C. A. YOUNG.

COLOR CHART.

APPLICATION FILED MAY 19, 1919.

1,327,005. Patented Jan. 6, 1920.

Fig. 1.

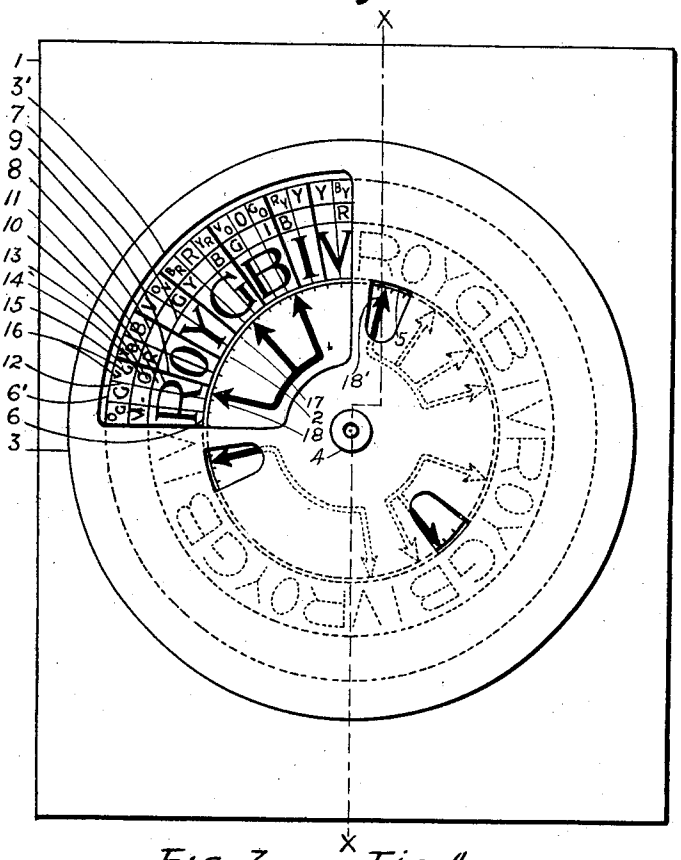


Fig. 2.

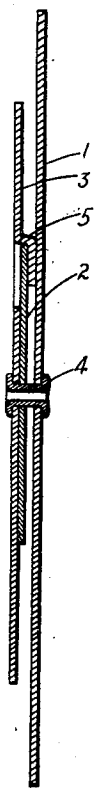


Fig. 3.

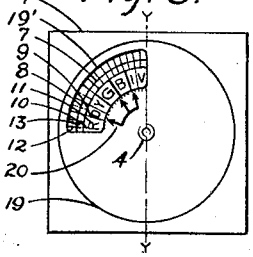
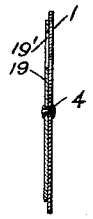


Fig. 4.



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COLOR-CHART.

1,327,005. Specification of Letters Patent. Patented Jan. 6, 1920.

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To all whom it may concern:

Be it known that I, CHESTER A. YOUNG, a citizen of the United States, residing at St. Joseph, in the county of Buchanan and State of Missouri, have invented certain new and useful Improvements in Color-Charts, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvements in color charts, the objects of which are, first; to provide a simple, substantial and durable chart of this class, in the use of which teachers and others doing art work in colors will have a plurality of spectrum colors, secondary tints and complementary tints so pointed out from among other colors and tints that the harmonizing ones can be ascertained by a glance at the chart, second, to provide a color chart by which various pluralities of colors and tints which harmonize can be pointed out and used, without being confused with the unused pluralities of harmonizing colors and tints, third; to provide a plurality of complete sets of spectrum colors and their associated harmonious tints, in such order and arrangement, that one set, or the desired parts of two sets of colors can be used, fourth; to so construct and arrange the parts of a color chart, that they can easily and quickly be moved into proper position for pointing out the desired plurality of said colors and tints, and to provide yieldable holding means whereby the movable parts of the chart are yieldably held in any desired position, fifth; to provide a color chart which shall be neat in appearance and be cheap in cost of manufacture.

I attain these objects by the devices illustrated in the accompanying drawings, in which:—

Figure 1 is a front view of the chart. Fig. 2 is a sectional veiw in detail, on the line X—X, seen in Fig. 1, looking toward the left. Fig. 3 is a reduced front view of one of the various other forms in which the chart may be made. Fig. 4 is a section similar to Fig. 2, of the parts seen in Fig. 3. The body 1 of the chart, is made of practically nonelastic cardboard or the like. The indicator disk 2 and the annular mask 3 are rotatably secured on said body by the eyelet 4.

Tongues 5 are formed integrally with said mask, project therefrom, around the edge of disk 2 and have their end portions passed between the edge portion of said disk and the body 1. Said disk and mask are formed of elastic sheet material which is preferably cardboard. The elastic pressure of said tongues, against the edge portion of said disk yieldably hold it against rotation in relation to said mask, while the pressure of said tongues against body 1, similarly hold said disk and mask against rotation on eyelet 4, thereby forming frictional holding means for said mask and disk.

Mask 3 has the opening 3′ formed therethrough, for exposing to view, the hereinafter described parts of body 1 and disk 2, while the remaining portions of said body and disk are obscured by said mask for avoiding distraction and confusion of the user, as hereinafter described.

The inner marginal line, formed in a circle around and close to the edge of disk 2, is seen at 6, while the outer marginal line 6′ is formed concentrically thereto. The annular space between said marginal lines is divided into three spaces by the intermediate circular lines 7 and 8, the inner one of said spaces being the broadest and the outer one the narrowest of the three. The spacing lines 9 extend from said inner marginal line to said outer marginal line for dividing the widest concentric space into a plurality of spaces, on which the spectrum colors 10 are applied in sets. Said colors are not indicated by shading, but are pointed out by their initials, one of which is seen at 11. Said initials are R, O, Y, G, B, I, V being the initials of the spectrum colors, red, orange, yellow, green blue, indigo, and violet, respectively.

