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E. A. LAGE
PROCESS FOR THE PRODUCTION OF PHOTOGRAPHIC PLATES, FILMS,
AND THE LIKE FOR INDIRECT THREE-COLOR PHOTOGRAPHY
Filed March 13, 1926

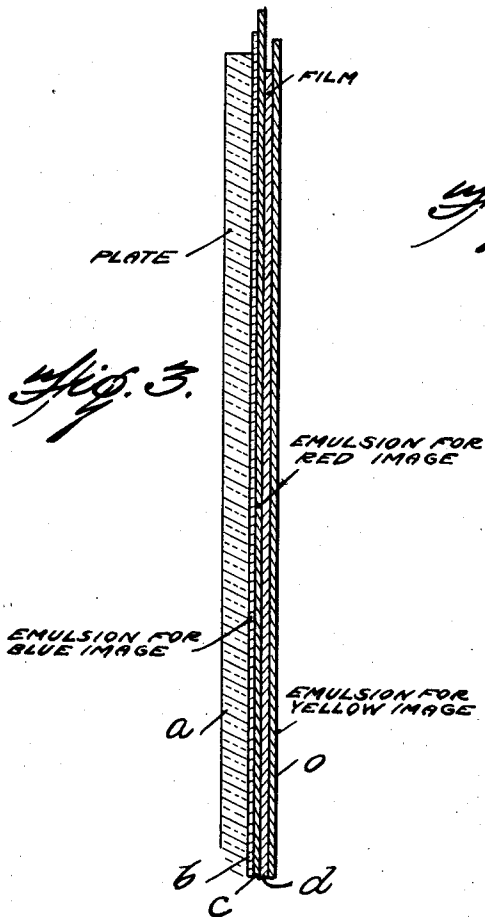
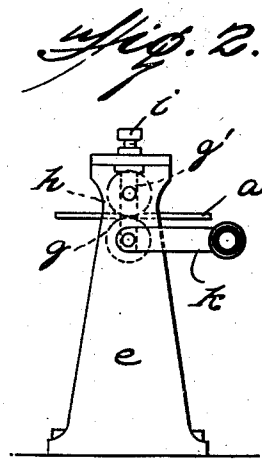
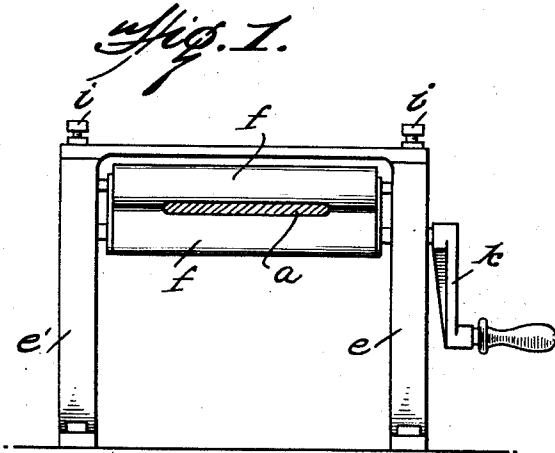
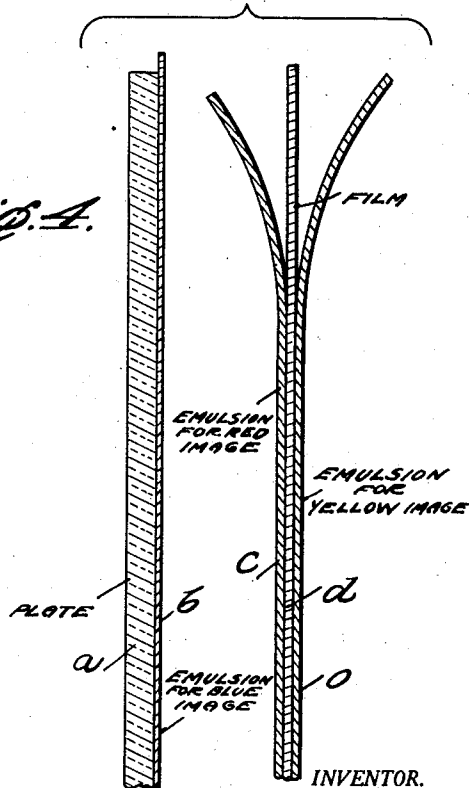


Fig. 4.



