

No. 670,683.

Patented Mar. 26, 1901.

W. N. MOORE.
PHOTOGRAPHIC ROLL HOLDER.

(Application filed Dec. 4, 1900.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

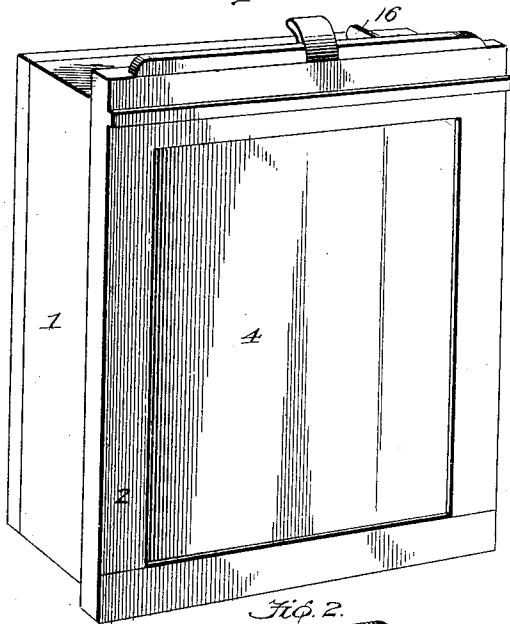


Fig. 2.

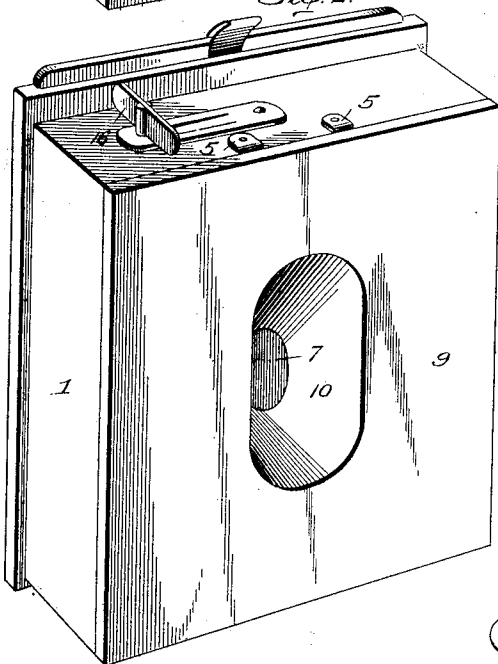


Fig. 3.

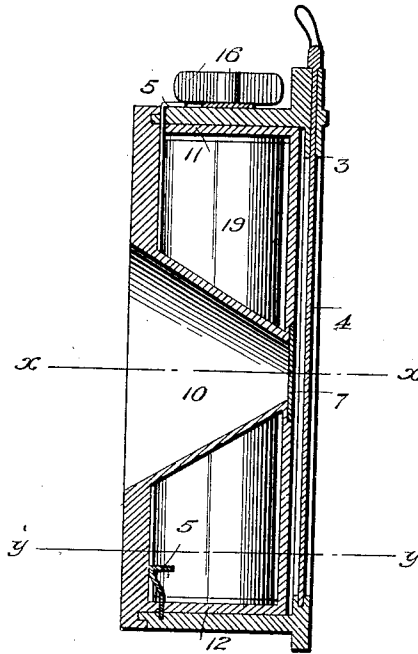


Fig. 4.

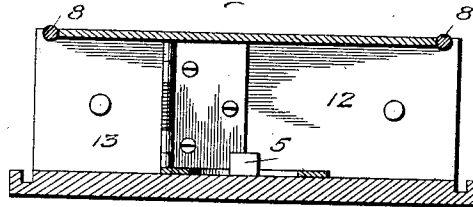


Fig. 5.

