

May 21, 1940.

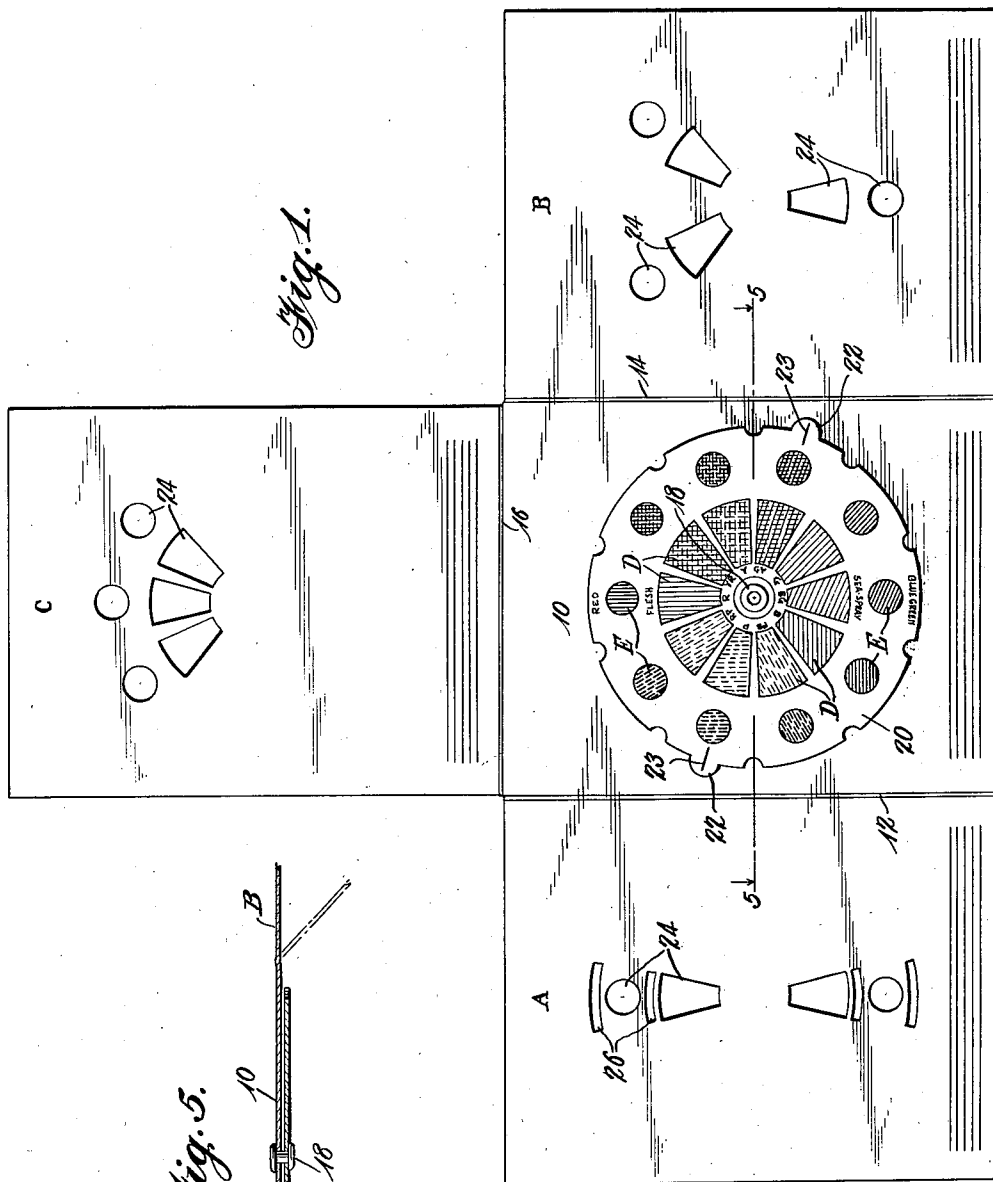
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2,201,888

COLOR PLANNER

Filed Nov. 7, 1936

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

Fig. 2.

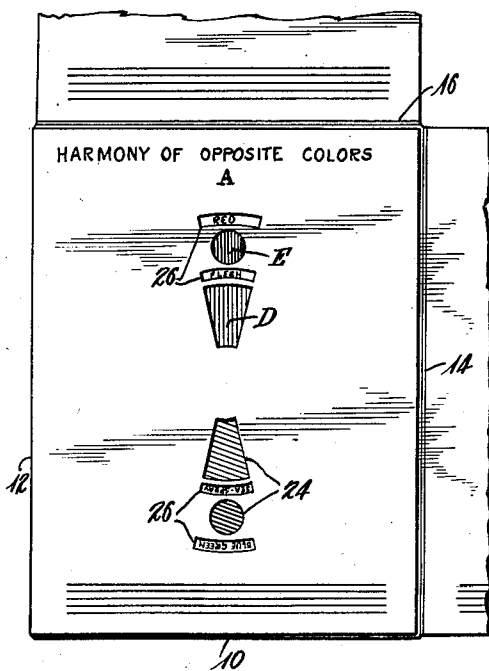


Fig. 3.