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PROCESS FOR THE PRODUCTION OF PHOTOGRAPHIC PLATES, FILMS, AND THE LIKE FOR INDIRECT THREE-COLOR PHOTOGRAPHY.

Application filed March 13, 1926, Serial No. 94,595, and in Germany October 23, 1925.

The invention relates to a process for the production of photographic plates, films and the like for indirect three-color photography.

The invention consists principally in
5 squeegeeing a light-sensitive film which is provided with a suitable coating of emulsion for the red partial image on to a support provided with a suitable coating of emulsion for the blue partial image and then pouring a
10 suitable coating of emulsion for the yellow partial image on to the film which has been squeegeed on to the support.

After a photographic exposure has been made the said film together with the coating
15 of emulsion which has been poured on can be stripped off from the said support, after which the two separated parts can be individually developed whereupon, after the film which has been stripped off has dried, the
20 one or the other or both of the negatives can be separated from the film.

In the accompanying drawing,

Figure 1 is an elevation and

Figure 2 a side view of the means for pressing
25 the films upon the plate.

Figure 3 is a sectional view through a plate with the layers in position thereon.

Figure 4 is a view similar to Figure 3, showing the layers partly separated.

30 The process of production is carried out as follows:—

A film *d*, one side of which is coated with light-sensitive emulsion *c* and which, after the photographic exposure, is to provide the
35 red partial image is squeegeed in such a manner on to a photographic support *a* (dry plate, film or the like) coated with an emulsion *b* which is to provide the blue part picture that the surface of the one emulsion coating *c* rests upon the surface of the other emulsion coating *b* and is in optical contact with the latter. The film *d*, together with the
40 plate *a*, are pressed against one another by one or more spring-actuated or yielding rubber rollers or the like which express the air between the layers *b* and *c* which are to be brought together. The rollers *f*, *f'* are movable and rotatably mounted in the standards *e*, *e'*, through blocks *g*, *g'*, springs *h* being provided to normally force the rollers apart
50 and screws *i* providing an adjustment for obtaining the necessary pressure to the rollers on the films passing therethrough, and being forced into intimate contact. A handle *k* mounted on one side at the extended

ends of the lower roller shaft, provides the means for rotating the rollers and feeding the films *b* and *c* that are to be pressed together through the machine. An emulsion
55 *o*, which after photographic exposure is intended to provide the yellow partial image is now poured on to the still unused surface of the film *d* which has been squeegeed on to the support *a*. By means of this process an absolutely firm intimate contact of the individual parts with one another is attained
65 which thus obviates for an indefinite period the possibility of the parts becoming automatically detached from one another. After the photographic exposure a slight incision
70 is made on one or more of the edges of the plate or film in order to render possible the removal of the film which has been squeegeed on and which is coated on both sides with emulsion. After the separation of the film
75 from the support both parts are developed so that the glass plate, film or the like after drying is at once suitable for providing the blue partial image, whilst, after the drying
80 off of the developed film, the coating of emulsion which was poured on is stripped off so that the film now forms the negative for the red partial image and the drawn-off coating the negative for the yellow partial image.

Instead of stripping the yellow partial
85 negative off from the film after its removal from the support the red partial negative may be stripped off or, if desired, both partial negatives may be stripped off. In the last named case the somewhat faulty transparency
90 to light of the support for the coatings is thus overcome.

Besides this it is possible to print copies without removing one of the coatings from the film after separation from the support
95 by bleaching one or the other of the partial images (thus rendering it transparent) and afterwards causing the bleached image to reappear.

I claim:—

1. Process for the production of photographic tri-packs for indirect three-color
100 photography, consisting in that a light-sensitive film provided with the coating of emulsion suitable for the red partial image is
105 squeegeed on to a support provided with a coating of emulsion suitable for the blue partial image, after which a suitable coating of emulsion for the yellow partial image is poured on to the squeegeed film.

2. A process involving the exposure of a photographic tri-pack of a type wherein a light sensitive film provided with an emulsion for a one-color image is squeegeed onto a support previously provided with an emulsion for another color image, with an emulsion for a third-color image subsequently poured onto the squeegeed film, said process further consisting in removing the film following said exposure, together with the coating with the emulsion which has been poured on from the support, developing the support and emulsion and the film and emulsions, and separating one or the other of the emulsions from the film to thereby provide the desired number of negatives each having its independent color partial image. 15

In testimony whereof I have affixed my signature.

ERNST AUGUST LAGE.