

(No Model.)

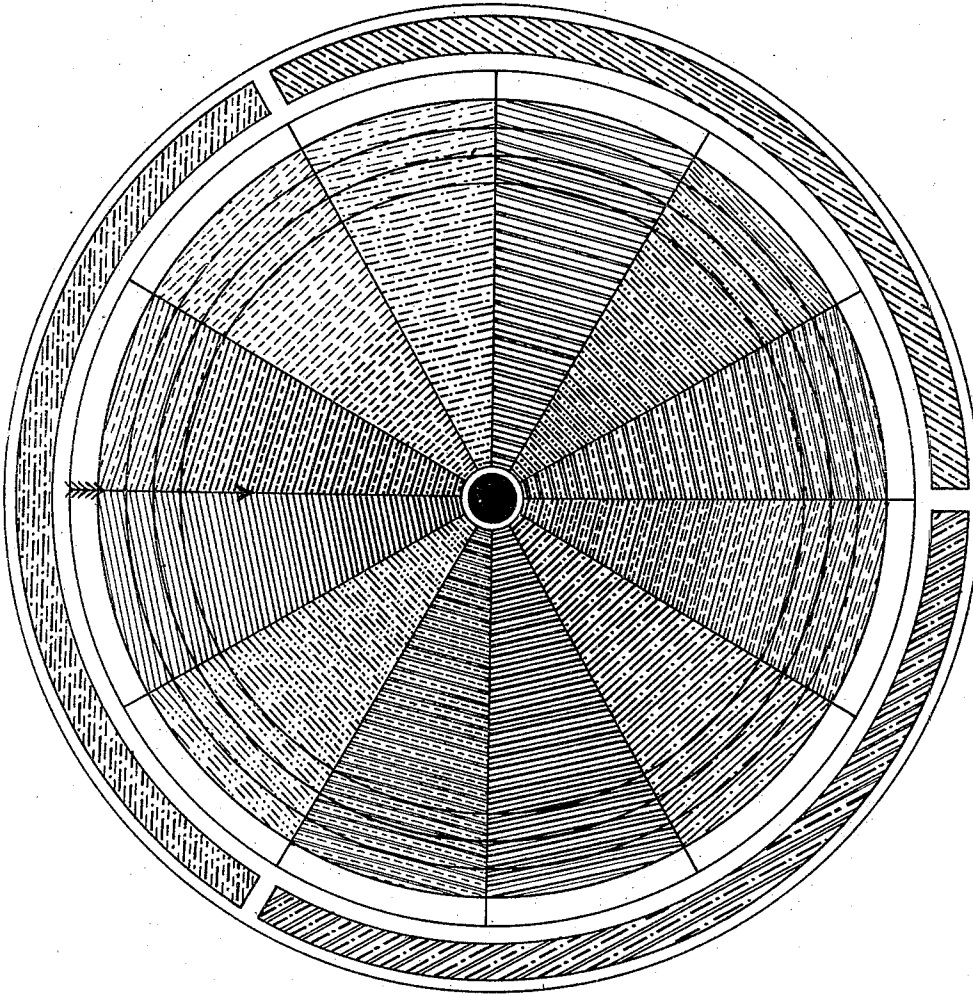
2 Sheets—Sheet 1.

E. KREUTZER.
COLOR HARMONIZER.

No. 513,399.

Patented Jan. 23, 1894.

Fig. 1.



Attest
Malvern Macdonald
F. L. Middleton

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Eduard Kreutzer
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Att'y.

(No Model.)

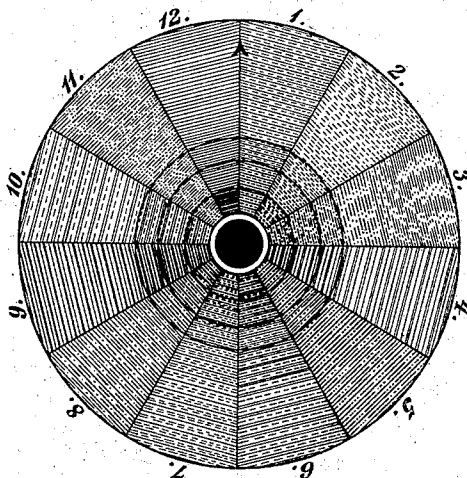
2 Sheets—Sheet 2.

E. KREUTZER.
COLOR HARMONIZER.

No. 513,399.

Patented Jan. 23, 1894.

Fig. 2.



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UNITED STATES PATENT OFFICE.

EDUARD KREUTZER, OF WIESBADEN, GERMANY.

COLOR-HARMONIZER.

SPECIFICATION forming part of Letters Patent No. 513,399, dated January 23, 1894.

Application filed July 28, 1893. Serial No. 481,715. (No model.)

To all whom it may concern:

Be it known that I, EDUARD KREUTZER, drawing-master, of 37 Albrechtstrasse, Wiesbaden, in the German Empire, have invented a new and useful Color-Harmonizer, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

The invention is shown in Figures 1 and 2, in plan, a border being shown in Fig. 1 which is omitted in Fig. 2.