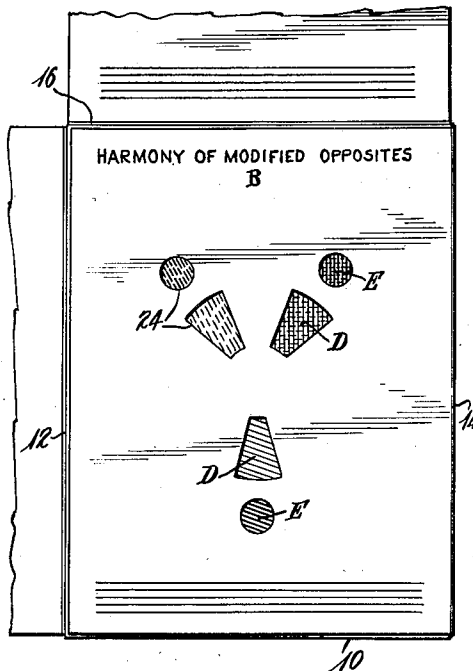
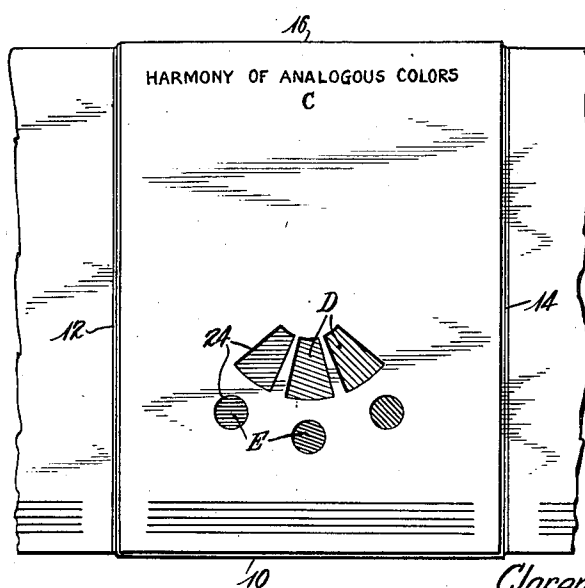


Fig. 4.



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UNITED STATES PATENT OFFICE

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COLOR PLANNER

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1 Claim. (Cl. 88—14)

This invention relates to improvements in color charts and more particularly to devices for displaying selected colors in harmonious combination. Practically all theories of color harmony confuse the effect of actually mixing colors or pigments with the effect of combining them or juxtaposing them in a design, room decoration, costume, or the like. It is widely accepted that red, yellow and blue are the three primary colors and that green, being the result of mixing blue and yellow, is the complement of the remaining primary red. This is true when mixing pigments, but not true when referring to color in terms of light or the reflection of light in a given wave length from an object which gives one the color sensation that identifies the color of the object.

The Munsell color system, on the other hand, deals with color and color harmony as we see it and use it, and as it relates to the effect on the sight of color combinations. In this system, complementary colors are true opposites as determined by the fact that combining them by the disk spinning method produces neutral gray. For example, red and blue-green are complementary or opposite colors.

The device of the present invention is a practical application of the principles of color harmony which derive from the Munsell system and it is accordingly an object of the invention to facilitate accurate and uniform sight sensations of various combinations of colors whereby, for example, paint colors may be readily displayed to a consumer or customer for suggesting color schemes or color combinations based on recognized principles of correct color harmony. Various other uses and advantages of the device of the invention will be apparent from the following detailed explanation thereof.

Referring to the accompanying drawings, wherein a preferred embodiment of the principles of the invention has been selected for exemplification:

Figure 1 is a plan view of a color chart in an open inoperative position.

Figure 2 is a plan view of the device of Figure 1 having mask A superposed upon the color disk.

Figure 3 is a similar view except that mask B is used.

Figure 4 is a view similar to Figure 2 with the exception that mask C is used.

Figure 5 is a section taken along the line 5—5 of Figure 1.

Referring in more detail to the drawings, the

device illustrated comprises a base 10 of cardboard or any other suitable material, having a plurality of masks such as A, B, and C hinged to edges thereof as at 12, 14 and 16 respectively. Rotatably secured to base 10 by means of a stud or grommet 18 is a disk 20, having various colors radially arranged thereon. To facilitate rotation of the disk, tabs 22 may be provided projecting from its periphery which may be decorated or ornamented in any suitable manner desired. Guide lines 23 serve to position the disk.

