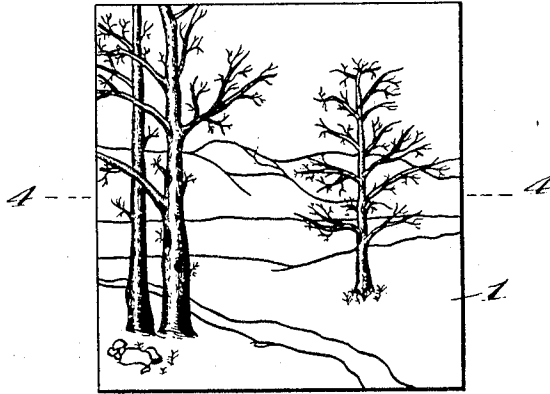


No. 856,519.

PATENTED JUNE 11, 1907.

H. C. J. DEEKS.  
COLORED PICTURE AND PROCESS OF MAKING SAME.  
APPLICATION FILED SEPT. 24, 1906.

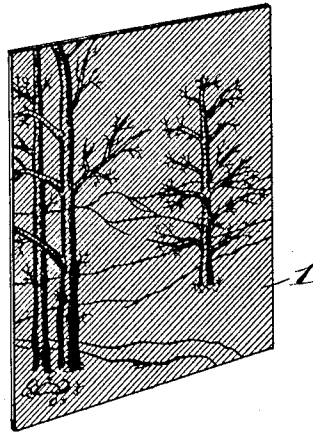
*Fig. 1.*



*Fig. 3.*



*Fig. 2.*



*Fig. 4.*



Witnesses  
David Ramsey  
Russell R. Vaughan

Inventor  
Hiram C. J. Deeks  
By his Attorney  
Joseph A. Sutton

# UNITED STATES PATENT OFFICE.

HIRAM C. J. DEEKS, OF PATERSON, NEW JERSEY.

## COLORED PICTURE AND PROCESS OF MAKING SAME.

No. 856,519.

Specification of Letters Patent.

Patented June 11, 1907.

Application filed September 24, 1906. Serial No. 335,947.

*To all whom it may concern:*

Be it known that I, HIRAM C. J. DEEKS, a citizen of the United States, residing at the city of Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Colored Pictures and Processes of Making the Same, of which the following is a specification.

My invention relates to the production of striking and pleasing effects upon pictures which, viewed from one direction, are displayed in one or more colors, whereas, while viewed from another direction, the same picture is displayed with a variation of color.

The object of my invention is to produce a picture by an inexpensive process of manufacture, which has the novel and striking property of varying its color effects in accordance with the point of observation.

My invention may be conveniently employed for the production of color postal cards, but its use is not limited to such articles, inasmuch as it may be applied to pictures of any size to be displayed or exhibited in any suitable way.

Referring to the drawings, Figure 1 is a front view of my picture; Fig. 2 is a view of the same when observed from the left, the view being displayed in one color as, for instance, purple; Fig. 3 is a view of the same when viewed from the right, the picture being displayed in two colors as, for instance, orange and green, the upper portion of the picture being colored in orange while the lower portion is colored in green; Fig. 4 is a horizontal sectional view on the line 4-4 of Fig. 1, the corrugations in the picture being very much exaggerated in the drawing for the purpose of clearness.

Referring to the drawings, 1 represents my picture which is displayed upon a surface having the corrugations 2 with left-hand surfaces or facets 3 and right-hand surfaces or facets 4. To prepare my color picture, I first print or produce, by any well-known means upon a plain surface, the picture which I desire to color. The picture thus produced upon the plain surface may be in black and white, or it may be in any suitable colors. I then pass the picture through rollers adapted to corrugate the same with vertical parallel corrugations of minute size so as to produce a corrugated surface with the picture appearing upon the sides of the corrugations. To the observer, the picture will now present an appearance almost pre-

