W. I. SCHULTZ, Sr.

FILM ROLL HOLDER.

APPLICATION FILED JUNE 5, 1915.

1,213,694.

Patented Jan. 23, 1917.

2 SHEETS—SHEET 1.

FIG. 1

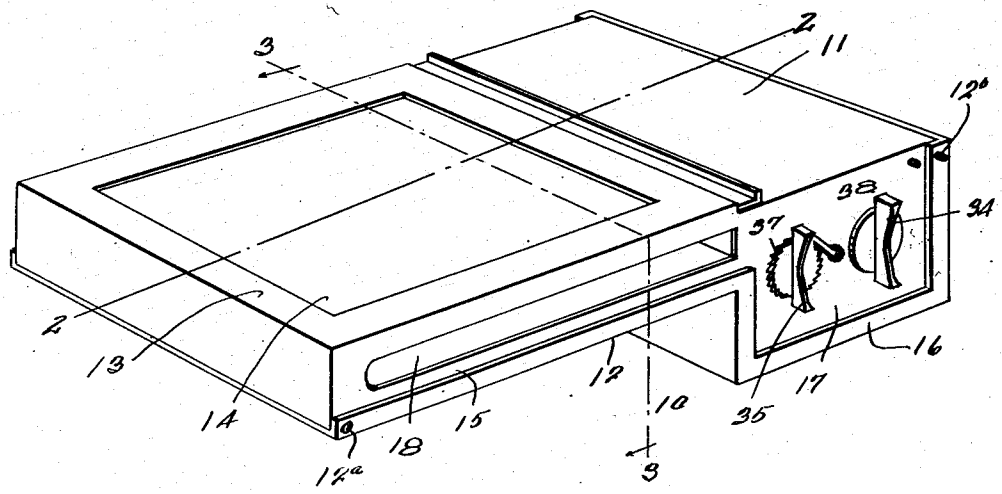


FIG. 3

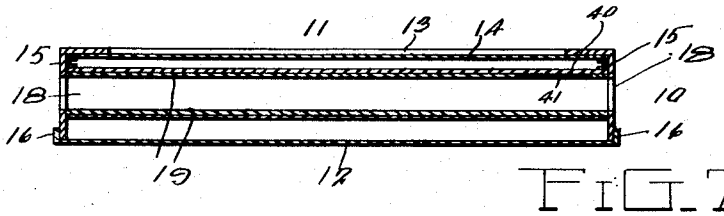


FIG. 7

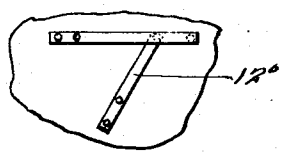
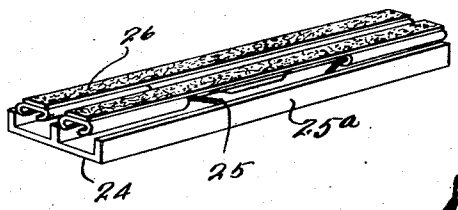


FIG. 6



Witnesses

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2 SHEETS—SHEET 2.

FIG. 2

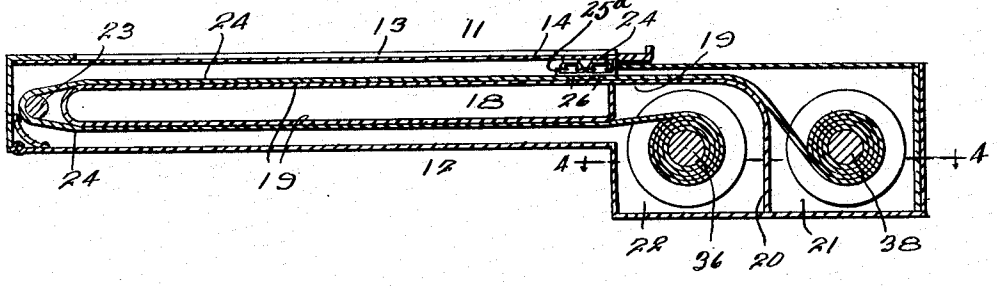
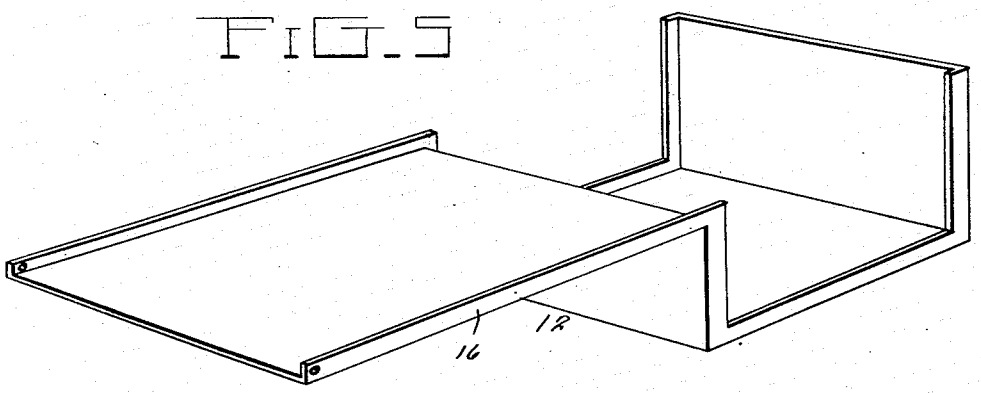


