Nov. 16, 1948. W. A. BOULAIS, JR 2,454,032

PHOTOGRAPHIC BORDER DEVICE

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Fig. 1

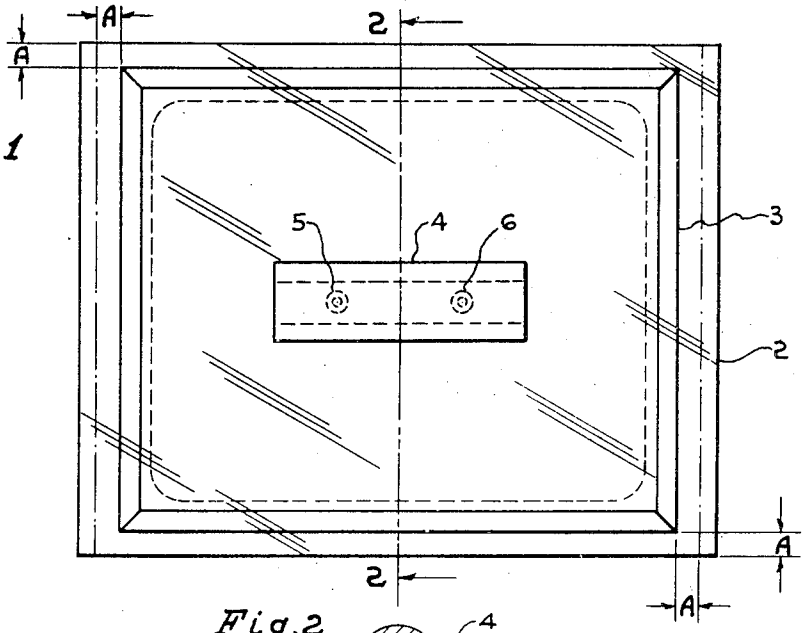


Fig. 2

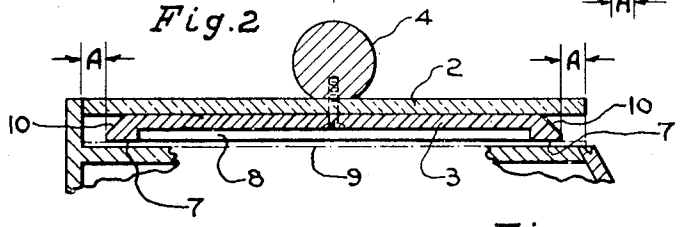


Fig. 3

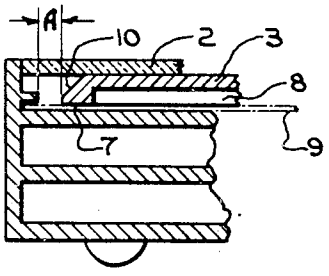


Fig. 5

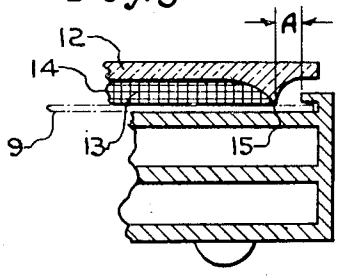
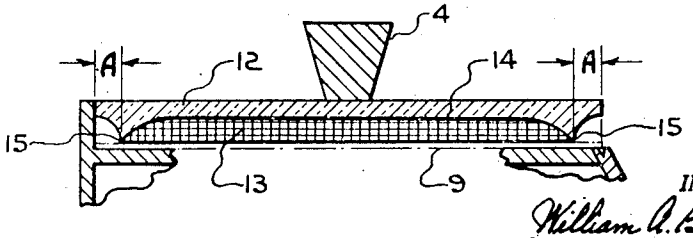


