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1,958,192

COLOR MATCH GUIDE

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2 Sheets-Sheet 2

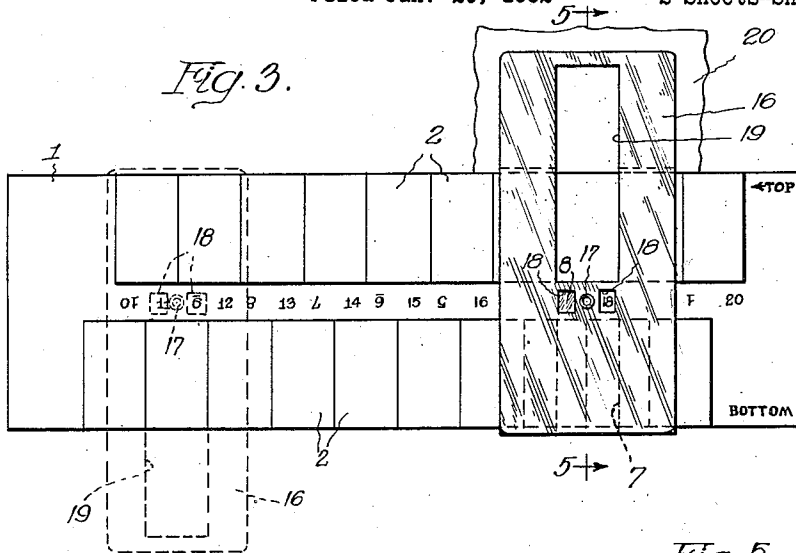
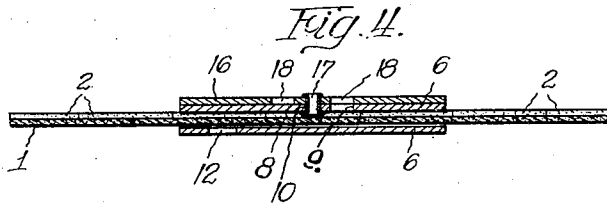
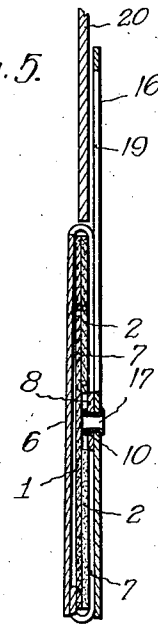
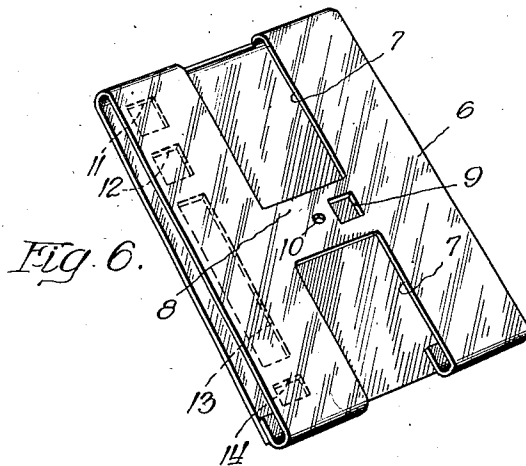


*Fig. 5.*



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## UNITED STATES PATENT OFFICE

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## COLOR MATCH GUIDE

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11 Claims. (Cl. 41-6)

This invention relates to devices for matching colors and mixing paint and analogous materials to produce selected colors, and more particularly to what we term a color match guide.

One of the main objects of our invention is to provide a device of the character stated of simple and inexpensive construction and operation, by means of which a color or colors submitted can be compared with facility with predetermined samples of colors so as to be matched with one of such samples. A further object is to provide means for indicating certain mixing colors and the proportions thereof to be mixed together to produce the color of a selected sample. It is also an object of our invention to indicate certain colors to be used for trimming and striping and which will harmonize with the respective color samples.

Further objects and advantages of our invention will appear from the detailed description.

In the drawings:—

Figure 1 is a face view of a color match guide in accordance with our invention, as used, partly broken away;

Figure 2 is a back view of the color match guide of Figure 1, partly broken away;

Figure 3 is a face view, on a reduced scale, of the device of Figure 1 indicating the two operative positions of the shield;

Figure 4 is a section taken substantially on line 4—4 of Figure 1;

Figure 5 is a section taken substantially on line 5—5 of Figure 3, on an enlarged scale;

Figure 6 is a perspective detail view of the slide member.