FIG. 5



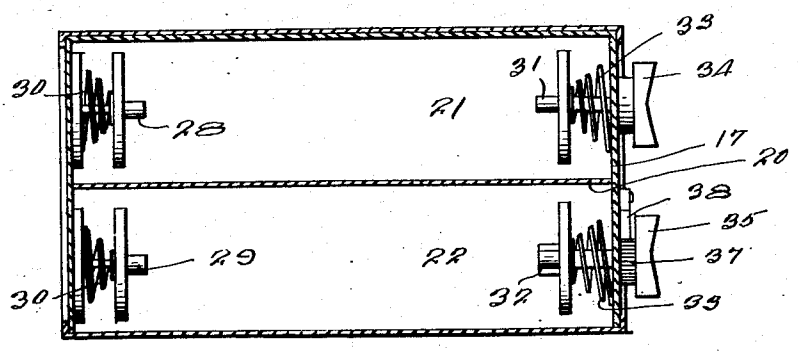


FIG. 4

Witnesses

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UNITED STATES PATENT OFFICE.

WILBUR I. SCHULTZ, SR., OF CLAY CITY, INDIANA.

FILM-ROLL HOLDER.

1,213,694. Specification of Letters Patent. Patented Jan. 23, 1917.

Application filed June 5, 1915. Serial No. 32,416.

To all whom it may concern:

Be it known that I, WILBUR I. SCHULTZ, Sr., a citizen of the United States, residing at Clay City, in the county of Clay and State of Indiana, have invented certain new and useful Improvements in Film-Roll Holders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to photographic cameras, and more particularly to an improved film roll holder especially designed to be used interchangeably with an ordinary dry plate holder.

Another object is the provision of a film roll holder including a casing of novel construction including essentially two hinged parts which may be readily separated or swung apart to permit of the insertion or removal of a film roll.

Another object is the provision of a film roll holder of simple construction which shall be efficient in use and inexpensive to manufacture.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts as will be hereinafter specifically described, claimed and illustrated in the accompanying drawings, in which:

Figure 1 represents a perspective view of the improved film roll holder. Fig. 2 represents a longitudinal sectional view therethrough. Fig. 3 represents a transverse sectional view through the holder on the line 3—3 of Fig. 1. Fig. 4 represents a longitudinal sectional view through the holder on the line 4—4 of Fig. 2. Fig. 5 represents a perspective view of the rear section or part of the holder casing removed. Fig. 6 represents a perspective view of the light excluding strips and holder therefor removed, and Fig. 7 represents a detail view of the fastener for securing the parts or sections of the casing in closed position.

Referring to the drawing in detail, wherein similar reference numerals designate corresponding parts throughout the several views, the numeral 10 indicates generally the casing of the film roll holder, which includes the front and rear parts or sections 11 and 12 respectively, which are hingedly connected in any suitable manner at one end by a hinge bolt 12^a, whereby the sections or parts may be separated to permit of the insertion or removal of a roll of films. At the end opposite the hinge bolt 12^a the casing is provided with a suitable type of fastener 12^b for securing the parts in closed position. The front part 11 of the casing is formed with an exposure opening 13 behind which is slidably and removably mounted an opaque slide 14 designed to exclude light from the interior of the holder when the latter is removed from the camera. The side walls 15 are formed integral with or secured to the front part 11 and are adapted to lie under the relatively narrow flanges 16 formed at the sides of the rear part 12, thereby providing a light tight joint between the parts of the holder. The portions of the side walls 15 at the ends opposite the hinge bolt 12^a are increased in width, as indicated at 17, and the rear section or part 12 is correspondingly shaped for a purpose which will hereinafter appear.