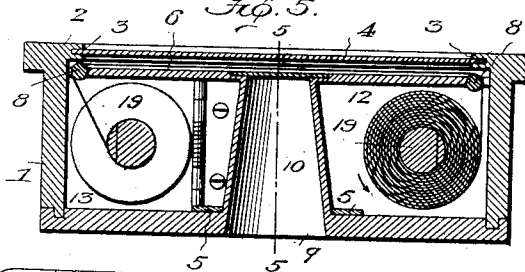
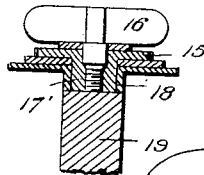


Fig. 11.



Witnesses

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No. 670,683.

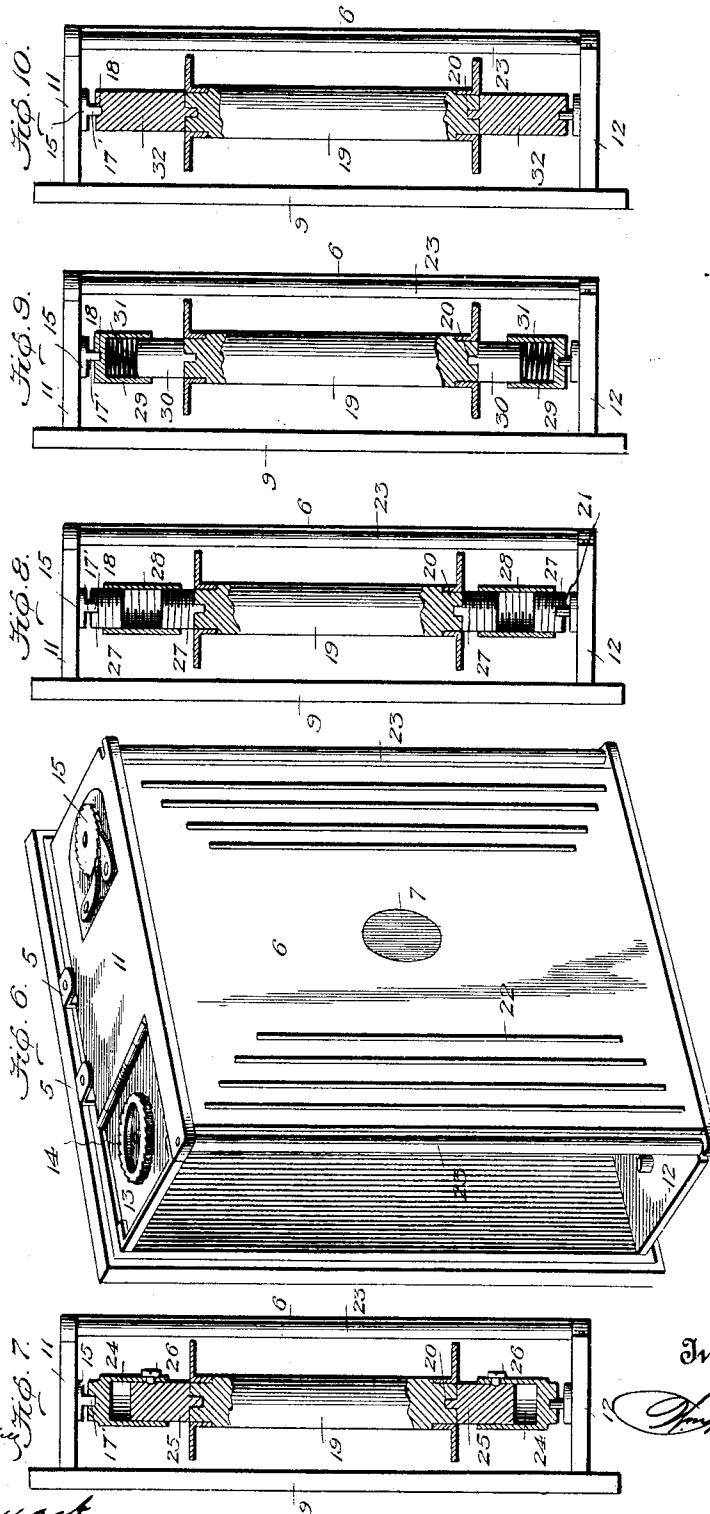
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W. N. MOORE.
PHOTOGRAPHIC ROLL HOLDER.