The disk may be divided into equal parts of any multiple of 10 and the disk illustrated is divided into ten radially extending equal parts. Centered on each part or radius is an area of color D which may be printed on the disk or comprise a color swatch, chip or sample secured to the disk. In addition, disk 20 is provided with further areas of color as at E which may be applied similarly to the areas D and which lie along the same radii. As indicated in the drawings, the views represent the principal colors of the solar spectrum, namely red, yellow, green, blue, purple, and as many intermediate steps as many be desired, the disk illustrated being provided with yellow-red, green-yellow, blue-green, purple-blue, and red-purple. The color spots E are intended to have other values or other chromas than the corresponding segments D and, in the device illustrated, the spots E are darker or grayer. As clearly shown, the colors on the disk are equidistant one from the other in their arrangement on the hue circle as well as in their actual hue quality. Opposite colors or complementaries are shown as opposites on the disk and the order in which the hues are arranged is the order in which they appear in the spectrum.

To more particularly identify the various colors, the disk may be provided with the Munsell hue initial, such as R, YR, Y, GY and so forth. In addition the colors may be each given arbitrary names and their other Munsell designations in the form of fractions such as 8/3 which is interpreted as 8 value, 3 chroma. It will be seen that if the dial is turned so that yellow-green is at the bottom, all the so-called warm colors will be found on the right half of the dial and all of the so-called cool colors on the left half.

Coacting with the disk 20 are the masks A, B, and C above referred to. As clearly shown, each mask is provided with windows or openings 24 of a shape conforming to the shape of the color areas but which openings may, if desired, be slightly smaller so that the desired color area only

may be displayed therethrough when a mask is superposed on the disk. It is sometimes convenient to additionally provide the masks with further openings such as shown at 26 in mask A through which the various color designations may be visible. Although such openings 26 are illustrated only in connection with mask A, it is understood that similar openings may be carried by each of the other masks. The various masks are adapted to be used more or less independently of each other, that is to say, one will be folded over upon the disk in operative position, while the remaining masks are swung out in inoperative position. It will be apparent from Figure 5 that the stud 18 which projects slightly above the surface of the disk 20 will engage an overlying mask and space the same from the disk to facilitate rotation of the disk when a mask is in overlying operative position.

The mask A is used to illustrate opposite or complementary hues and to this end the windows or openings therein are oppositely disposed so that when the same is superposed upon the disk only opposite or complementary hues will be displayed therethrough. Mask B is adapted to illustrate color schemes in which instead of the opposite or complementary of the basic hue selected, the two hues immediately to the right and left of the opposite hue are employed, the harmony or balance being potentially the same as with opposite hues, the contrast less, the variety greater, and to this end, mask B is provided with suitably disposed openings. Mask C is adapted to illustrate the combination of analogous, neighboring or related hues and to this end is provided with openings so disposed as to display therethrough adjacent color areas. It is thus apparent that color harmony results from proximity and from common qualities shared by the hues shown through the masks.

Starting with a given color which, for example, may be moved to a position at the bottom of the base, the three masks show three different types of combinations. When mask C is used, the given color may be moved one space to the right or one space to the left and thus two additional color schemes are disclosed. It is apparent that a total of five specific combinations employing any given color are possible with the three masks, and there being twenty colors on the disk illustrated, it follows that at least a hundred combinations without regard for the variations possible in their applications may be

selected from the simple device herein illustrated and described.

The four or six different colors shown by the masks may all be used as, for example, paint colors, if the decoration of a room calls for that many, but in most cases, however, only one or two would be actually used, the remaining colors supplying the key to draperies, floor coverings and other furnishings. It is obvious that the masks or the base may carry instructions for use and copy relating to color harmony, and although only twenty colors are provided on the disk herein shown, their number could be increased to any multiple of ten, the same relation being maintained between the hues and the same sequence around the circle.

It is understood that the device herein illustrated and described is exemplary only and is capable of many additional modifications, additions or omissions without departing from the scope of the invention as defined in the following claim.

Having thus described the invention, I claim:

A color harmony chart comprising a base, a disk rotatably mounted on a stud secured to said base, said disk bearing a field of colors arranged in a circle having its center coincident with the axis of the disk and another field of corresponding colors but of other chromas disposed in radial alignment with said first named field of colors, Munsell system complementary colors being diametrically opposed and all of the colors arranged in spectrum order, a plurality of masks each hinged to a different marginal extremity of said base to interchangeably overlie said color fields and each having openings therein of different arrangement whereby to expose selective portions of said color fields in harmonious color and chroma combination, one of said masks having openings adapted to expose oppositely disposed colors, another of said masks having openings adapted to expose analogous colors, and another of said masks having openings adapted to expose a selected color and the colors adjacent its opposite color, said stud projecting slightly above the surface of said disk whereby to engage an overlying mask and space the same from the disk to facilitate rotation of the disk when a mask is in overlying operative position, and said disk having peripheral offset portions by means of which it may be rotated when a mask is operatively positioned to selectively vary the exposed combination of colors.

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