H. J. ERKENSWICK. MAGAZINE PLATE HOLDER.

(Application filed Apr. 14, 1899.)

2 Sheets—Sheet 1. (No Model.) _14 Fig. 2 Fig. 1 13 Fig. 3 Fig. 5.

B .

WITNESSES: Hod. Brown D. Cartes INVENTOR

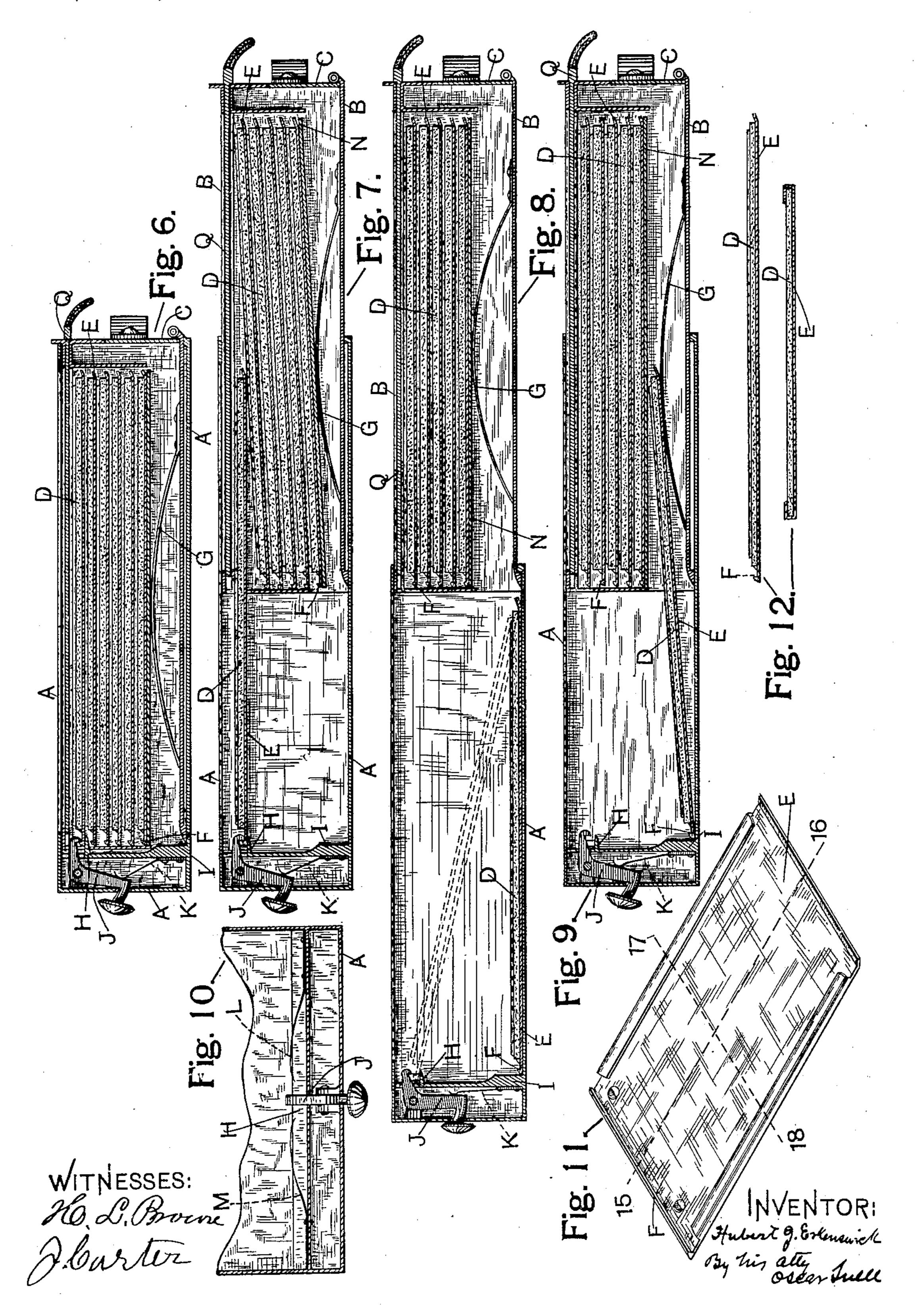
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United States Patent Office.

HUBERT J. ERKENSWICK, OF CHICAGO, ILLINOIS.

