

[54] CAMERA ATTACHMENT

[75] Inventors: Miklos B. Horvath; Daniel Etherton,
both of Redmond; Neel Wilson,
Bellevue, all of Wash.

[73] Assignee: Synetix Industries, Redmond, Wash.

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[58] Field of Search 95/36

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Primary Examiner—John M. Horan

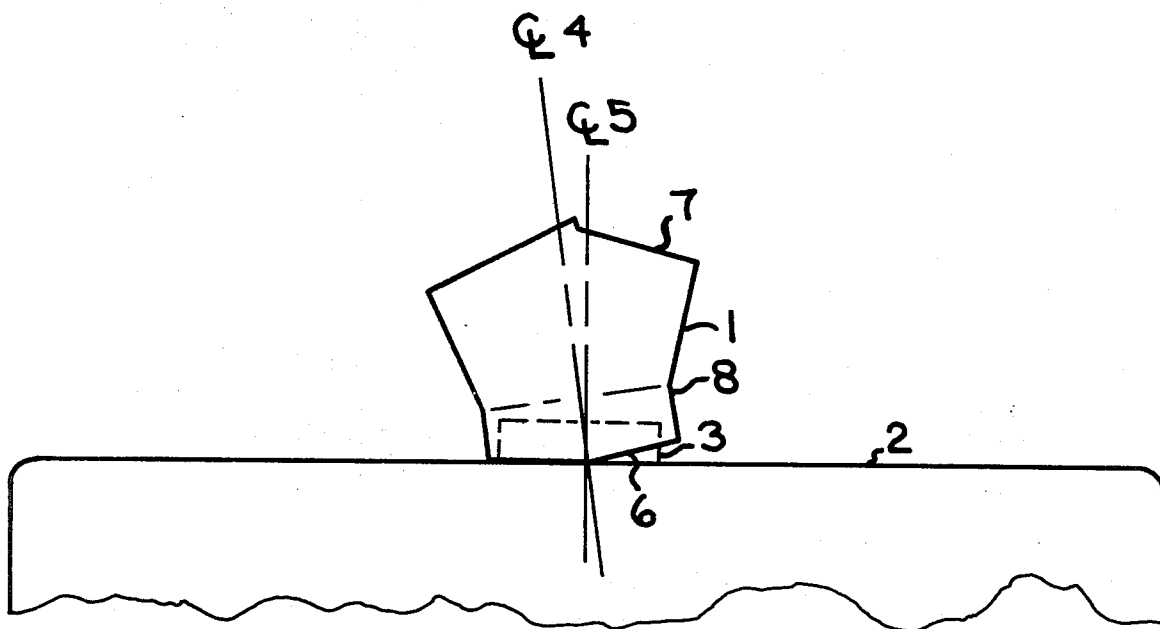
Attorney—Richard W. Seed et al.

[57]

ABSTRACT

This invention is a device that slips over the lens mount of a camera. The device is somewhat cylindrical in shape where the end opposite the end on the lens mount has an opening that shades approximately one-half of the film when a picture is taken. By rotating the device 180°, the other one-half of the film is shaded. The device thus allows the combining of two scenes onto one picture frame.

1 Claim, 4 Drawing Figures



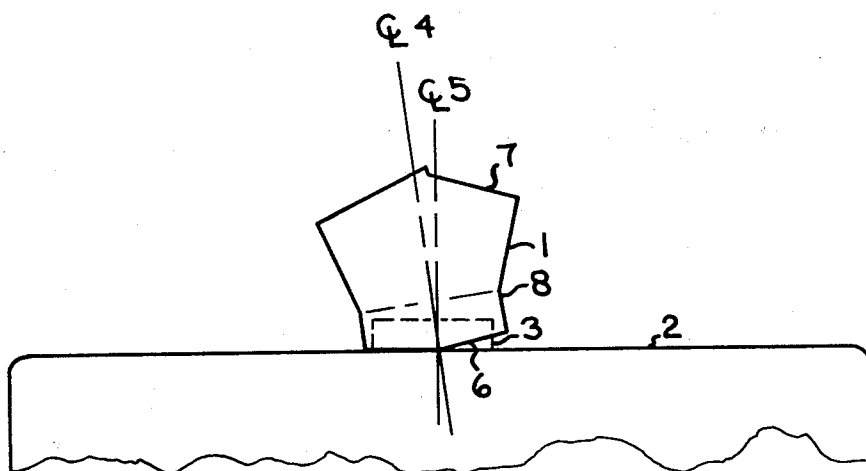


FIG. 1.

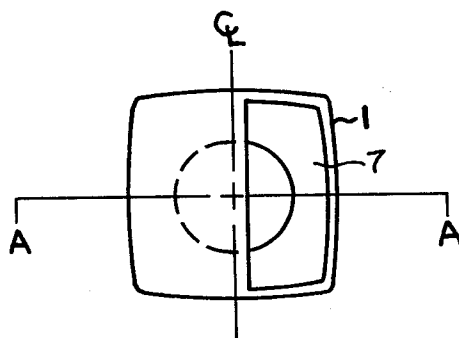


FIG. 2.

