A CONVENIENT COLOR TABLE.

The purpose of the same is to ascertain which colors to combine in the construction of textile fabrics in order to assist in obtaining harmonious effects.

This table consists 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.

A gray annular border surrounds the twelve colors of the larger disk, the outermost portion of which is occupied by the three tertiary colors, *vis*: 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, appears 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.

A few examples will best explain the operation of this color-table. Assuming 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, we will see 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

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For this purpose two disks, such as shown for example in the accompanying two illustrations, are divided into twelve equal parts or sections, each of a different color, each disk having sections colored as follows:

*Three primary colors*: yellow, red, blue.

*Three secondary colors*: orange, violet, green, and 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 (Fig. 1) gradually become lighter in shade toward the circumference and those of the smaller disk (Fig. 2) gradually become of a deeper shade as they approach the centre.
To Match Two Colors.

To find two colors calculated to jointly exercise a pleasing effect on the observer’s eye, it is only necessary (for example) 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 to enhance their value; thus, for example, orange will come next to ultramarine blue, crimson next to bluish-green, etc.

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.

To Match Three Colors.

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 joins No. 5 (purple) on the outer disk, the following harmonious triple groups will form (for example) yellow, purple and turquoise blue; orange, purple-violet and bluish-green; crimson, ultramarine blue and yellowish-green, etc.

Lubricant.

According to a late English patent, a solid lubricant is obtained by heating lubricating oils, such as castor oil, mineral oil, or petroleum jelly, with a composition obtained by adding melted tallow to water, casein, and caustic soda. This composition is stored until of the required degree of hardness, powdered, and mixed with the lubricating oil, and on heating a homogeneous mass results.