MAGAZINE PLATE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 652,174, dated June 19, 1900. Application filed April 14, 1899. Serial No. 713,033. (No model.)

To all whom it may concern:

Be it known that I, HUBERT J. ERKENS-WICK, a citizen of the United States, residing at Chicago, in the county of Cook and State 5 of Illinois, have invented a new and useful Magazine Plate-Holder, of which the follow-

ing is a specification.

My invention relates to means for holding and protecting sensitized plates or films in 10 cameras; and my object is to provide a construction adapted to contain a plurality of such plates or films, which, although out of view of the operator, may easily, surely, and quickly be shifted from the position of ex-15 posure to that of seclusion from the light, as is hereinafter fully described, and illustrated in the accompanying drawings, in which-

Figure 1 is an isometric perspective view of the magazine as it appears detached from 20 the camera. Fig. 2 is the same view as shown in Fig. 1, with the exception that the dark slide is drawn out to expose a plate in the magazine. Fig. 3 is an isometric perspective view of the magazine turned over with the 25 back disposed downwardly and the platedrawer pulled out to the position when one end of a plate and holder is dropped into the outer case. Fig. 4 is an isometric perspective view of the outer casing to illustrate relative posi-30 tions of plate-holder detent and springs for releasing the plate-holder when the detent is operated. Fig. 5 is an isometric perspective view of the plate-holder drawer with the dark slide and plates removed and the plate-door 35 open. Fig. 6 is a longitudinal section on broken line 13 14, Fig. 1, showing a number of holders with their plates in position for use, the parts being all in the closed position. Fig. 7 is same section as Fig. 6, but with the 40 plate-drawer, together with one of the top plate-holders, with its plate, pulled out a short distance. Fig. 8 is same section as Figs. 6

and 7 and illustrates the plate-drawer with a holder pulled out to the greatest extent, so 45 that the plate and holder have first dropped to the position indicated by the broken lines and being released from a detent are dropped to the bottom of the outer case, from which they may be slid in under the remaining hold-

50 ers and plates in the plate drawer or maga-

plate-drawer is in the same position as shown in Fig. 7; but a plate, with the inner end thereof, is entered within the plate-drawer between the bottom plate of a series and a spring 55 attached to the bottom of the plate-drawer. Fig. 10 is a portion of the rear end of the outer case with the top removed to show relative positions of a plate-holder detent and two curved springs for ejecting the plate 60 from a ledge against which the hook of the detent bears. Fig. 11 is an isometric perspective view of one of the holders for supporting the usually-flat sensitized glass plates or celluloid films adapted to use in this maga- 65 zine. Fig. 12 shows two sectional views of the plate-holders, respectively on broken lines 15 16 and 17 18, Fig. 11, but with a glass plate in position same as seen in the sections Figs. 6, 7, and 8.

Similar letters indicate like parts through-

out the several views.

The outer case A is rectangular in form in this instance, with two sides, one end, and the bottom closed, as plainly shown in Fig. 4. 75 The plate drawer or magazine B is also rectangular in shape and is closed at two sides and the bottom, the top and one end being open, the other end being provided with a door C, which is usually closed.

The sensitized plates D are usually of glass, but may be of celluloid or any transparent material adapted to serve instead of glass. Plates D are held in a holder E, which is usually of thin metal formed into shape by stamp-85 ing, there being side flanges for retaining the plates laterally and adequate means for holding the plates in longitudinal position. At one end of the holder is a marginal flange F, which is turned up not only to stiffen the 90 edge thereof, but also to form a hook by which it may be engaged when being withdrawn. The holders E, with the plates D therewith, are slid into the plate-drawer B after opening the door C, Fig. 5, the spring 95 G serving to hold the plates against the front, side, and end marginal inwardly-projecting rims of the plate-drawer.

At H is a thin ledge which projects inwardly from the end of the casing A, and at I is an roo inward projection below ledge H, and these zine, as is illustrated in Fig. 6, where the I two parts project through two transverse slots

in the end of the plate-drawer B when the latter is in the closed position. (Shown in

Fig. 6.)

At J is a detent, which is pivotally mounted between two lugs, Fig. 10, which project from the inside surface of case A. At the inner end of detent J is a hook, and at K is a spring which bears against the outer arm of the detent and serves to yieldingly hold the hook against the ledge H. The outer arm of detent J terminates in a button outside of case A, so that it may be operated by the fingers.