The device of our invention includes a rectangular supporting strip 1 conveniently formed of cardboard or other suitable material. This strip is provided, at the front thereof, with color samples 2 which are arranged in two series along the top and the bottom edges of the strip, the samples being of elongated rectangular shape and the longer dimension of the respective samples extending transversely of the strip. In the particular embodiment of our invention illustrated by way of example, there are ten color samples in each series, the samples of the lower series being numbered consecutively from 1 to 10, inclusive, the samples of the upper series being numbered from 11 to 20 and reversely to the samples of the lower series. When using the samples of the upper series, the edge of strip 1, which is marked "Top", is disposed away from the observer, as in Figure 1, in which position of the strip the numbers 11 to 20, inclusive, will

be in upright position so as to be read with facility from left to right. In using the color samples of the lower series, the position of the strip 1 is reversed so that the "bottom" edge of the strip is away from the observer, in which position of the strip the numbers 1 to 10, inclusive, can be read from left to right with facility.

The names of a series of different mixing colors are printed upon the back of strip 1 and arranged in a column extending transversely of the strip, as indicated at 3 in Figure 2. Conveniently, this column of mixing colors is disposed at the right-hand end of the strip when this strip is turned with the "bottom" edge away from the observer so as to be viewed as in Figure 2. In addition, the back face of the strip is provided with a plurality of series of numbers aligned lengthwise of the strip with the names of the respective mixing colors. These numbers are also arranged in series or columns extending transversely of the strip, and these columns are numbered correspondingly to the color samples 2 at the front of the strip. The numbers of each column indicate the proportions of the mixing colors corresponding to such numbers which are to be mixed together to produce the color of the corresponding sample at the front of the strip. The reference number 4 indicates the respective columns of numbers for the mixing colors. The back of the strip also has printed thereon, conveniently beneath column 3, and as shown at 5, the names of suitable colors for use for striping purposes in connection with the colors of the samples at the front of the strip. A suitable identifying character, such as a letter of the alphabet, is disposed adjacent each of the mixing colors and each of the striping colors, a different character or letter being used for each color. These characters are preferably printed in a color, such as red, which contrasts with the numbers and names, as well as certain other characters, which are preferably printed in black. The back of the strip is also provided, beneath the columns 4 of numbers, with characters preferably printed in red corresponding to selected characters for designating certain of the mixing and striping colors. These characters, in addition to being arranged in alignment with the columns of numbers, are also arranged in lines extending lengthwise of the strip, certain of these lines of characters being designated "Suggested trim colors" and certain other lines of these characters being designated "Striping colors". Each column of numbers and characters at the back of the strip and extending transversely thereof thus indicates

the trim colors and the striping colors which will harmonize with any selected color sample at the front of the strip, as well as the proper mixing colors and the proportions thereof to be mixed together to produce the color of such selected sample.

A member 6 extends about strip 2 and is slidable along the strip lengthwise thereof. This member is closed at both sides and is of approximately rectangular section lengthwise, as in Figures 5 and 6. The front wall of member 6 is cut away from each side thereof so as to provide an opening 7 which extends inwardly of member 6 to within a short distance of the transverse center thereof, the front wall of this member being of the shape of the letter H. Element 8 of member 6 is provided with a small opening 9 adjacent one arm of such member, and with a central opening 10. The back wall of member 6 is provided, adjacent the "bottom" edge of strip 1, with a rectangular opening 11. Adjacent this opening the abbreviation "No." is printed to indicate the number exposed through opening 11, this opening being disposed to expose, during movement of member 6 along strip 1, the numbers for indicating the columns 4 corresponding to the color samples at the front of the strip. In addition to opening 4, back wall of member 6 is provided with an elongated rectangular slot 12 and, below this slot, with two openings 13 and 14. Slot 12 is disposed to expose the numbers of the column 4, the number of which is displayed through opening 11, and the openings 13 and 14 are disposed to expose the corresponding characters of the trim colors and the striping colors. Conveniently, the names of the various colors and the characters associated therewith are also printed upon the back of member 6 and arranged thereon in the same order as on the back of strip 1. While this is not essential, it is preferred as facilitating use of the device. If desired, the names of the colors and the associated characters may be omitted from member 6 or from the back of strip 1, though under ordinary conditions we prefer to duplicate the names of the colors and the associated characters, as shown, for convenience.

A shield 16, conveniently of rectangular shape, is pivotally secured to element 8 of member 6, as by means of a hollow rivet 17 passing through the shield and through opening 10, the ends of this rivet being beaded over in a known manner. Shield 16 may be formed of any suitable material, though we preferably form this shield of sheet celluloid suitably colored so as to render it opaque or substantially so.