(Application filed Dec. 4, 1900.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM N. MOORE, OF WASHINGTON, DISTRICT OF COLUMBIA.

PHOTOGRAPHIC-ROLL HOLDER.

SPECIFICATION forming part of Letters Patent No. 670,683, dated March 26, 1901.

Application filed December 4, 1900. Serial No. 38,642. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. MOORE, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Photographic-Roll Holders, of which the following is a specification.

My invention relates to improvements in photographic-roll holders adapted for use in conjunction with what are known as "plate-cameras" when it is found desirable to substitute a roll of film for a plate.

One object of my invention is the provision of a roll-holder which can be adjusted to receive and be adjustable to rolls of film of different widths to enable the single roll-holder to accommodate different widths of rolls of film, whereby a single roll-holder will be capable of using different widths of film-rolls and obtaining a number of different sizes of photographs.

Another object of my invention is the provision of a roll-holder which will accommodate different sizes of film-rolls and which will take pictures of oblong shape and of different widths and also photographs of substantially square shape, and thus enable the single roll-holder to be used for photographs of numerous sizes and shapes, as circumstances require.

Another object of my invention is the provision of a roll-holder which will embody only a single chamber or compartment to receive the feed and winding rolls and which will permit a ready and quick adjustment of the film and allow the numbers or indications to be easily visible.

Another object of my invention is the provision of a roll-holder which can be instantly adjusted to receive rolls of film of varying widths and also rolls of film of determined lengths for taking a certain or limited number of exposures, according to the roll of film desired.

Another object of my invention is the provision of a roll-holder which will attain the objects for which it is intended in a practical and thorough manner and which will be of simple and inexpensive construction.

To attain the objects stated, my invention consists of a photographic-roll holder embodying novel features of construction and

combination of parts, substantially as disclosed herein.

In order that the details of construction and the operation of my roll-holder may be fully understood and its many advantages be fully appreciated, I have shown in the accompanying drawings an embodiment of my invention.

Figure 1 represents a perspective view of my roll-holder, taken from the front. Fig. 2 represents a similar view taken from the back or rear. Fig. 3 represents a vertical central sectional view of the complete roll-holder, showing a single roll in place, the said roll being of the full capacity of the holder. Fig. 4 represents a horizontal sectional view on the line *yy* of Fig. 3, showing the roll-holding frame or the carrier. Fig. 5 represents a horizontal sectional view on the line *xx* of Fig. 3. Fig. 6 represents a perspective view of a form of roll-holding frame or carrier in which the front or support board is formed with slots or passages to receive films of varying sizes. Figs. 7, 8, 9, and 10 represent end views, partly in section, of various constructions of devices for receiving rolls of films of different widths to enable the roll-holder to accommodate different sizes of rolls. Fig. 11 represents a detail view showing the connection between the turning-key and the take-up roller to show how the roller is turned to take the film from the supply-roll.

Referring to the drawings, in which similar numerals of reference designate similar parts in the various views, the numeral 1 designates the outer box, casing, or housing of my roll-holder, which is open at the rear and has the front 2 formed with the guides or cleats 3 to receive and allow the slide 4 to be inserted and withdrawn when desired. This box or casing, it will be understood, is fitted to a plate-camera when it is desired to take photographs upon a roll of film and is of any desired size to fit the camera in connection with which it is to be used. Fitting and secured in the said box or casing is the roll holder or carrier, which is secured by the sliding catch-plate 5, which engages the box or casing at the top and bottom, and said holder proper consists of the front board 6, having the peep-hole covered by the non-actinic strip, covering, or plate 7, the