In Figs. 4 and 10 are plainly shown two springs L and M, which are attached to the inside end of the case A at each side of the

inner end of detent J.

At N is shown the bottom plate in the magazine, which is made without a hook or any means to engage with detent J. The usual dark slide is shown at Q and is adapted to slide into the plate-drawer in side grooves.

(Shown in Fig. 5 at P.)

In practice this magazine is secured within the camera in such a position that the outer sensitized plate D, Fig. 2, may be properly exposed to the light from the lens after the withdrawal of dark slide Q. After exposure the dark slide is slid to the closed position, when the outer or exposed plate may be slid out of its position and transferred to the bottom of the series of plates by turning the camera over so that the magazine is disposed in a horizontal position, similar to that shown in Fig. 3, when the plate-drawer B is pulled out to the position shown in Fig. 8. When

the parts are in the closed position, Fig. 6, the outer thin edge of ledge II projects in under the hooked end of the holder of the outside plate, and the detent J is in engagement with this hook, with the two springs L and M compressed in contact with the end of the plate-holder. When the plate-drawer B is drawn out to the position shown in Figs. 3

and 8, the engagement of detent J with the plate-holder will cause the holder to be slid out from its position until the inner end thereof will drop to the bottom of case A, as shown in Fig. 3 and indicated by the broken

from engagement with the plate-holder, the springs L and M will instantly force the plate-holder off of ledge H to the position shown in Fig. 8 at the bottom of case A. By the ac-

tion of closing the drawer B the plate-holder at the bottom of case A is contacted by the inward projection I, and the other end of the holder being in register with a transverse opening in the end of the drawer B is slid into

60 the drawer between the lowest plate-holder and the elevating-spring G, as shown in Figs. 6 and 8, and on account of the projection I the plate-holder is moved into the drawer so far that it is clear of the end of the drawer 65 and is free to rise by virtue of spring G.

It has been stated that the last plate N in l

the series is without a hook to be engaged by detent J, which prevents reëxposing any of the sensitized plates and serves as a cover or means for excluding the light from the plates 70 should the dark slide be accidentally moved to an open position.

I claim as my invention—

1. In a plate-magazine for cameras, the combination, with an outer casing, of a plate-75 drawer therein, the casing having one side and one end open and having a catch at the closed end for engaging with the plate-holders, and the drawer having a dark plate at one side and a spring at the opposite side.

2. In a plate-magazine for cameras, the combination, with an outer casing, of a plate-drawer therein, the casing having one side and one end open and having a catch at the closed end for engaging with the plate-holders, said catch having a button upon the outside of the casing, and the drawer having a dark plate at one side and a spring at the op-

posite side.

3. In a plate-magazine for cameras, the combination, with an outer easing, of a plate-drawer therein, the casing having one side and one end open and having a catch at the closed end for engaging with the plate-holders, and the drawer being provided with a 95 dark slide and a spring and having one end slotted transversely, one of the slots registering with the catch and being for the passage of the plates into the casing and the other slot being for the passage of the plates into the casing.

4. In a plate-magazine for cameras, the combination, with a casing, of a drawer therein, the casing being open at one side and one end and the drawer being provided with a dark 105 plate and a spring, a ledge and a catch at the closed end of the casing in position to engage with the opposite sides of a plate-holder when

the parts are in their closed position.

5. In a plate-magazine for cameras, the combination, with a casing, of a drawer therein, the casing being open at one side and at one end and the drawer being provided with a dark plate and a spring and having one end slotted transversely, a catch, a ledge and an inward projection below the ledge, the catch and the ledge being in position to project through one of the slots in the drawer and engage with a plate-holder, and the projection being in position to project through the other 120 slot when the parts are in their closed position.

6. In a plate-magazine for cameras, the combination, with a casing provided with a catch, of a drawer therein provided with a dark 125 plate and a spring, and a series of plate-holders within the drawer, one end of each of which is provided with a flange of a less height than the side walls and in position to be engaged by the catch when the parts are 130 in their closed position.

7. In a plate-magazine for cameras, the com-

3

bination, with a casing provided with a catch, of a drawer therein provided with a dark plate and a spring, and having one end slotted and the bottom inclined at that end, and a series of plate-holders in the drawer, one end of each of which is provided with a ledge to engage with the catch and the oppo-

site end is inclined to engage with the inclined portion of the bottom.

HUBERT J. ERKENSWICK.

Witnesses:

OSCAR SNELL, H. L. BROWN.