Fig. 4



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Fig. 6

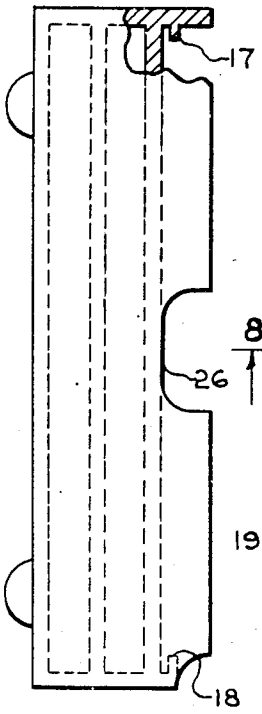


Fig. 7

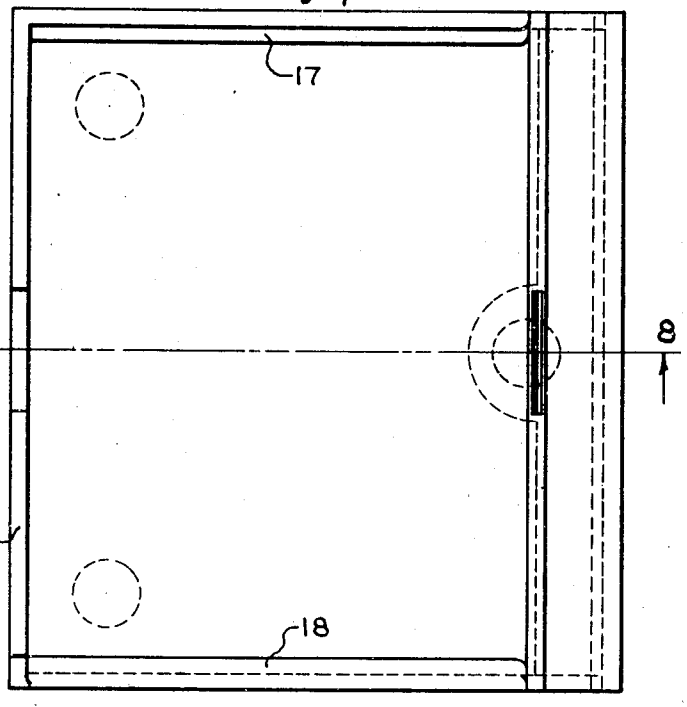
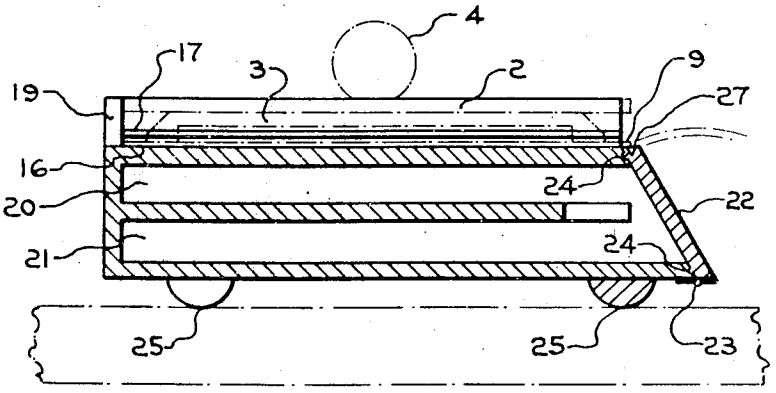


