Oct. 9, 1928. G. L. CHANIER 1,686,650

FILM HOLDER

Filed Oct. 21, 1926

Fig. 1.

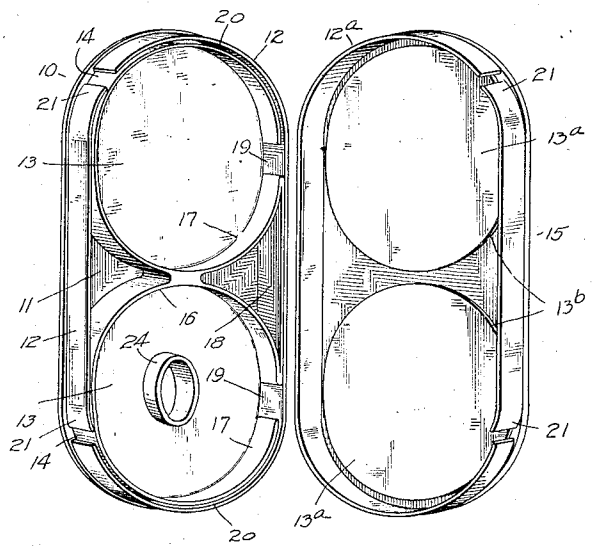


Fig. 3.

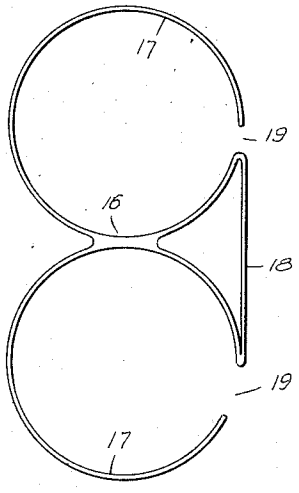
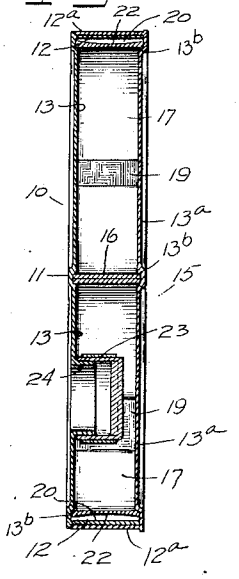


Fig. 2.



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Patented Oct. 9, 1928. 1,686,650

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FILM HOLDER.

Application filed October 21, 1926. Serial No. 143,084.

This invention relates to improvements in holders for unexposed and exposed motion picture film of the type used in connection with toy and amateur moving picture cameras.

Film holders of this character are usually supplied fully loaded with film and ready to be inserted in a camera, and during exposure the film either re-enters the same holder or is wound up in a second holder from which the film has already been exhausted. The present invention relates more especially to the former type of holder which comprises an elongated container having film space at each end and slits adjacent the ends to accommodate the film passing between the film spaces or chambers. In order to make the interior of the holder light tight, suitable curved passages have been provided through which the film is guided in its approach to the slits. These passages are necessarily very narrow and during movement of the film therethrough a large accumulation of dust and bits of shavings from the film collect therein, a condition which must be removed before the holder may be reloaded. The methods used to clean the passages have been more or less make-shift and not at all satisfactory.

With the foregoing in mind it is the purpose of the present invention to provide a holder of the type just described with means operating to exclude light from the interior of the holder, such means being removable from the holder proper to facilitate cleaning operations. I accomplish this purpose by means of the arrangement hereinafter described and claimed, and illustratively exemplified in the accompanying drawings, in which, Figure 1 is a perspective view of a film holder in open position showing the removable interior wall in position; Figure 2 is a substantially longitudinal sectional view of the holder in closed position; and Figure 3 is an elevational view of the interior wall removed from the holder.

Referring to the drawings, 10 denotes an elongated box or body member having a flat side wall 11 and perpendicular continuous edge wall 12 marginally disposed about the side wall. The opposite ends of the box are semi-circular and conform to the outer portions of two circular struck up surfaces 13, which are raised from the metal of the side 11, and which are spaced slightly from each other at their nearest adjacent points. At what may be termed the front of the edge wall 12 the latter is cut away at points, which are slightly beyond the points when the curved ends leave the straight portion, and the slots 14 formed by the cuts are to enable the film to be drawn out of the box at one end and in again at the other end. The box 10 is provided with a cover 15 which corresponds exactly with the body except in size, which is sufficiently large to enable the edge walls 12^a to fit snugly over the edge walls 12, as illustrated in Figure 2.