The side walls 15 are formed with longitudinally elongated slots 18 to the edges of which are secured the adjacent longitudinal edges of a partition 19, one end of which is extended angularly within the relatively wide end 17 of the casing, as indicated at 20, thus providing spool containing chambers 21 and 22. A roller 23 is rotatably mounted in the end of the casing adjacent the hinge bolt 12^a over which is adapted to pass the film 24. A flanged holder plate 25^a is secured to the inner surface of the front part 11 at one end of the exposure opening 13 and secures a pair of springs 25, which normally retain light excluding strips 26 against the rear surface of the slide 14.

Spool supporting studs 28 and 29 are secured to the inner surface of the enlarged end 17 of one side wall 15 and are normally retained in inwardly extended position by suitable springs 30, and relatively short shafts 31 and 32 are slidably mounted in the enlarged portion 17 of the opposite side wall and are normally retained in inwardly extended position by the tension of the springs 33. The shafts 31 and 32 are extended a distance laterally of the side wall of the casing and provided with keys 34 and 35, respectively, whereby the shafts may be conveniently rotated to wind the film upon the spools. The shaft 32 is formed with the usual laterally projecting wings at its inner extremity adapted to be received within a correspondingly shaped recess formed

in the adjacent extremity of the film receiving spool 36, which latter is engaged between the stud 29 and the shaft 32 and is adapted to be rotated by the shaft. A ratchet wheel 37 is keyed upon the shaft 32 between the key 35 and the outer face of the side wall and is adapted to coöperate with a pivoted pawl 38 to prevent rotational movement of the shaft 32 in a direction to unwind the film from the receiving spool 36.

The feed spool 38 is supported upon the shaft 28 and shaft 31 and may be actuated to rewind the film thereon, when the pawl 38 is disengaged from the ratchet wheel 37, by the key 34.

In use, the fastening device 12^b is released and the parts 11 and 12 are swung apart upon the hinge bolt 12^a, and the spool 38 containing the films for exposure is engaged between the stud 28 and shaft 31 in the usual manner and the film backing sheet is threaded between the front member 11 and the adjacent portion of the partition 19, under the roller 23, between the rear part 12 and the adjacent portion of the partition 19 and the free end thereof is secured to the receiving spool 36, which latter is engaged between the stud 29 and turning shaft 32. The parts of the casing are subsequently closed and secured by the fastener 12^b and the first section of the film for exposure is drawn into position behind the exposure opening 13 by rotating the key 35 on the shaft 32. This operation rotates the receiving spool 36 and winds the film backing sheet thereon.

The front portion of the partition 19 is preferably formed with an aperture 40 having a cover of translucent material through which the markings designating the film sections are visible. When the exposure is to be made the holder is positioned in the back of the camera in the same manner as a dry plate holder and the slide 14 is removed, thus exposing the film to the light rays admitted through the lens of the camera when the shutter is opened.

What I claim is:

A film roll holder including a casing comprising front and rear sections, said rear section having one end thereof bent downwardly, then forwardly and upwardly and provided with upturned flanges formed on its longitudinal edges, said front casing comprising a flat plate having side walls, a rear wall, and a front wall, said plate having an exposure opening formed therein, a partition secured to said front section, said partition having a downturned end, spool carrying studs secured to said side walls of said front casing positioned on each side of said downturned end of the partition, a guide roller secured adjacent the lower end of said front section, said rear section being hingedly connected to the rear wall of said front section and extending forwardly to the front part thereof and overlying said spool carrying studs, said flanges engaging the outer side of the side walls of the front section to form light tight joints, and a slide adapted to cover said exposure opening in the front section.

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

WILBUR I. SCHULTZ, Sr.

Witnesses:

Blanche T. Ward,

Pearl E. Luetzel.