Fig. 8



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Fig. 9

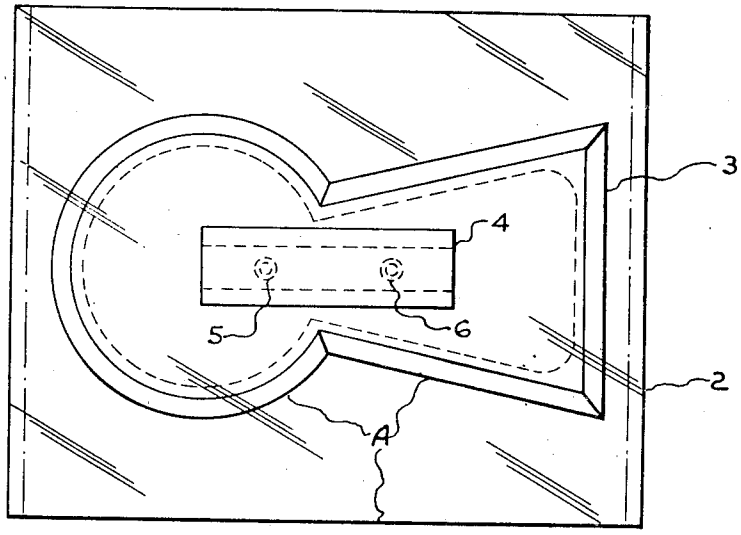


Fig. 10

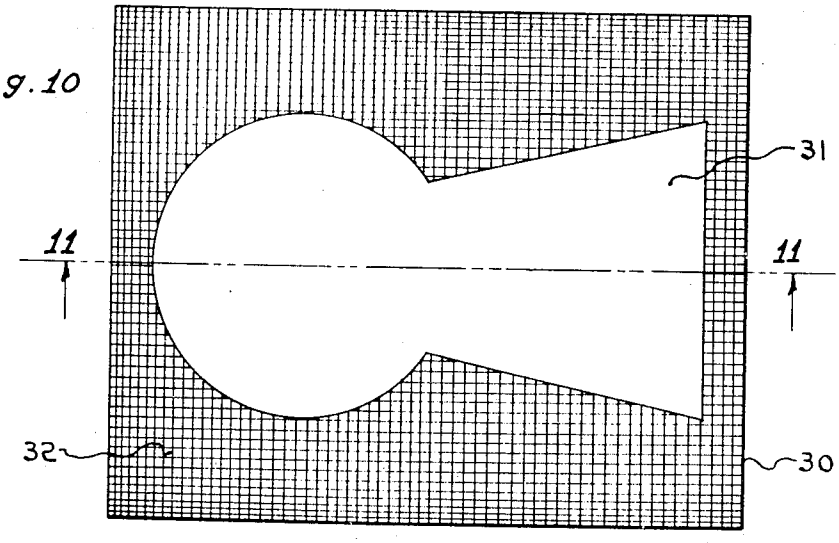
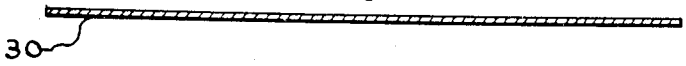


Fig. 11



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2,454,032

UNITED STATES PATENT OFFICE

2,454,032

PHOTOGRAPHIC BORDER DEVICE

William A. Boulais, Jr., Jersey City, N. J.

Application October 29, 1947, Serial No. 782,787

3 Claims. (Cl. 88—24)

1

My invention relates to the use of tripack sensitized color photographic emulsion. More specifically it relates to those of the reversal type.

It is well known in the art that under the normal or usual operations a black border will be secured upon printing. It is also well known that developing of such color pictures not only requires the utmost care but also consumes a great deal of time. Due to these facts operators find it desirable to make as many exposures as one can develop at one time.

Inasmuch as all color printing material of the reversal type is just the opposite of negative photographic material, if one desires to produce white it becomes necessary to utilize light to break down the layers of emulsion to attain that result.

My invention has for its principal object to provide a mask which when used will produce a white border or a silhouette of white upon the finished contact print or enlargement.

It can be used in association or combination with any type of enlarging easel or any other type of holder designed to hold sensitized material where one wishes to produce a reversal border, a silhouette, or any special design either before or after the projection of the positive or negative image upon the sensitized material.

A further object of my invention is to provide a combined mask and holder.

A further object is to construct the mask with the opaque portion formed integral therewith.

A further object is to provide an easel or holder having a plurality of compartments one of which is adapted to receive the sensitized material which is to be used and another in which the material which has been exposed and is awaiting development.

A further object is to construct a target adapted to fit in the easel or holder preferably approximating the size of the material which is being used for printing upon. The target has a white or light area which coincides with that of the design of the mask which is to be used. That portion of the target outside of the design is black. This target enables the operator to compose his picture within boundaries of the area covered by the mask.

My means of accomplishing the foregoing object may be more readily understood by reference to the accompanying drawings which are hereunto annexed and form a part of this specification in which:

Fig. 1 is a top or plan view of my improved mask on the easel or holder;

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Fig. 2 is a partial cross-section taken on the line 2—2 in Fig. 1;

Fig. 3 is an enlarged fragmentary sectional detail view of the construction;

Fig. 4 is a sectional view of a modified form of construction;

Fig. 5 is an enlarged fragmentary sectional view of the construction in Fig. 4;

Fig. 6 is an end view of my improved easel or holder;

Fig. 7 is a top or plan view of the same the mask being omitted;

Fig. 8 is a sectional view on the line 8—8 in Fig. 7, the mask being shown in place;

Fig. 9 is a top or plan view of a mask showing the design of the target;

Fig. 10 is a top or plan view of my target for that design, and

Fig. 11 is a cross-section taken on the line 11—11 in Fig. 10.

Similar reference numerals refer to similar parts throughout the entire specification.

As shown in Figure 1, the mask is formed of a piece of clear glass 2 or a suitable transparent plastic may be used. This glass 2 acts as a centering device for an opaque portion 3 which may be suitably but detachably secured to the clear portion in any suitable or convenient manner. By making the opaque portion detachable I am able to permit the operator to change to any design or configuration desired. The opaque portion 3 shields that part of the sensitized material, shown in dotted lines, which is under it, from the light while the light is breaking down that portion of such sensitized material which is not shielded, thus enabling the operator to obtain or secure a white border in the final print. A handle 4 is secured to the mask, and as shown it is fastened by two screws 5 and 6, though any desired method of fastening may be employed.

The opaque portion 3 has a ridge 7 which extends completely around the opaque portion 3 thus forming a recess 8. This recess 8 being spaced from the sensitized material 9 acts to protect it while the border, indicated by A, is being formed by the light breaking down the sensitized material exposed to the light through the transparent glass 2, to form the white border A.