When the body 10 and cover 15 are assembled the circular raised surfaces 13 of the former and similar surfaces 13^a of the latter, provide marginal guideways or grooves to receive an internal wall 16, comprising a single strip of material bent and curved to provide two circular portions 17 and a tangential strip 18 disposed therebetween. The opposite ends of the strip of material are parts of the circular portions 17 and are so arranged as to be separated from the opposite ends of the tangent strip 18 by short spaces 19. These spaces 19 in the holder are arranged at the rear edge wall, as illustrated in Figure 1. The circular portions 17 are sufficiently smaller than the inside diameter of the curved portions of the edge wall 12 to provide curved spaces or passages 20 therebetween, while the tangent portion 18 closely embraces the inner surface of the straight portion of the rear edge wall. The lips or ends 21 of the front portion of the edge wall 12 at the slots 14 are curved inwardly to a still greater degree so as to yieldably bear against the adjacent circular portions 17 of the internal wall 16.

The outer surface 22 of the wall 16 is slightly concave, as illustrated in Figure 2, so as to merely engage the film at its edges during movement through the passages 20. In order to hold the two circular portions 17 in position and prevent separation thereof the contacting points, where the two peripheries meet, are soldered together, giving the interior wall the appearance of the numeral eight.

In operation the two circular portions 17 form two film chambers or compartments, one for the unexposed portion of the film and the other for the exposed portion, the unexposed film being drawn from the first compartment through the space 19 and curved passage 20 to the slot 14 where the course of the film

takes it outside of the holder and over the front edge wall. The exposed film then enters the other curved passage 20 through the slot 14 and is wound up in the second compartment about a spool 23 which revolves over a collar 24 struck up in the side wall 11 at the center of the circular raised surface 13.

It will be clear that in order to clean the holder every part thereof will be readily accessible by simply removing the detachable internal wall 16 from the body portion of the box.

In addition to the features already pointed out in connection with the present invention, it is to be noted that the upstanding side portions or peripheries of the circular struck up surfaces 13 and 13^a provide sills or seats 13^b against which the edges of the inner wall 16 are disposed to form light tight joints, as clearly illustrated in Figure 2.

What I claim and desire to secure by Letters Patent is:—

1. In a film holder, the combination with a closed container, of a detachable interior wall operating to form a curved passage for film from one section of the holder to another, said wall being detachable for permitting access to the curved passage for the purpose of cleaning the same.

2. In a film holder, the combination with body and cover portions adapted to fit one over the other, of a detachable interior wall insertible in the body and cover portions and having curved sections spaced from and conforming to adjacent sections of the body and cover to provide curved passages into and out of the interior of the holder, said wall being detachable for permitting access to the curved passages for the purpose of cleaning the same.

3. A film holder, comprising body and cover portions having curved ends and parallel edge walls, the curved ends having slots communicating with the interior of the holder, the body and cover being further provided with circular raised surfaces the pehipheries thereof being spaced from the curved end walls, and a detachable interior wall for the holder, comprising a strip of mater[illegible] bent to form two ring portions to embrace the peripheries of the circular raised surfaces and a tangent piece to engage the parallel wall opposite the slots, said rings having openings adjacent the ends of the tangent piece and being of a smaller diameter than the curved end walls to provide a curved film passage from the said openings to the slots in the edge wall.

4. A film holder, as claimed in claim 3, in which walls of the said slots are curved inwardly to engage the adjacent curved surfaces of the interior wall to hold the latter in position, substantially as described.

5. A film holder, as claimed in claim 3, in which the outer surface of the interior wall is concave in transverse section to engage only the margins of the film.

6. A film holder, as claimed in claim 3, in which the body portion at the center of one of the circular raised surfaces is provided with an interiorly flanged opening to accommodate a film spool, substantially as described.

7. A detachable interior wall for a film holder, comprising a single piece of material curved at its ends to form two rings and a straight mid portion bent back upon itself to project at a tangent to the two rings, the ends of the material and the ends of the tangent portion being spaced apart to provide access to the spaces inside the rings, the peripheries of the latter being in contact with each other at points intersected by a line drawn through the centers of both rings.

8. In a film holder, the combination of a covered container from which film is drawn out at one end and enters at the other end, an insertible wall for the container comprising two film chambers, said wall being spaced from the adjacent wall of the container between openings into the chambers and outside of the container to form curved passages for the film in its travel into and out of the chambers.

In testimony whereof I affix my signture.

GASTON L. CHANIER.