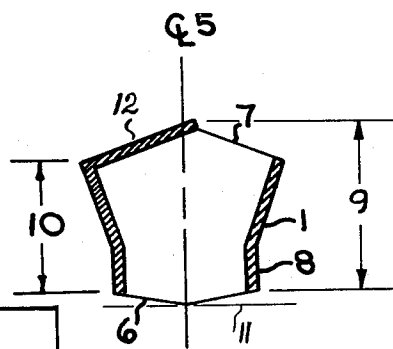


FIG. 3.

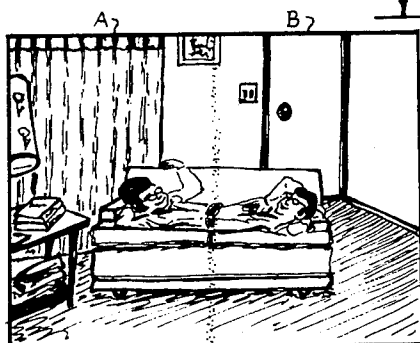


FIG. 4.

CAMERA ATTACHMENT

BACKGROUND AND SUMMARY OF THE INVENTION

This invention relates to the general field of photography where a portion of the film is obstructed such that a portion of the film is not exposed when the lens is opened in the normal manner of taking a picture. More specifically, this invention is a device that allows only a part of the film, such as one-half, to be exposed, then by repositioning the device, that part of the film not exposed may be exposed and at the same time the portion previously exposed is then blocked from further exposure. Such a device is seen to be useful where two scenes are desired to be exposed on the same picture frame. It is also seen to be useful when a conservation of film is desired, that is, twice as many scenes may be photographed on the same quantity of film. However, the primary usefulness of the invention when reduced to practice as described herein, is the recording of two scenes on film whereby the blending of the two scenes together along one centerline of the picture is not distinct but rather a gentle fading of one scene and a gentle increase of intensity of the other scene. The usefulness of the non-distinct blending of the two scenes becomes clearly evident when considering the following example. It is desired that a picture of a sofa be made where seated on the left side of the sofa is a person, and seated on the right side of the sofa is the same person. If it is desired that the person on the left be handing a book to the person on the right and it is further desired that the picture appear that identical twins be performing the action, only one exposure will be required to make the picture.

Other examples may be a front view and profile view of the same person, or a view of a person lying on a sofa (FIG. 4) such that if a vertical centerline is drawn through the picture, on the left side (A) is seen a view from the waist up, and on the right side (B) is also seen a view of the same person from the waist up. Therefore, to the viewer it looks like a person who has been sawed through at the waist and joined together with the top part of an identical person who had also been sawed through at the waist. It now becomes obvious that an endless variety of "trick" photographs may be taken.

After having read the total description of the device, certain other advantages of the invention will become clear. One such advantage is that the division line of the two scenes may be varied from one blending, as previously described, to a sharp line where a scene division is definitely desired. Another advantage is that instead of two scenes on one picture any number of scenes may be made by varying the construction of the invention.

A common method used by photographers to perform the previously mentioned double or more scenes on one picture has been to take two pictures, cut the two pictures in half and paste the two halves together, then take another picture of the pasted picture. Another method used for film pack type cameras, such as "press" cameras, is inserting cut film (rather than a roll) the size of one picture frame negative into the camera. Prior to insertion of the film into the camera one half of the film is masked so that it will not be exposed when the picture is taken. The picture is taken, thus exposing only that part of the film that is not masked. The plate is then removed and the mask is repositioned to the other half of the film. The plate is

then reinserted into the camera and another picture taken. This technique provides sharp scene divisions. Scene blending by this technique requires that the edge of the mask along the centerline of the negative to also be of a varying opaqueness. Such techniques become obviously awkward after a full understanding of the description of this invention.

Another primary advantage of this invention is that due to its construction it may be used with two types of film, each of which has different exposure latitudes. The best example is between black and white film and color film.

The primary objects of this invention will now be discussed. These objectives will become evident as well as other less evident objectives after the total invention has been studied and understood. One objective is that the invention may be quickly attached to the camera. A second objective is that no tools are required to attach the device. Yet another objective is that no disassembly or removal of any camera part or parts is required to attach the invention to the camera. A further objective is that the device have no moving parts. Another objective is that the device may be manufactured with conventional manufacturing techniques requiring no new technology or exotic tooling. Another objective is that the manufacturing technique be economical and adaptable to mass production type processes. A further objective is that the material used in the device be readily available and require no undue processing or procuring requirements. Yet another objective is that different degrees of scene blending are accomplished with a minimum change in the devices' dimensions. Another objective is that the device have a simple means to adapt itself to film with different exposure latitudes.