In order to prevent any shadow or the production of a fuzzy edge of the border A, I have found in practice it is desirable to chamfer the outer edge 10 as clearly seen in the detail and sectional views.

In Figures 4 and 5, I have shown a modified form of mask. In this construction the opaque

portion is not interchangeable. The mask 12 being moulded or formed of glass or plastic with the opaque portion 13 formed integral with the glass or plastic 12. This is routed out as at 14 to protect the sensitized material 8. This forms a ridge 15. The ridge 15 in this construction is shown with practically a knife edge although the other form may be used. Lack of shadow is secured by curving the surface as clearly seen.

I have found in practice that the ridge, thus provided, serves to hold the sensitized material 9 firmly in place.

Figures 6 to 9 show my improved easel or holder. It comprises a surface 16 on which is placed the sensitized material 9. The surface 16 has flanges 17 and 18, which serve to hold the sides of the sensitized material 9 down. Its edge abuts a flange 19.

These flanges are provided with upwardly extending portions which act as guides to correctly position the glass portion of the mask. Below the surface 16, I form two compartments 20 and 21, admission to which is gained by means of a door 22 which swings on spring hinges 23. It is rendered light tight by ridges 24 which enters corresponding grooves. The compartment 20 is for the reception of unexposed material. The compartment 21 is for material which has been exposed and is awaiting development. The edge of the bottom of compartment 20 has a finger hole, which affords easy access for the removal of unexposed sensitized material.

I have found in practice it is desirable to provide the holder with feet 25 made of rubber which holds the easel or holder in position upon the enlarger base board indicated in Figure 8 by dotted lines. A finger slot 26 is provided to afford the operator a start in removing the sensitized material 9 from the surface 16 of the holder.

It will be clear from the foregoing that the light tight door 22 is not liable to be accidently opened while it contains the sensitized exposed and unexposed material when the target of the sensitized material is in the holder, for the material or the target will overlap the upper edge of the light tight door 22 and the thumb nail groove 27 which is provided for convenient opening of the door 22.

In Figures 9 to 11 I have shown the use of my target. In Figure 9 the mask is provided with an opaque portion in the shape of a key-hole assuming that is the design desired for the boundary of the picture.

A target 30 is prepared with a corresponding area of light or white material 31 the remainder 32 of the target 30 being opaque. The target is then placed in position on the holder. In this manner the operator can determine the exact area or boundary lines of the picture to be exposed. When this is done, the target is then removed and the sensitized material placed in position in the holder. The mask having the desired design is then placed on the material and when the exposure is made the picture when developed will be framed with a white border of the key-hole shape.

The operation is believed to be apparent from the foregoing description. The operator can make an exposure to form the white border or silhouette with the mask in position either before or after the exposure for the making of the picture. The light source (not shown) can be either the enlarger color balanced light with the transparency removed from the carrier and the diaphragm opened wide for the maximum amount of light or any other light source.

If a contact print is to be made utilizing the balanced light of the enlarger the operator need only remove the transparency from contact with the sensitized material, place the mask in position and expose for the border A, or a silhouette.

Although I have described with some degree of particularity specific details of form of construction, I do not desire to be understood as limiting myself thereby, as many changes may be made and I am not to be limited except as such limitations may appear in the hereinafter contained claims.

I claim:

1. In a mask for forming a white border on sensitized color photographic emulsion of the reversal type, a photographic easel, upwardly extending lips on said easel, a sheet of clear transparent material adapted to cover said easel inside said lips, means to attach an opaque member to said sheet, said opaque member having a sharp photographic border edge for engaging the sensitized sheet between its periphery and the edge of said sheet.

2. In a mask for forming a white border on sensitized color photographic emulsion of the reversal type, a photographic easel, upwardly extending lips on said easel, means on said lips to hold said photographic paper, a sheet of clear transparent material adapted to cover said easel inside said lips, means to attach an opaque member to said sheet, said opaque member having a sharp photographic border edge between its periphery and the edge of said sheet for engaging the sensitized sheet and means provided in said easel to store and receive said photographic paper.

3. In a mask for forming a white border on sensitized color photographic emulsion of the reversal type, a photographic easel, upwardly extending lips on said easel, a sheet of clear transparent material adapted to cover said easel inside said lips, said sheet having a central portion routed out, said routed portion being coated until opaque, the balance of said sheet having a sharp photographic border edge whereby a light transmitting border is produced between said routed portion and the edge of said sheet on said sensitized emulsion.

WILLIAM A. BOULAIS, JR.

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