guide-rollers 8, the back or rear board 9, which is provided with the funnel-shaped tube 10, which leads to the said plate 7 and enables the numbers or indications to be instantly
 5 seen on the back of the usual black paper, and the back and front boards are connected by the upper strip 11 and the lower strip 12, which strips are provided with the spring upper and lower hinged plates 13, which are
 10 provided with the feed ratchet-wheel 14 and the tension-take-up ratchet-wheel 15, which take-up ratchet is operated by the turning-key 16, said ratchet-wheel 15 having the feather 17, which engages the slot 18 in the
 15 spool 19, and the other end of the spool is formed with a socket 20, which receives the trunnion 21. From this construction it will be seen that I dispense entirely with the compartments for each spool and make the holder
 20 form a single open chamber to receive the feed and take-up spool, and the funnel-shaped tube allows the numbers or indications to be easily seen as they appear at the observation window or plate 7, and it will also be seen
 25 that the winding and supply spools are secured in each side of the roll-holder, with the film passing in front of and lying flat upon the front of the support-board, and that the film is carried over the front board and wound
 30 upon the take-up spool by the turning of the key as each section of film is exposed.

In the form of my roll holder or carrier shown in Fig. 6 I provide the front or support board with a series of slits or passages
 35 22 in addition to the guide-rollers 23, the purpose of the slits being to receive the film of various-sized rolls and enable exposures of oblong as well as substantially square shape to be obtained and also different widths of
 40 photographs, which is a feature of much importance, as it adapts the roll-holder for taking many different sized and shaped photographs, as circumstances may require.

I propose to use any construction of devices
 45 for adjusting various-sized films to the roll-holder that could be used for the purpose; but for the sake of illustration I have shown four forms of adjusting devices which will operate effectively. In the form shown in Fig. 7
 50 the device is composed of the two sockets or barrels 24, in which fit the rods or plungers 25, which engage the upper and lower ends of the spool, as shown, and the rods are held at any desired adjustment, according to the
 55 size of the spools, by means of the binding-screws 26. In the form illustrated in Fig. 8 the device consists of the double screws 27, which are adjusted by means of the sleeve 28. In the form shown in Fig. 9 I use the sockets
 60 29, in which fits the plunger 30, with which engages the spring 31, which insures the adjustment by accommodating itself to varying-sized spools. In the form shown in Fig. 10 I simply use a series of blanks of different
 65 sizes to suit the rolls of film as circumstances dictate.

In the drawings I have shown the devices

as adjusted to a spool of only one width; but it will be apparent that any width spool may be used to suit the circumstances. I would also
 70 say that in using my device to make exposures of different-width films the finder on the camera should be made to enable the operator to adapt the camera to the size of the exposure, as is evident.
 75

In use it will be understood that when desired to substitute rolls of film for plates in making exposures the roll-holder, with the supply-roll of film, and the empty take-up roll are placed in the holder or "loaded," as it is
 80 termed, and the holder is applied to the camera, and when ready for use it is simply necessary to remove the slide, and the exposure is made by opening the shutter in the manner well known. It will also be evident that
 85 the holder is loaded with the size roll of film which the operator wishes to have exposures made from, the adjusting devices holding the rolls of the desired size in proper alinement for the making of exposures and the separate
 90 exposures being made by turning the key and winding the used film upon the take-up spool, each exposure having a number or indication which is observed through the transparent covering over the peep-hole or observation-
 95 aperture.

The many advantages of my improvements will be readily understood by all conversant with photography, and I will simply state that my roll-holder will permit the taking of pho-
 100 tographs of varying sizes with a single roll-holder, also of obtaining photographs of oblong as well as substantially square shape and of varying widths and lengths and of making any number of exposures, according
 105 to the length of the film used, and, further, that the improvements are practical and efficient and inexpensive.

