

# UNITED STATES PATENT OFFICE.

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## PRODUCING SURFACES FOR COLOR-PRINTING.

SPECIFICATION forming part of Letters Patent No. 742,354, dated October 27, 1903.

Application filed April 27, 1903. Serial No. 154,478. (No model.)

*To all whom it may concern:*

Be it known that I, JOSHUA RAMSDELL, a citizen of the United States, and a resident of Springfield, in the county of Queens and State of New York, have invented a certain new and useful Improvement in Producing Surfaces for Color-Printing, of which the following is a specification.

This invention relates to the production of printing-surfaces for color-printing, and has for its object the lessening of the time and cost of producing the same.

In the practice of my invention I make a single half-tone photograph (negative) of the original object or scene, as a drawing or a photograph, and then for each color or printing-surface desired or required stop out with opaque pigment all portions of that negative except the portion or portions required for that particular color or surface. Then I make a print or transfer on zinc, stone, &c., from the half-tone so stopped out. Then I remove in whole or in part the pigment and again apply pigment, so as to leave exposed some other desired part of the negative, and again make a print or transfer, and so on until the desired number of prints or transfers are secured.

If photo-prints are made as above described, the printing-surfaces are made therefrom in known manner. The printing-surfaces are so arranged in printing as to cause the impressions therefrom to lie in the completed picture in the places appropriated thereto. For the purpose of securing an even tint or tone in any part of the finished picture I may cut out the corresponding part of the film and insert in the place of the part so cut out a flat tone or tint and then make the prints or transfers in the manner above stated. I prefer to use water-colors for the stopping-out medium, as such colors are readily removable; but other means may be employed in stopping out without departing from the invention and claims herein.

While the invention is especially applicable in the case where there is in the finished picture no overlapping of colors from differ-

ent printing plates or surfaces, which conduces to rapid printing, it is not limited to such case, but may be used in the case where colors from different plates or surfaces overlap more or less in the final picture. In the latter case semi-opaque pigments may be used on the half-tone negative for partially stopping out the overlapping parts.

What is claimed as new is—

1. That improvement in the art of preparing printing-surfaces for color-printing, substantially as hereinbefore set forth, which consists in making a half-tone photograph of the object, and, for each color required, stopping out all parts of the photograph as are not required for the printing-surface for such color, and making a print or transfer from said stopped-out photograph for each color or surface required, the stopping-out medium being removed in whole or in part after each print or transfer is made and again applied to stop out other parts of said photograph during the making of the next print or transfer.

2. That improvement in the art of preparing printing-surfaces for color-printing, substantially as hereinbefore set forth, which consists in making a half-tone photograph of the object, cutting out such portion thereof as it is desired to have appear in an even or flat tone or tint in the finished picture and inserting in such cut-out portion a flat tint or tone, and then, for each color required, stopping out all parts of the photograph not required for the printing-surface for such color, and making a print or transfer for each color or surface required, the stopping-out medium being removed in whole or in part after each print or transfer is made and again applied to stop out properly for the next print or transfer.

3. That improvement in the art of preparing printing-surfaces for color-printing, substantially as hereinbefore set forth, which consists in making a single half-tone photograph of the object, and then, for each surface to be prepared or color to be used, forming a print or transfer from said photograph stopping out, with opaque pigment removable

by washing, such portions of said photograph  
as are not to appear in or contain that color  
in the finished picture, and washing off such  
pigment after each print or transfer is made,  
5 and applying said opaque pigment to said  
photograph to stop out properly for the next  
print or transfer.

Signed at New York city, in the county of  
New York and State of New York, this 25th  
day of April, A. D. 1903.

JOSHUA RAMSDELL.

Witnesses:

R. W. BARKLEY,  
ISAAC D. MARSHALL.