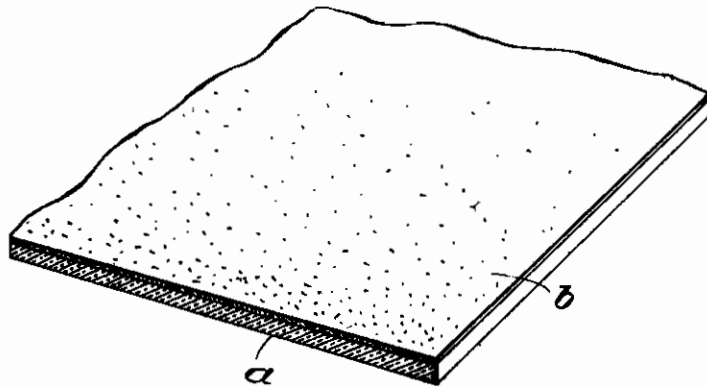


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FILTER-SCREEN
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ALIEN PROPERTY CUSTODIAN

FILTER-SCREEN

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Application filed May 25, 1942

This application is a division of my copending patent application Ser. No. 369,451, filed December 10, 1940.

My invention relates to a filter screen for use in color photography.

By the filter screen the light is decomposed into its component colors in exact conformity with the colors emitted from the object, the negative becoming graduated in accordance with the values of the colors. After the exposure the colored filter screen is free for other exposures, the negative being now capable of letting pass only such color-rays as correspond to the graduation of its sensitive layer.

The new filter-screen forming the object of the present invention is illustrated in perspective view in the accompanying drawing.

The filter-screen consists of a support *a*, covered with a single layer *b*, in which all colors in conformity with the colors of the positive material or at least the three basic colors, thoroughly mixed with one another, are contained in form of emulsions. The support *a* may be of glass or Celluloid or another transparent material. Of course during the exposure the colored layer must touch the sensitized layer of the negative material.

For producing the filter-screen the following receipt I may be followed.

Receipt I

Distilled water.....c. cm.. 100
 A saturated solution of gum arabic, at least.....grms.. 70

To 100 c. cm of this solution 20 c. cm glycerine are to be added.

Now mix with one another:

5 Distilled water.....c. cm.. 100
 Glycerinedo.... 20
 So-called filter violet.....grms.. 4

(This is a compound $C_{23}H_{17}N_3O_4S_3Na_2$)

10 On the other hand a hardening solution is prepared according to the following

Receipt II

15 Distilled water.....c. cm.. 100
 Chrome alumgrms.. 5

20 Of this hardening solution 15 c. cm are to be added to said color emulsion, thoroughly mixing both at 35° C. Thereafter the whole is slowly evaporated with continuous stirring and then the resulting product is poured on glass plates. After solidification the foil is ground to a fine powder and the required quantity thereof is mixed with the different color emulsions and spread on the support *a*.

25 In any event for these emulsions the same colors are to be used as for the layers used for the positive material.

JOHANN SPECHT.

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