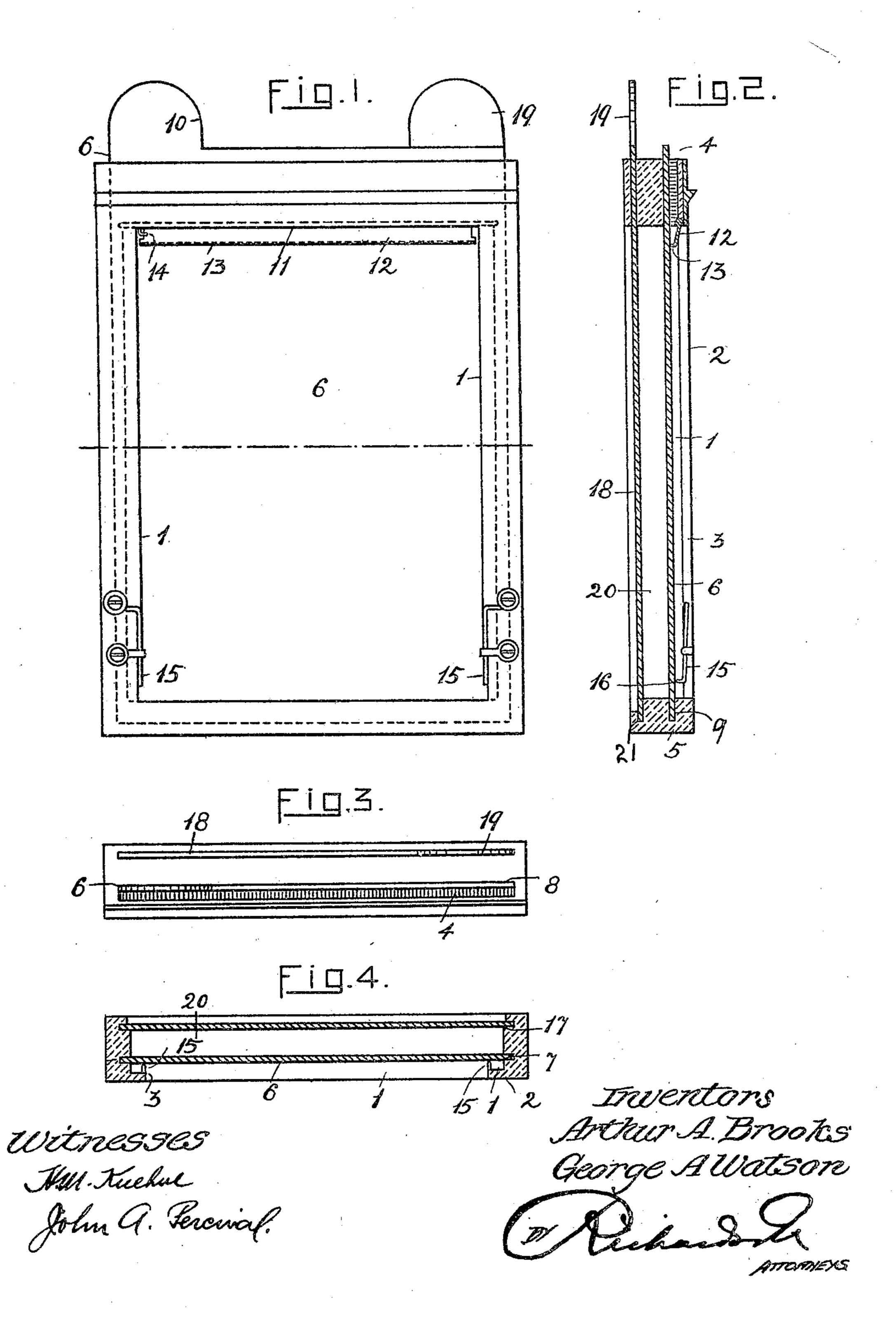
A. A. BROOKS & G. A. WATSON. MAGAZINE PLATE HOLDER. APPLICATION FILED MAY 16, 1905.