cisely the same as the picture before the corrugations were made on its surface. Fig. 4 illustrates, roughly, the shape of the corrugations, although they are so minute in size that the drawing cannot properly represent the same. The picture, before being treated further, will present substantially the same appearance whether it be observed from the front or from either side. Of course, inasmuch as the picture is now sectioned vertically upon the different sides of the corrugations, there will be a slight difference in the picture according to the direction from which it is observed. Such differences, are, however, so minute as to be negligible. I next subject the picture to a spray of liquid pigment or coloring matter, directed upon its surface from the left-hand side, so that the spray is deposited solely upon the left-hand faces 3 of the vertical corrugations 2. After allowing the coloring matter thus deposited to dry and become fixed, I then spray in like manner, from the right-hand side of the picture, the right-hand surfaces or facets 4 of the corrugations 2, with a pigment of a different color. As illustrated in the drawings, I may use two colors for spraying the right-hand surfaces of the corrugations, one color being devoted to the upper section of the picture, while a different color is employed to the lower section. After the color has completely dried upon the picture and become fixed, I may varnish or otherwise protect the colored picture by any well-known means.

When the picture is now observed from the front, the entire surface will be presented to the vision and the effect will be a combination or mingling of the colors which have been applied by means of the spray, together with the colors underlying the same on which the picture was originally produced. When observed from the left, however, the observer will see only parallel sides of the corrugations which face to the left and the effect will be a mingling of the original colors of the picture and the color sprayed, as before explained, on the left-hand facets or surfaces 3 of the corrugations 2. When the observer changes his position, or when the picture is tilted so that the right-hand surfaces or facets 4 of the corrugations 2 only are observed, a different effect will be produced, consisting of a mingling or combination of the colors of the original picture with the colors which have been applied to the

right-hand surfaces or facets 4 of the corrugations.

By means of my invention striking and variegated effects may be produced. The number of colors which may be sprayed upon different parts or sections, horizontal or vertical, of the picture, is practically unlimited. The spraying may be directed broadly upon a section of the picture, or it may be confined to selected spots or portions, according to the artistic purposes of the operator, who may be provided with a stencil, or stencils, to confine to particular portions or configurations of the picture the selected colorings.

In my application Serial Number 234,125, filed November 25, 1904, I have shown a multiple photograph having a corrugated surface with minute sections of one photograph appearing on parallel surfaces of the corrugations, while minute sections of another photograph appear upon the opposite surfaces of the corrugations. In my application Serial Number 289,402, filed November 28, 1905, I have claimed the process of producing such a multiple photograph. The description above is confined to a corrugated picture in which both sides of the corrugations display sections of the same picture. My present invention is also applicable to the coloring of the multiple pictures of the two applications named.

What I claim as new and desire to protect by Letters Patent is:

1. The process of producing a colored picture which consists in first forming upon the surface of the picture minute corrugations and, second, spraying with a pigment the sides of the corrugations which face in one direction.

2. The process of producing a colored picture which consists in first forming upon the surface of the picture minute corrugations, second, spraying with a pigment the sides of the corrugations which face in one direction and, third, spraying with a pigment of a different color the opposite sides of the corrugations.

3. The process of coloring pictures which consists in first forming minute corrugations with consecutive sections of the picture upon parallel sides thereof and, second, spraying said parallel consecutive sections of the picture with a pigment.

4. The process of producing a colored picture which consists in first forming upon the surface of the picture minute corrugations and, second, spraying with a multiplicity of different pigments different portions of the picture as displayed upon the sides of the corrugations facing in one direction.

5. The process of producing a picture having two different color effects according to the side from which the picture is observed, which consists in first forming the surface of the picture into minute parallel corrugations, second, spraying with one or more pigments the sides of the corrugations facing in one direction and, third, spraying with a different pigment or a different distribution of pigment the sides of the corrugations facing in the other direction.

6. The process of producing a picture having three color effects, each different as the picture is viewed from the front or either side, which consists in first producing a picture whose surface is formed into minute corrugations, second, spraying with one or more pigments the sides of the corrugations facing in one direction and, third, spraying with a different pigment, or a different distribution of pigment, the sides of the corrugations facing in the other direction.

7. A changeable picture having minute corrugations in its surface, the sides of the corrugations which face in one direction being colored differently from the sides of the corrugations which face in the other direction.

Signed at New York city in the county of New York and State of New York this 22d day of September A. D. 1906.

HIRAM C. J. DEEKS.

Witnesses:

JOSEPH A. STETSON,  
MINNIE KAUFFMAN.