Shield 16 is provided, at opposite sides of and adjacent rivet 17, with two openings 18 so disposed that one of these openings is aligned with opening 9 of member 6 when the shield 16 is disposed in one position perpendicular to the longitudinal axis of strip 1, the other opening 18 overlying opening 9 when the shield is disposed in its other position perpendicular to the longitudinal axis of the strip. The shield may be turned into either of such positions, as indicated in Figure 3, by turning it about the rivet 17.

In addition to the openings 18, the shield is provided with an opening 19 of approximately twice the length of the respective color samples 2, it being noted that the shield is of sufficient length to project a considerable distance beyond either edge of strip 1 so that, when the shield is disposed at right angles to the strip, the inner half of opening 19 overlies a selected color sample 2, the outer half of this opening projecting

beyond the edge of the strip. Conveniently, opening 19 corresponds in width to the respective color samples 2 so that, when shield 16 is disposed in operative relation to a selected color sample, such sample is framed by the inner half of opening 19. If it be desired to match a color, a sheet 20 of material, or other object, bearing the color to be matched, is disposed adjacent the edge of strip 1 so that a portion of the color to be matched is framed by the outer portion of opening 19 of the shield, as in Figure 1. The area of the color to be matched thus framed corresponds to the area of the color sample framed by the inner portion of opening 19, which is advantageous as facilitating matching of the color. In the use of the device, the color to be matched is disposed beneath shield 16 and member 6, together with the shield, is adjusted along strip 1 so as to expose selectively the color samples 2 until a sample which accurately matches the desired color is found. If it be assumed that the desired sample does not occur in the series of color samples at the "top" edge of the strip, the shield 16 may be turned into the dotted line position of Figure 3, and the color to be matched compared with the samples of the series numbered 1 to 10, inclusive, until a sample which accurately matches the color to be matched has been located. The shield is thus of great assistance in matching colors and, while not essential to my invention in its broader aspects, is preferable. While the opening 19 preferably corresponds in width to the width of the respective color samples 2, the width, as well as the length of this opening can be varied within wide limits. The shield 16 is so related to member 6 that the inner portion of opening 19 overlies one of the openings 7, when the shield is in either of its operative positions. If the shield 16 be omitted, as it may be, the openings 7 of member 6 serve to frame the color samples 2, selectively, for matching colors.

In any operative position of member 6, the number of the color sample framed by either opening 7 of such member is displayed through opening 9 and, if the shield is used, opening 18 of the shield which overlies opening 9. Also, opening 11 in the back of member 6 is so disposed that the column number, and the numbers and characters of such column, which corresponds to the color sample exposed or framed at the front of the strip, will be exposed at the back of the strip. This will be more clearly understood by reference to Figures 1 and 2. In Figure 1, member 6 and shield 16 are disposed to frame color sample 15, which number is visible through the aligned openings 18 and 9 of the shield and member 6, respectively. It is assumed that color sample 15 accurately matches the color of the sheet or article 20. With member 6 in this position, column 15 at the back of the sheet is exposed, and the numbers and characters of this column are also exposed so as to indicate the mixing colors and the proportions thereof which, when mixed together, will produce the color of sample 15, thus producing the color of article 20 which it is desired to match. The column at the back of strip 1 thus exposed also indicates the trim colors and the striping colors which will harmonize with the color sample 15.

In the particular form of my invention illustrated by way of example, it is assumed that the samples 2 show twenty different shades of green. In order to produce the shade of green numbered 15, three parts of permanent toning yellow, 57 150

parts of sienna, 28 parts of dark green, and 12 parts of black, by measure, are mixed together. The trim colors appropriate for use with this shade of green are oxide red and toning maroon, as indicated by the characters F and J visible through opening 13. The striping color suitable for use with the shade of green corresponding to color sample 15 is gold, as indicated by the letter R visible through the opening 14. In the same manner, the colors to be mixed together and the proportions thereof, to reproduce the shade or color of any selected color sample, can quickly be determined from the back of strip 1, as well as the trim colors and the striping colors most suitable for use with the selected shade or color sample. It will be noted that the letter T appears in certain of the columns at the back of strip 1. This letter indicates that a mere touch or trace of the corresponding color is to be used. In example, referring to column 9 in Figure 2, the letter T appears in this column and opposite the color ultramarine blue. In order to produce the color or shade of green corresponding to column 9, which would be color sample 9 on the front of strip 1, twenty parts of permanent toning yellow, 70 parts of black and ten parts of white are mixed together, and a touch or trace of ultramarine blue is added to this mixture. The meaning of a "touch" of color is well known in the art, and need not be set forth in detail here.