UNITED STATES PATENT OFFICE.

ARTHUR AUGUSTUS BROOKS AND GEORGE ANDREW WATSON, OF LIVERPOOL, ENGLAND.

MAGAZINE PLATE-HOLDER.

No. 819,403.

Specification of Letters Patent.

Patented May 1, 1906.

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To all whom it may concern:

Be it known that we, ARTHUR AUGUSTUS BROOKS and GEORGE ANDREW WATSON, subjects of the King of Great Britain and Ireland, and residents of Liverpool, in the county of Lancaster, England, have invented certain new and useful Improvements in Magazine Plate-Holders for Photographic Cameras, of which the following is a specification.

This invention relates to magazine plate-holders, and more particularly to those adapted for sensitized plates each inclosed in a separate flexible envelop; and it consists in an improved construction of the plate-holder for facilitating the changing of plates in daylight.

The improved plate-holder comprises an exposure-frame and a magazine for exposed plates and is adapted particularly to receive one flexible envelop containing a single sensitized plate at a time inserted into the exposure-frame from the outside, which plate, after the envelop has been stripped off, can be transferred to the magazine through an opening closed normally by a slidable door.

This improved plate-holder and magazine may form the permanent back of a camera or may be made detachable in the manner of an ordinary plate-holder.

The drawings attached hereunto illustrate our improved magazine plate-holder made in detachable form for using in a camera in a similar manner to and as an ordinary single or double plate-holder.

Figure 1 represents a front elevation of the exposure-frame and magazine; Fig. 2, a cross-sectional elevation; Fig. 3, a plan from the top, and Fig. 4 a cross-sectional plan.

The apparatus illustrated consists of a frame having three slideways, one being adapted for the insertion of the sensitized plate inclosed in an envelop and the other two for slidable doors or shutters which close a compartment for receiving the plates after exposure. The first-named slideway forms the exposure slideway or frame and is preferably provided with rabbeted sides 2, formed by the ledges 3, the opening being slightly less than the width of the sensitized plate and the width in the rabbeting being sufficient to take in the envelop. At the top of the apparatus in line with the slideway 1

there is a slot 4, trapped with plush or velvet in order to prevent the admission of light 55 and of suitable proportions to allow of the insertion of the envelop into the slideway 1. The bottom end 5 of the apparatus is closed. The back of the slideway 1 is formed by the door or shutter 6 of the second slideway 7, 60 which door passes through a slot 8 in the top and fits in a light-tight manner the grooves in the sides of the frame forming the said slideway 7 and the groove 9 in the bottom of the same and is provided with a tab 10, by 65 which it can be grasped with the fingers.

Immediately under the upper margin 11 of the exposure-aperture is pivoted at its ends a bar 12, having its lower edge 13 preferably turned inward and pressed against the shut- 70 ter 6 by means of a spring, such as that marked 14. In the lower part of the exposure-frame there are fixed, one at each side of the exposure-aperture and in the position shown, two spring-fingers 15, which are pref- 75 erably made of hard wire and which have their free ends turned inward and pointed, as at 16. These fingers press against the shutter 6. The purpose of these fingers, as well as the bar 12, is to hold the envelops con- 80 taining the plates in position and to push the exposed plate into compartment 20 after the slide 6 is removed. The third slideway 17 is located at the back of the apparatus and is fitted in a light-tight manner with a door or 85 shutter 18, provided with a tab 19, by which it can be withdrawn and which when closed enters the groove 21 in the bottom of the frame. This door is provided for the purpose of emptying the compartment 20 of the 90 exposed plates when full or when the plates therein are required to be developed. By the fitting of a slidable door for this purpose the attachment of a similar-sized receptacle to the back of the apparatus having a simi- 95 larly-fitted door is facilitated, and by withdrawing the shutter 18 and the door of the receptacle when attached thereto together the exposed plates can be transferred to the latter without the necessity of a dark room. 100