The intermediate lines 12 are formed radially between said spacing lines, from said inner to said outer marginal line for evenly subdividing the spaces between said spacing lines into a plurality of smaller spaces.

The secondary tints 13 are formed on body 1, in the intermediate spaces thus formed and are similarly indicated by the indications 14.

The complementary tints 15 are similarly formed in the outer plurality of spaces and are indicated by indications 16, which indicate the tints of which said complementary tints are formed, the designated one of which, is formed by mixing violet and

green, as the smallest letters V and G indicate.

It will be understood, that the chart will show a complementary tint composed of certain parts of its component tints, but the user of the chart may exercise his judgment in varying these quantities.

The inner ends of all of the radially formed spacing and intermediate lines terminate in register with the register points 17, which are formed on the edge portion of indicator disk 2.

Pointers 18 are formed in a plurality of groups on disk 2, of which one group is seen through opening 3′. Said group comprises three pointers, which are shown in position, pointing to the initials of the spectrum colors, red, green and blue, which colors harmonize. The designated one of said pointers, which points to the red, also points toward the secondary tint orange, and to the complementary tint which is composed of violet and green.

The user of the chart, upon finding that the colors and tints thus pointed out, are harmonious, uses such quantities of each, as his judgment dictates, in mixing the tints with the red, for modifying and subduing the glaring effect of said spectrum color. The central one of said group of pointers, points to the green and toward the blank space among the secondary tints, which shows that no tint of this class should be used in conjunction with the complementary tint of red which is pointed out.

The other pointer, which points to the spectrum color blue, also points to the secondary tint of indigo and the complementary tint composed of green and orange, which should be mixed as previously described.

Other combinations of harmonious tints and colors are pointed out in the following manner: The user of the chart holds the mask 3 against rotation, by applying his finger to the edge of it, and with a finger of the other hand, passed through opening 3′, he rotates disk 2 in the direction and as many steps as he desires for bringing pointers 18 into the desired position, with register points 17 in register with the inner ends of lines 9 and 12, after which he consults the chart for ascertaining therefrom the spectrum colors and tints which harmonize, as previously described.

Fractional parts of two groups of spectrum colors and their tints are used in the following manner:

The user of the chart rotates mask 3 in either direction until the desired portions of the described spectrum colors and of an adjacent group indicated by dotted lines are exposed through opening 3′, after which he rotates disk 2, until the pointers 18 point toward the desired spectrum colors and toward the desired ones of their secondary and complementary tints, which are so arranged and spaced that the ones thus pointed out are harmonious, regardless of the ones to which the group of pointers 18 (which also are properly spaced to perform their functions,) may point.

When it is desired, a greater or less number of harmonious spectrum colors than the described three are pointed out in the following manner:

The user of the chart holds mask 3 against rotation by the edge thereof and passes the fingers of his other hand through opening 3′ and by the edge of disk 2 he rotates the same in either direction, until the desired one of the groups of pointers 18′ is thereby moved into view through said opening. He then rotates said disk and mask until they are in the desired position for pointing out the desired spectrum colors and their associated tints.

While I have shown and described my invention as being provided with four sets of spectrum colors and a like number of groups of pointers, it is evident that any desired plurality of sets of said colors and any number of groups of pointers could be provided, and also that charts could be made for the use of primary pupils, in which either the secondary or the complementary tints or both are omitted, without departing from the spirit of my invention, all of which I reserve the right to do.

One of such other forms of charts is shown in Figs. 3 and 4, in which the indicator disk 2 is omitted and the mask 19 is mounted on body 1. Said mask has the opening 19′ formed therethrough, for exposing one set of spectrum colors 10, and has the group of pointers 20 formed thereon, for pointing to a certain number of said colors which harmonize. Said mask is rotatable on eyelet 4, for permitting said mask and the thereon carried pointers to be moved into register with various harmonizing ones of said colors.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A chart body; an indicator disk rotatably mounted over the central portion of said body; an inner, circular, marginal line formed on said body adjacent to the edge of said disk; an outer, circular marginal line formed on said body; two intermediate lines formed on said body between said marginal lines, forming three concentric spaces on said body around said disk, the inner one of said spaces being the broadest and the outer one being the narrowest of said three spaces; spacing lines formed radially across said spaces for separating said inner concentric space into a predetermined plurality of spectrum spaces; a plurality of sets of spectrum colors formed on said body in said spectrum

spaces; indications formed on said spectrum colors whereby the name of each color can be determined; intermediate lines formed radially between said spacing lines which together with the latter evenly divide the intermediate and outer concentric spaces into a plurality of intermediate and outer spaces; secondary tints formed on said body in said intermediate spaces; complementary tints similarly formed in said outer spaces; secondary indications for indicating the colors of which said secondary tints are composed; complementary tints similarly formed in said outer spaces; complementary indications for indicating the colors of which said complementary tints are composed; a rotatably mounted group of pointers for pointing toward the colors and tints which harmonize; and register points similarly mounted with said pointers whereby said pointers have their proper positions determined.

2. In a color chart, the combination with a practically non-elastic chart body and two superimposed elastic disks rotatably secured on said chart body by a pivot through their centers; of a plurality of tongues formed with the outer one of said disks, said tongues extending from said outer disk between said chart body and the marginal portion of the intermediate disk, forming frictional holding means whereby said disks are yieldably held against separate rotation and whereby the outer one of said two disks is similarly held against rotation on said pivot.

In testimony whereof I affix my signature.

CHESTER A. YOUNG.