

No. 852,938.

PATENTED MAY 7, 1907.

L. EMERSON.

CARDBOARD AND METHOD OF MANUFACTURING THE SAME.

APPLICATION FILED MAY 25, 1906.

Fig. 1.

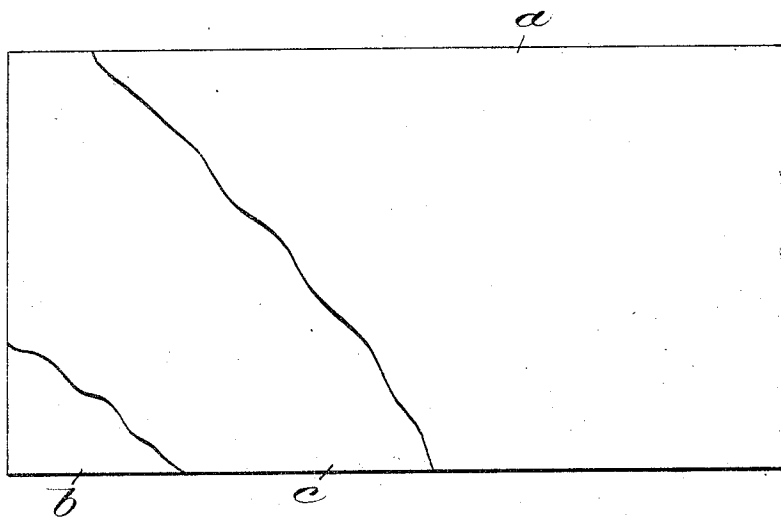


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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No. 852,938.

Specification of Letters Patent.

Patented May 7, 1907.

Application filed May 25, 1906. Serial No. 318,634.

To all whom it may concern:

Be it known that I, LOWELL EMERSON, a citizen of the United States, residing in Pawtucket, county of Providence, and State of Rhode Island, have invented an Improvement in Cardboard and Method of Manufacturing the Same, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to a novel cardboard and to the method of manufacturing the same.

The card board comprises a face layer of paper presenting gradations in color due to the application of a darker pigment to the inner side of the face layer. I employ for the face of my novel card board a well known paper varying in translucency due to the irregular deposit or accumulation of more stock or fiber at some than at other parts of the sheet, or due to treating the paper with acid, while the paper used at the back of the card board may be of any suitable stock and thickness, preferably of substantially the same color or shade as that of the face, but not necessarily darker than the face, because the back is not depended upon to produce the gradations of color at the face of the card board.

Prior to my invention I am aware that a face paper differing in translucency at different parts of the sheet has been pasted to a back of a darker color, the thinner or more translucent portion of the face paper presenting a lighter shade of the dominating color of the back.

Where the back layer of the card board is depended upon for producing the gradations in color at the face, the back is usually of the same color throughout its thickness, and the particular hue of the back is usually gained by dyeing the pulp entering into the formation of the back.

In my invention, I depend for the gradation of color at the face of the card board or paper upon a pigment which may be of any color desired and which may be applied to the inner side of the face layer, said pigment being more or less intense in color according to the particular color shading it is desired to show through the face sheet or layer, and this pigment may contain cement so that it becomes cementitious and causes the adhesion of the face to the back.

Figure 1 shows a piece of my novel card board with the back partially broken out to show the pigment layer between, and with the pigment layer partially broken out to show the opposite side or face of the paper, and Fig. 2 is an edge view of Fig. 1 chiefly to show the back, face, and pigment.

The drawing shows the back of a piece of card board embodying my invention, the back being broken out to show the pigment covering the inner side of the more or less translucent face, the pigment being also omitted from a part of the inner side of the face, the difference in translucency of the face being indicated by fine parallel lines which show where the face is more opaque.

The back *a* of the card board will preferably be of some neutral color substantially the same as that of the face *b*, although the particular color of the back is immaterial so long as it cannot be viewed through the pigment, the latter being of a color to negative any color effect of the back that may be visible at the face of the paper.

The face *b* is composed of paper varying in translucency, and the parallel lines *b'* indicate the most opaque portions of the face. To secure the desired color shading through the more translucent parts of the face, I apply to the inner side of the face a pigment indicated at *c* which may be of any color more or less intense, always, however, darker than the face layer. The pigment may be composed of any usual earthy matter commonly employed in the manufacture of pigments employed in connection with paper, and the pigment may be of any desired color, the color being gained in usual ways, and the pigment may contain cementitious matter so that the pigment when applied will also serve the purpose of cementing the face to the back. This pigment is applied in usual manner to the inner side of the face *c*, and if desired the pigment of different colors may be applied to different portions of the inner side of the face layer.

Obtaining the desired shading or gradation of color at the face of the translucent paper by the application to the inner side of the face of a pigment is very advantageous, as thereby it is possible to gain more pronounced color effects, and at less cost than by depending upon the darker back of the paper for such color gradations.

Having described my invention, what I

claim as new and desire to secure by Letters Patent is:—

1. A novel card board, comprising a face layer of varying translucency, a back, and a layer of cementitious pigment of a different color from the back interposed between the face and back, whereby the face presents gradations of color differing from the color of the back.

2. A method of obtaining color effect at the face of a card board which consists in coloring the back of a sheet of paper of varying translucency evenly and uniformly with a layer of cementitious pigment of a color different from the color of the back, and then applying said sheet to a back with the colored face next the back, whereby the face of the

card board is given a mottled effect, differing in color from the color of the back.

3. A novel card board comprising a back, a layer of cementitious pigment applied to both sides of said back, said layers of pigment being of dissimilar colors, and a face layer of paper of mottled translucency applied to each of said layers of cementitious pigment whereby the respective faces present gradations of color differing from each other.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

LOWELL EMERSON.

Witnesses:

CARRIE B. JOHNSON,
SUSANNA PETTIT.