

## UNITED STATES PATENT OFFICE.

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## ART OF BUILDING PICTURES.

## SPECIFICATION forming part of Letters Patent No. 683,802, dated September 24, 1901.

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To all whom it may concern: Be it known that I, JOHN ALDEN LEE, of Milton, in the county of Norfolk and State of Massachusetts, have invented a Built-Up Pic-5 ture and a Method of Producing the Same, of which the following is a specification, reference being had to the accompanying draw-

ings, in which-Figure 1 shows the first or preliminary stage 10 of the building of a picture. Fig. 2 shows a subsequent stage; Fig. 3, the final or com-

pleted picture. My method of producing and forming pictures consists in building up upon a base-15 sheet by means of a multiplicity of superimposed and overlapping sheets of paper or other suitable material of different colors, each piece of paper being cut and formed in outline in such a fashion as to represent along 20 at least one edge some detail of the completed picture. This utilization of one edge of a sheet of material to bring out a detail of a completed picture is a feature of my inven-tion and so far as I know is novel with me.

Another feature of my invention is the fact 25 that the building of the picture is begun by laying upon the base-sheet those colors which in the scheme of composition of the picture will be principal, and I cannot illustrate my

- 30 meaning in this matter more clearly than by reference to the drawings accompanying this specification, which drawings illustrate the gradual growth or building up of a complete picture by superimposing and overlapping 35 successive sheets of paper or the like.
- In the drawings, 1 represents paper of a light-blue color; 2, light buff; 3<sup>a</sup> 3<sup>b</sup>, dark drab; 4 4<sup>a</sup>, greenish black; 5, bluish drab; 6, light brown; 7, dark gray.
- 3 3 represent a divisional line between the 40 upper and lower elements of the picture.

Fig. 1 represents the first step in the process of building a picture by the laying upon the base-sheet A of two rectangular sheets of 45 colored paper 1 and 2.

In Fig. 2 is shown a subsequent stage of the picture-building. The sheet  $3^{*}$  is first superimposed upon the sheet 2, its lower edge being coincident for part of its length with 50 the line 3 3, its side being coincident with the perpendicular right side of sheet 2 and a wavy

right line. Sheet 3<sup>b</sup> is then superimposed upon sheet 2 and sheet 3<sup>a</sup>, the lower edge of sheet 3<sup>b</sup> being coincident with part of line 3 55 3 and its side edge being coincident with the left side edge of sheet 2, a wavy contour con-necting line 33 and the perpendicular left line. The sheets 4 4ª are next superimposed upon sheets 3<sup>a</sup>, 3<sup>b</sup>, and 1, and sheet 5 is finally super- 60 imposed upon sheet 1.

In Fig.  $\bar{3}$  the final steps are taken, sheet 7 being superimposed upon sheets 5 and 1 and sheet 6 being superimposed upon sheets 7 and 5.

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The finished picture represents a landscape, 2 forming the sky; 3ª 3b, distant mountains; 4 4, nearer mountains or hills; 4ª 4ª, shadows; 1, water; 5, the foreshore; 6, the fore-ground, and 7 a house.

It will be obvious that my method contemplates only pictures of a simple and elementary character so far as their details are concerned, and I conceive that my method is peculiarly applicable for use in schools and for 75 educational purposes for children, the comparison, contrasting, and harmonizing of colors necessary in the production or reproduction of pictures by my method affording valuable training in itself, while the analysis of 80 pictures requisite and necessary to select and form the sheets of paper to reproduce the va-rious details of a picture or a landscape is in a high degree educational in its effect, both upon the powers of observation and analysis 85 and upon the color faculties and also in manual training in order to acquire the manual skill necessary to properly reproduce the necessary outlines and in the patience and care necessary to place the various parts in their 90 proper order, relations, and organization. Furthermore, the observation necessary in dissecting a picture which it is proposed to reproduce, or a landscape, for that matter, and the reduction of the picture or landscape 95 to a comparatively few principal general outlines and details of color is stimulating and strengthening to the creative faculties, rendering it necessary for the operator to use origi-nality and judgment, inasmuch as the infi- 100 nite variety of color in nature and the very great variety of color in many pictures ren-ders it impossible to reproduce in every decontour connecting line 3 3 with the upright | tail the color scheme, and therefore makes it

necessary that in reducing the thing to be reproduced to its simplest color expression the operator should use original judgment and taste.

5 My method or system is also applicable in the formation of topographical maps, the various elevations being very distinctly and beautifully reproduced by sheets of different colors superimposed one upon the other to 10 represent different heights.

The building of the picture in the way I have shown, described, and illustrated in the drawings renders it necessary that only one edge of each sheet be cut carefully to the de-

15 sired outline, each superimposed sheet, as it were, blocking out upon the sheet beneath it the outline which it itself bears. For example, in Fig. 3 sheet 1 is entirely changed in its visible shape by the superimposing thereon of
20 sheets 4<sup>a</sup>, 5, and 7. It is clear that it would have been practically impossible or, at least, exceedingly difficult to produce the effect if it had been attempted to cut sheet 1 to a shape which would cause it to fit accurately the out-25 lines of sheets 4, 5, and 7.

Another feature of my invention to which I have not heretofore alluded is the fact that preferably the various sheets as they are successively superimposed are secured by paste 30 or the like applied at the center of the various sheets, leaving the edges free. By this means a certain solid quality appears in the picture which greatly heightens the effect of reality, with the result that in pictures produced by my method there is a quality of scenic reality 35 which is frequently absent from pictures produced with infinitely more labor and pains by the ordinary method.

I claim–

1. A picture, composed of superimposed, 40 overlapping, differently-colored sheets of material, the exposed edges of each sheet being shaped to form the outline of a detail of the picture, and the various details of the picture being illustrated by the outline aforemen- 45 tioned and by the contrast and harmony of the various colored parts of which the picture is composed.

2. A picture, composed of superimposed, overlapping sheets of material, secured upon 50 a common base, the exposed edges of each sheet being shaped to form the outline of a detail of the picture, and said exposed edges being unsecured to the adjacent sheet or base, substantially as shown and described. 55

3. The method above described, of building a picture, consisting of superimposing overlapping sheets of differently-colored material, the exposed edges of each sheet being shaped to form the outline of a detail of the 60 picture.

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Witnesses: O. R. MITCHELL, JOSEPH T. BRENNAN.