While the particular device illustrated and described, by way of example, is for use in matching and producing various shades of green, my invention is in no way limited to producing and matching shades of colors only, but is capable of being used for matching and producing an infinite variety of colors and shades thereof. The provision of the shield 16 is advantageous as greatly facilitating the matching of a desired shade or color. When the device is not in use, the shield 16 may be turned so as to be disposed within the outline of strip 1, so that the device occupies but little space and a large number of such devices may be disposed within a drawer, cabinet, or other suitable container of small dimensions. The device as a whole is of inexpensive and compact construction, occupies but little space, and provides highly efficient means for quickly matching and reproducing colors and shades thereof.

What we claim is:—

1. In a device of the character described, a supporting strip bearing samples of colors, said samples being arranged along one edge of the strip and extending transversely thereof, and a shield movable lengthwise of the strip and projecting beyond said edge thereof, the shield having a continuous opening extending inwardly over the strip and outwardly beyond the adjacent edge of the strip, said opening serving to frame a selected color sample and a color to be matched in juxtaposed relation, the strip and the shield having associated therewith cooperating means for indicating certain other colors and the proportions thereof to be mixed together to produce the color of a selected sample.

2. In a device of the character described, a supporting strip bearing samples of colors, said samples being arranged along two opposite edges of the strip and extending transversely thereof, and a shield movable lengthwise of the strip and positionable to project beyond either of the two opposite edges thereof, the shield having an opening extending inwardly over the strip and outwardly beyond the adjacent edge thereof when

the shield is in either of its projected positions, said opening serving to frame a selected color sample and a color to be matched in juxtaposed relation, the strip and the shield having associated therewith cooperating means for indicating certain other colors and the proportions thereof to be mixed together to produce the color of the selected sample.

3. In a device of the character described, a supporting strip bearing samples of colors arranged in two series along two opposite edges of the strip and extending transversely thereof, a member extending about the strip transversely thereof and slidable lengthwise of the strip, said member being provided with openings disposed to successively expose the color samples of the respective series in the movement of the slidable member, and a shield carried by said slidable member and positionable to project beyond either of the two opposite edges of the strip, the shield having an opening extending outwardly beyond the strip and inwardly over the strip and overlying the adjacent opening of the slidable member, in either projected position of the shield, for selectively framing the color samples and a color to be matched in juxtaposed relation, the strip and said member being provided with cooperating means for indicating certain other colors and the proportions thereof to be mixed together to produce the color of the selected sample.

4. In a device of the character described, a supporting strip bearing samples of colors arranged in two series along two opposite edges of the strip and extending transversely thereof, a member extending about the strip transversely thereof and slidable lengthwise of the strip, said member being provided with openings disposed to successively expose the color samples of the respective series in the movement of the slidable member, and a shield pivoted upon the slidable member and of a length greater than the width of the strip, said shield being positionable about its pivot to project beyond either of the two opposite edges of the strip and having an opening extending outwardly beyond the strip and inwardly over the strip and overlying the adjacent opening of the slidable member, in either projected position of the shield, for selectively framing the color samples and a color to be matched in juxtaposed relation, the strip and said member being provided with cooperating means for indicating certain other colors and the proportions thereof to be mixed together to produce the color of the selected sample.

5. In a device of the character described, a supporting strip bearing at the front face thereof samples of colors arranged along an edge of the strip and extending transversely thereof, and a member extending about the strip transversely thereof and slidable along the strip, said member having an opening disposed to expose the color samples selectively in the movement of the slidable member, the back face of the strip being provided with different color indications disposed in columnar arrangement transversely of the strip and with numbers aligned lengthwise of the strip with the respective indications, said numbers being of appropriate values to indicate the proportions of colors to be mixed to produce the colors of the respective samples; the slidable member being provided at the back thereof with means for designating the appropriate numbers to indicate the proper colors and the proportions thereof to be mixed together to produce a color corresponding to any selected color sample ex-

posed through the opening of the slidable member.

6. In a device of the character described, a supporting strip bearing at the front face thereof, samples of colors arranged along an edge of the strip and extending transversely thereof, and a member extending about the strip transversely thereof and slidable along the strip, said member having an opening disposed to expose the color samples selectively in the movement of the slidable member, the back face of the strip being provided with the names of different mixing colors disposed in columnar arrangement transversely of the strip and with numbers aligned lengthwise of the strip with the respective names, the numbers being arranged in columns transversely of the strip and the numbers of each column indicating the proportions of the colors aligned with such numbers to be mixed together to produce a color corresponding to a color sample on the front face of the strip, the slidable member having an opening at the back thereof disposed to expose the numbers of the respective columns in accordance with the respective color samples selectively exposed through the opening at the front of said member.