FIG. 1 illustrates the invention installed onto a camera.

FIG. 2 is a top view of the invention.

FIG. 3 is a side sectional view through K - A of FIG. 2 of the invention.

FIG. 4 is a picture resulting from the use of this invention.

The invention is generally referred to by the numeral 1 and is shown installed on a camera 2 lens mount 3 in FIG. 1. It is noted that the device is tilted such that the camera 2 centerline 4 is not in line with the centerline 5 of the device. This tilt is caused because the bottom 6 of the device 1 is deliberately made in a V shape. With the device 1 tilted to the left as shown in FIG. 1 a greater half of the film is allowed to be exposed through the opening 7. By tilting the device 1 to the right, the opening 7 is shifted to the right, thereby allowing a smaller half of the negative to be exposed. This simple tilt type of adjustment allows two types of film to be used by compensating for different exposure latitude of films.

Installation of the device 1 onto the camera 2 is done by simply sliding the cylindrical end 8 of the device 1 over the lens mount 3. A deliberate slight distortion of the cylinder end 8 from a circle to a slight oval shape allows the device 1 to fit securely at a tilt over the lens mount 3. To operate the device 1, install it as shown in FIG. 1. Select the tilt angle—for black and white tilt it as shown in FIG. 1, for color—tilt it to the right. Take a picture of the scene you desire to be on the right half portion of the picture. Next remove the device 1 from the camera 2, turn the device 180° such that the opening 7 is now on the left side. Tilt the device 1 the same

3

as before, that is, if the opening 7 was maximum for the first scene, make it also the maximum for the next scene, which is now ready to be taken. It should be noted here that since both scenes are to be taken on the same frame, that the film cannot be advanced, or a new frame inserted, because in so doing you would defeat the purpose of two scenes on one picture.

The principle embodiment of the invention as shown in FIGS. 1, 2, and 3, has particular advantages of which some have already been discussed. Another is that the height 10 of the device may be made to be consistent with the type of camera used and the desired results to be obtained. As height 10 is decreased, the more undefined the area between the two scenes will be. As height 10 is increased, the sharper will be the dividing line because it more closely approaches the focus point of the subject. Additionally, the angle of the bottom 6 of the device may be made greater or lesser. The greater the angle, the greater the differential coverage of the opening 7 will be, thus allowing greater compensation for film exposure latitude differences. Care must be taken that the bottom angle is too great so that the field of view will not be blocked by the side 9 of the device 1.

An illustrative form of a typical image blocking lens cover adapted particularly to the Polaroid Model 250 camera will now be described. The cylinder 8 internal diameter is 1.52 inches, and the height is 0.50 inches measured from base line 11 in FIG. 3. The height 9 is 1.60 inches. Overall width at cross section AA in FIG. 2 is 1.80 inches, and is a rectangular shape. Height 10 in FIG. 3 is 1.00 inch. The V shape at bottom 6 is 0.03 inches tapered symmetrically on both sides in reference to base line 11, FIG. 3. The image blocking cover or masking face 12 in FIG. 3 extends 0.06 inch to the right over the centerline 5.

The material used for the device 1 is plastic or metal or any other material rigid enough to maintain the desired shape.

The device 1 should be naturally dark in contrast or

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should be painted black with non-glossy paint.

Other methods for tilt adjustment of the device 1 are also now apparent. Such methods include a multiplicity of angles on the bottom 6 such that a multiplicity of tilt angles may be obtained. Another method is simply a flat bottom with "tits" protruding on the centerline 4. Other methods may be thumb screws such that infinitely variable tilt angles are possible.

Other methods of attachment of the device 1 to the camera 2 are also now apparent. The method previously described where the device 1 is slipped over the lens mount 3 is a very acceptable method for some Polaroid type cameras so that the lens piece 3 protrudes in much the same manner as shown in FIG. 1. Some types of cameras are so constructed that this method of attachment is not feasible and other methods are more desirable. These other methods include slipping the device 1 inside the lens mount. Another method adaptable to 35 mm. cameras that have screw threads on the lens mount for the purpose of attaching accessories such as filters, is to simply thread the end 8 of the device 1. This means of attachment also allows 180° rotation of the device 1, by simply unscrewing the device 180°.

What is claimed is:

1. A device for partially blocking from exposure an image on a frame of film for allowing the combining of two images on one frame comprising a body having a masking face and a light receiving opening, said masking face blocking the incoming image from a portion of the film frame, and means for attaching the body to the lens of a camera, said means for attaching said body to said camera lens including a cylindrical surface adapted to fit snugly over the camera lens, and an angle end surface for rocking the body about the lens to vary the apparent size of the light receiving opening for accommodating various exposure latitudes.

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