This invention relates to a movable and adjustable table consisting of two concentric disks divided into sections of different colors and capable of being moved to any desired position in relation to each other, the object being to enable harmonious sets or combinations of colors to be formed, and colors that match or agree with each other to be found or determined. For this purpose the two disks, such as shown by way of example in the annexed drawings, are divided into twelve equal parts or sections, each of different color, and each disk having sections colored as follows: three primary colors: yellow, red, blue; three secondary colors: orange, violet, green; and six colors made up of combined primary and secondary colors: orange-yellow, orange-red, violet-red, violet-blue, bluish-green, and yellowish-green.

The order of succession of the colors on both disks is the same, viz:—first, yellow; second, orange; third, cinnabar red; fourth, crimson; fifth, purple; sixth, purple violet; seventh and eighth, ultramarine blue; ninth, Turkish-blue; tenth, bluish green; eleventh, cinnabar green, and twelfth, yellowish green. The colors of the larger of the two disks gradually become lighter in shade toward the circumference, and those of the smaller disk gradually become of a deeper shade as they approach the center. A gray annular border surrounds the twelve colors of the larger disk, the outermost portion of which is occupied by the three tertiary colors, viz: yellowish brown, bluish brown, and reddish brown. These diversely colored sections of the disks may be arranged in any imaginable relation to, or juxtaposition with, each other, so that, whenever any two colors are placed

side by side, the degree of contrast or harmony existing between them immediately becomes manifest, and their fitness, or otherwise, to appear in juxtaposition or conjunction with each other may be tested, while groups of two, three or four well-matched colors, such as are apt to be required in practice, may be readily formed. Thus contrasts and effects most pleasing to the eye may be produced by the diagrammatic arrangement of two, three, or more colors, either in succession, or in any desired, relation to each other. I will endeavor to illustrate this by a few examples which will explain the operation of the improved color-table. I will assume, to begin with that the two disks are so adjusted that each color of the one coincides with or meets the identical color of the other, and that the arrows marked upon them, respectively, point toward each other. In this case it will be seen that the effect of the juxtaposition of, say, orange and yellow, is not a pleasing one, owing chiefly to the affinity these two colors have for each other. Again, the juxtaposition of two colors of the same shade or tone is generally inharmonious and not to be recommended as they will mostly interfere with each other. Nevertheless, a pleasing effect may be produced by placing two kindred colors side by side, one of which is a shade deeper than the other. For this reason each of the colors on the color disk presents an entire scale of shades or tones to facilitate the choice of such two similar colors, as will match when they meet, owing to their different shades.

To find two colors calculated to jointly exercise a pleasing effect on the observer's eye, it is only necessary (for example) so to adjust the two disks that section No. 1 (yellow) of the inner disk meets section No. 7 (bluish-violet) of the outer disk, when all the other pairs of colors brought into juxtaposition on the table will be found to match and mutually enhance their value; thus, for example, orange will come next to ultramarine blue, crimson next to bluish green, &c. Combinations of such colors as these will, at all times, have an excellent effect, no matter what may be their shade or degree of opaqueness.

More harmonious effects may be produced by coupling any of the three tertiary colors with the eight colors facing them on the larger disk, and in each case the six central colors will form the most pleasing contrasts. As to the four colors of the outer disk which are encompassed by the tertiary colors, they are too closely akin to these tertiary colors to produce an agreeable effect.

10 If it be desired to form a harmonious group of three colors, *i. e.*, to couple two suitable colors with a third one taken as a ground color, whose effect is to be enhanced by such addition, and supposing the ground color to be No. 1 of the inner disk, the colors to be coupled with it will be 5 and 9 of the outer disk. If No. 1 (yellow) of the inner disk join No. 5 (purple) on the outer disk, the following harmonious triple groups will form (for example) yellow, purple and Turkish blue; orange, purple-violet and bluish-green; crimson, ultramarine blue and yellowish green, &c. These examples are deemed sufficient to illustrate the manner in which the color table may be utilized both for artistic and manufacturing purposes.

25 The table may be made of sheet metal or

any other material sufficiently strong and rigid to receive the coats or layers of colors.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. A color harmonizer comprising two or more concentric disks of varying diameter revolubly connected together, each disk having its face divided into a series of sections of different colors, substantially as described.

2. A color table consisting of two concentric color-carrying disks adjustable in relation to each other, and the inner of which carries the primary, secondary and mixed colors arranged on it in twelve (12) equal sections or divisions, while the outer disk carries other shades of the same twelve colors and in addition to these, three tertiary colors, thereby enabling colors to be matched at will and harmonious effects to be produced, substantially as described and illustrated in the accompanying drawings.

In witness whereof I have hereunto set my hand in presence of two witnesses.

EDUARD KREUTZER.

Witnesses:

JAS. CLANTHFIN,
CARL ED HAHN.