I claim—

1. A photographic-roll holder, consisting of
 110 a casing having a slide in the front thereof, a roll-holder fitting light-tight in said casing and composed of a front support-board, a rear board and upper and lower connecting-strips making an open single chamber in the holder,
 115 means in the holder for observing the numbers or indications on the back of the paper as it passes over the front support-board, supply and take-up spools arranged in the holder and mechanism for winding the film
 120 from the supply to the take-up spool.

2. A photographic-roll holder adapted to be applied to a plate-camera, consisting of an outer casing, a light-tight roll-carrier in said casing composed of a single rear wall and a
 125 front support-board and top and bottom walls forming when inserted in the casing a single open chamber, and spool-centering devices in the top and bottom walls.

3. A photographic-roll holder adapted to be
 130 inserted in a plate-camera, consisting of an outer casing, a roll-carrier fitting light-tight in said casing and composed of a rear wall and top and bottom walls forming a single

open chamber, a front support having an observation-aperture, and a tube connected to said rear wall and leading to the observation-aperture on the front board.

5 4. A photographic-roll holder consisting of an outer casing, a roll-carrier composed of a single rear wall, a front wall having an observation-aperture, and top and bottom walls, a catch for securing the carrier in the casing and permitting removal thereof, and means
10 leading from the rear wall to the observation-aperture.

5. A photographic-roll holder having its front board formed with a series of slits of
15 different lengths to accommodate films of different widths.

6. A photographic-roll holder, consisting of a light-tight casing, a supply and a take-up
20 spool arranged in said casing, and adjusting devices in said casing for allowing the roll-holder to accommodate rolls of film of different widths.

7. A photographic-roll holder, consisting of an outer casing having a slide, a roll-carrier
25 fitting light-tight therein, devices in the carrier for receiving rolls of film of different widths, and means for observing the feeding of the film.

8. In a photographic-roll holder, the combination with an outer casing, of a roll-carrier
30 consisting of a front board, a single rear wall, and top and bottom walls connecting the front board and rear wall to form a single open chamber.

9. In a photographic-roll holder, the combination with an outer casing, of a roll-carrier
35 consisting of a front board having an observation-aperture, a single rear wall, top and bottom walls connecting the front board and rear wall to form a single open chamber, and means for observing indications through the observation-aperture of the front board.

10. In a photographic-roll holder, the combination with an outer casing open at the rear
45 and having a slide for closing the front, a roll-carrier fitting light-tight in the open rear of said casing and composed of a front board, a rear board, and upper and lower walls connecting the front and rear boards, the whole forming when in place a single open chamber to
50

receive the supply-roll of film and the take-up spool.

11. In a photographic-roll holder, the combination with an outer casing open at the rear
and having a door for opening and closing the front, a roll-carrier fitting in the open rear
55 portion and consisting of a front board having an observation-aperture, a rear board, and top and bottom walls, connecting the front and rear board, a supply-roll and a take-up
60 spool mounted in the top and bottom walls on opposite sides, and an observation-tube leading from the rear board to the observation-aperture in the front board.

12. A photographic-roll holder consisting
65 of an outer casing, a roll-carrier fitting light-tight in said casing, and adjusting devices connected to the top and bottom walls of the roll-carrier to receive rolls of film of different widths.
70

13. A photographic-roll holder consisting of a front support-board having an aperture covered with non-actinic material, a rear board, top and bottom strips connecting the front and rear board and forming a single
75 chamber, a sight-tube of conical shape leading from the rear board to the aperture in the front board, for instantly directing the line of vision upon said aperture.

14. A photographic-roll holder, consisting
80 of a casing having a slide in the front thereof, a roll-holder fitting light-tight in said casing and composed of a front support-board, a rear board and upper and lower connecting-strips making an open single chamber in the
85 holder, means in the holder for observing the feeding of the film as it passes over the front support-board, supply and take-up spools arranged in the holder and mechanism for winding the film from the supply to the take-up
90 spool, and devices for holding the film flat upon the front support-board in its passage from the supply to the take-up spool.

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

WILLIAM N. MOORE.

Witnesses:

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CHAS. G. EMACK.