7. In a device of the character described, a supporting strip bearing at the front face thereof samples of colors arranged along an edge of the strip and extending transversely thereof, and a member extending about the strip transversely thereof and slidable along the strip, said member having an opening disposed to expose the color samples selectively in the movement of the slidable member, the back face of the strip being provided with the names of different mixing colors disposed in columnar arrangement transversely of the strip and with numbers aligned lengthwise of the strip with the respective names, the numbers being arranged in columns transversely of the strip and the numbers of each column indicating the proportions of the colors aligned with such numbers to be mixed together to produce a color corresponding to a color sample on the front face of the strip, the back face of the strip being also provided with the names of striping colors appropriate for use with the color samples of the strip and with characters indicating said striping colors and certain of the mixing colors aligned transversely of the strip with said numbers, the slidable member having openings at the back thereof disposed to expose the numbers and characters of the respective columns in accordance with the respective color samples selectively exposed through the opening at the front of said member.

8. In a device of the character described, a supporting strip bearing at the front face thereof samples of colors arranged along an edge of the strip and extending transversely thereof, and a member extending about the strip transversely thereof and slidable along the strip, said member having an opening disposed to expose the color samples selectively in the movement of the slidable member, the back face of the slidable member being provided with the names of different mixing colors disposed in columnar arrangement transversely of the strip and with a main opening adjacent said means and also extending transversely of the strip, the back face of the strip being provided with numbers aligned lengthwise of the strip with the names and disposed in columns transversely of the strip, the numbers of each column indicating the proportions of the

colors aligned therewith to be mixed together to produce a color corresponding to a color sample on the front of the strip, the opening at the back of the slidable member being disposed to expose the numbers of the respective columns in accordance with the respective color samples selectively exposed through the opening at the front of said member.

9. In a device of the character described, a supporting strip bearing at the front face thereof samples of colors arranged along an edge of the strip and extending transversely thereof, and a member extending about the strip transversely thereof and slidable along the strip, said member having an opening disposed to expose the color samples selectively in the movement of the slidable member, the back face of the slidable member being provided with the names of different mixing colors disposed in columnar arrangement transversely of the strip and with a main opening adjacent said names and also extending transversely of the strip, the back face of said member being also provided with the names of striping colors and with characters designating the respective mixing and striping colors, the back face of the strip being provided with numbers aligned lengthwise of the strip with the names of the mixing colors and with characters corresponding to certain of the colors, disposed in columns transversely of the strip, the numbers and characters of each column indicating the proportions of the corresponding colors to be mixed together to produce a color corresponding to a color sample on the front of the strip, and the striping and trim colors appropriate for use with the color of the mix produced, the back of the slidable member being provided with supplemental openings, said supplemental openings and the main opening being disposed to expose the numbers and characters of the respective columns in accordance with the respective color samples selectively exposed through the opening at the front of said member.

10. In a device of the character described, a supporting strip bearing two series of color samples at opposite edges of the strip, a member movable lengthwise of the strip and provided with openings disposed to expose the color samples selectively in the movement of said member, and a shield carried by said member and positionable thereon to project beyond either of said edges of the strip, the shield having an opening extending outwardly beyond the strip and inwardly over the strip and overlying the adjacent opening of the slidable member, in either projected position of the shield, for selectively framing the color samples and a color to be matched in juxtaposed relation.

11. In a device of the character described, a supporting strip bearing two series of color samples at opposite edges of the strip, a member movable lengthwise of the strip and provided with openings disposed to expose the color samples selectively in the movement of said member, and a shield pivoted to said member and positionable thereon to project beyond either of said edges of the strip or to be disposed within the outline of said strip, the shield being constructed to expose a selected color sample through one of the openings of the movable member and an area of a color to be matched disposed adjacent the edge of the strip, when said shield is in either of its projected positions.

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**CERTIFICATE OF CORRECTION.****Patent No. 1,958,192.****May 8, 1934.****RUSSELL M. FLETCHER, ET AL.**

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 4, line 69, claim 8, for "means" read names; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 19th day of June, A. D. 1934.

**Bryan M. Battey**

(Seal)

**Acting Commissioner of Patents.**