formed by the ledges 3, the opening being slightly less than the width of the sensitized plate and the width in the rabbeting being sufficient to take in the envelop. At the top of the apparatus in line with the slideway 1

bar 12 and fingers 15 giving way before the envelop. The envelop may now be withdrawn, leaving the plate in the exposure aperture. After the plate has been exposed the 5 shutter 6 is fully withdrawn and the exposed plate is pressed into the compartment 20 by means of the horizontal bar 12 and the fingers 15. Upon now pushing in the shutter 6 the apparatus is ready for the insertion of 10 another envelop. The compartment 20 can be emptied when desired through the opening covered by the shutter 18.

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1. A plate-holder combined with a storage-15 magazine for a photographic camera, adapted for the successive insertion of single sensitized plates in envelops; consisting of an exposure-frame with a trapped entrance-slot at one side for admitting and withdrawing 20 the envelop; a compartment for the storage of exposed plates behind said exposureframe and separated therefrom by a slidable shutter and means for permitting the unload-

ing of said compartment.

2. A plate-holder combined with a storagemagazine for a photographic camera adapted for the successive insertion of single sensitized plates in envelops; consisting of an exposure-frame with a trapped entrance-slot 30 thereto, means for pressing the sensitized plate inward and means for preventing the withdrawal of the same; a compartment for the storage of exposed plates behind said exposure-frame and separated therefrom by a 35 slidable shutter, and means for permitting the unloading of said compartment.

3. A plate-holder combined with a storagemagazine for a photographic camera, adapted for the successive insertion of single sensi-40 tized plates in envelops; consisting of an exposure-frame with a trapped entrance-slot thereto; means for pressing the sensitized plate inward, and spring-fingers each with a pointed turned-in end fixed one in each side 45 of the said frame and adapted to allow the

envelop and plate being pushed past them but preventing the withdrawal of the plate after the envelop has been partly removed; a compartment for the storage of the ex-50 posed plates behind the exposure-frame and

separated therefrom by a slidable shutter, and another slidable shutter forming the

back of said compartment to permit unload-

ing the same.

4. A plate-holder combined with a storage- 55 magazine for a photographic camera adapted for the successive insertion of single sensitized plates in envelops; consisting of an exposure-frame with a trapped entrance-slot at one side for admitting the envelop, having a 60 longitudinally-hinged bar resiliently covering the inner end of said slot and adapted to give way upon inserting the envelop and to press the plate inward, and a spring-finger having a pointed end in each side of the said 65 frame adapted to press the plate inward and to prevent its withdrawal when the envelop is partly removed; a slidable shutter at the back of the exposure-frame covering an opening adapted to pass the sensitized plate 7° through; a compartment for exposed plates behind said shutter and another slidable shutter forming the back of the apparatus and adapted to permit unloading said compartment.

5. A plate-holder having a slideway having a trapped entrance-slot for receiving the sensitized plate and holding it in position for exposure; and another slideway immediately behind the first-named one and fitted with a 80 withdrawable shutter; a compartment for exposed plates behind said shutter and a door for permitting the unloading of said

compartment.

6. A plate-holder having a slideway hav- 85 ing a trapped entrance-slot for receiving the sensitized plate and holding it in position for exposure; and another slideway immediately behind the first-named one and fitted with a withdrawable shutter; a compartment for 90 exposed plates behind said shutter; a door for permitting the unloading of said compartment and springs for bearing upon the sensitized plate in the first-named slideway and pressing it against said shutter.

In testimony whereof we have hereunto set our hands in the presence of two wit-

nesses.

ARTHUR AUGUSTUS BROOKS. GEORGE ANDREW WATSON.

Witnesses:

Frederic S. Bishop. RIDLEY G. URQUHART.