

Photography can render correctly the light, shade and contour of a plaster cast, or reproduce a black and white drawing, but when the subject before the camera contains color (as almost everything does), then is there misrepresentation. We all know how the golden-haired, blue-eyed little child, or the auburn haired miss has been libeled. How bright green foliage becomes black masses in a photograph. How the blue of the sky is bleached white, until the bright, fleecy clouds passing over it are indistinguishable; and it is needless to state that this is due to the darker colors, violet and blue, operating most powerfully on the photographic film, while the brighter colors, yellow, green, orange and red, are weakest in their action. As all objects contain these colors in a greater or less degree, it is not too strong a statement to make, that a correct representation is impossible through photography with ordinary plates.

I made a tour through all the photographic stock houses in New York recently, to purchase samples of all the orthochromatic plates in the American market. From the polite young clerks in these places, I learned that the particular brand of plates they sold were "the best made." When they were out of orthochromatics, I was told (but this is confidence)

that all the dry plates of the best makers were now made orthochromatic. Here was a photographic millennium. If all dry plates were orthochromatic, there would be no need of advocating their use, no others being obtainable, so I purchased four boxes of plates other than orthochromatic, in the hope that this might, in some measure at least, be true.

Now, to test the plates standard colors are necessary. The best I could obtain are those which Prang furnishes the schools. With Prang's standard yellow, orange, blue, green, orange red, and violet colored papers, a star 10 inches in diameter was designed. From this, negatives were made with each brand of plates. The light was that of an ordinary studio—the exposures were made in the middle of the day, as rapidly after each other as possible. An assistant developed the plates, and several trials of each plate were made to get the best time and development. The label on the end of each box of plates was photographed with the charts so that there would be no mistaking the negatives afterwards. Unfortunately the half-tone cuts herewith do not show the gradations in tone in the original negatives. These gradations have been carefully recorded in the accompanying table, so that the results can be compared:

Table Showing the Orthochromatic Properties of Various Brands of Plates when Used Without Color Screens.

	1	2	3	4	5	6	
The Proper Color Values .....	Y	....	O	BG	R	V	
Cramer's Slow Isochromatic .....	Y	....	O	B	G	RV	2 points incorrect.
Cramer's Medium Isochromatic .....	B	Y	....	V	GO	R	10 " "
Forbes' Orthochromatic .....	B	Y	V	O	G	R	10 " "
Carbutt's Orthochromatic .....	B	V	Y	O	G	R	12 " "
Wuestner's Orthochromatic .....	B	V	Y	O	G	R	12 " "
Lumière's Series B .....	B	V	....	YO	GR	....	12 " "
Eastman's Extra Rapid .....	B	V	....	YO	G	R	13 " "
Cramer's Banner .....	B	....	V	Y	OG	R	13 " "
Seed's Sens. '26 .....	B	....	V	....	YOG	R	14 " "
Hammer's Extra Fast .....	B	....	V	....	YOG	R	14 " "