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YELLOW VERSUS ORANGE LIGHT IN THE DEVELOPING ROOM.

As the use of red light in the developing room with plates which are not orthochromatic may now be considered to be a mistake on the part of those who wish, for the benefit of their eyesight, to work in as bright a light as possible, the relative merits of yellow and orange light remain to be considered. The following table by Amédée Guillemin, which we published last week, at once throws much light on the question:—

Colours.	Luminous Intensities.		Lines.
Extreme Red	Imperceptible ...	A
Red	32 ...	B
Red	94 ...	C
Orange	640 ...	D
Yellow	1,000 ...	
Green	480 ...	E
Blue	170 ...	F
Indigo...	31 ...	G
Extreme Violet	6 ...	H

This table shows the relative luminosity of the spectrum where cut by the eight principal lines of Fraunhofer. The maximum brightness is between D and E, nearer D, and distant from it about one-tenth of the total interval DE. The yellow, it will be seen, appears to the eye to be not very far from double as bright as the orange of the same spectrum, therefore orange is a colour to be avoided in developing room operations; but it is a far better colour to use than red.

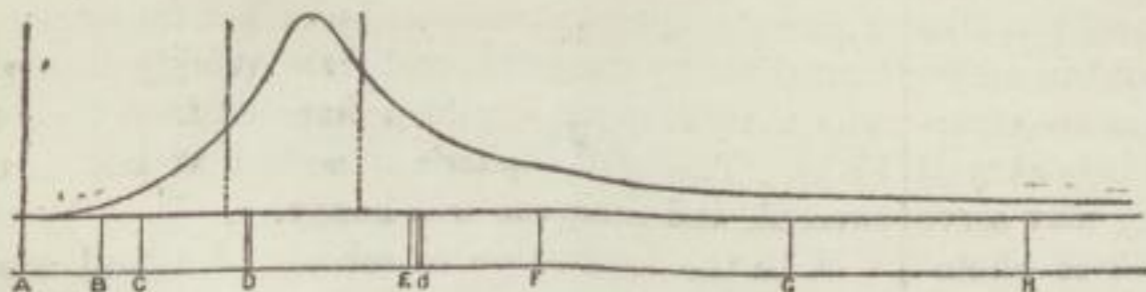


Fig. 1.

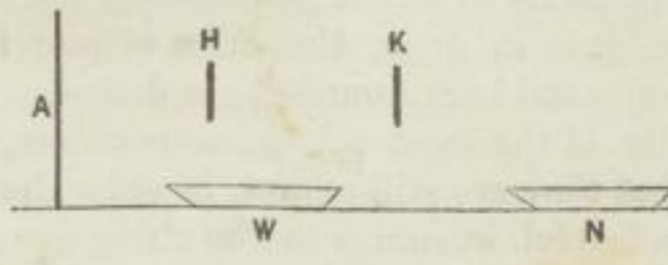


Fig. 2.

the exposed half. In actual work a plate is practically never so exposed, and should it thus give fog may yet do well for developing operations when the conditions are applied which we published last week.

For instance, let A, fig. 2, be the translucent front of the developing room lantern, and H a plate held

In farther illustration of this principle, we reprint the diagram from the YEAR-BOOK showing the luminous intensity to the eye of the different parts of a diffraction spectrum, and it will be seen that the brightest rays are the yellow, between D and E, fig. 1. Guillemin probably used a spectrum produced by a prism or prisms. Anyhow, the falling off in luminous intensity is so great in the orange as compared with the yellow, that the former ought not to be used. We prefer a full sunflower yellow, not deep enough to be mistaken for orange, and to use a translucent screen.

Still, under certain conditions, light lemon yellow can be used with safety. One reason why what is called "canary medium" answers well in some hands is that the fabric is thick, and, in addition, may be used in more than one layer, so that the good translucency of the material adds to such safety as is given by the colour. By avoiding the use of too strong a light, by developing at a suitable distance from the screen, and by attending to the conditions we published last week, there is no difficulty in employing the canary fabric with safety; indeed, many photographers have for years used it with satisfaction.

A fundamental error running through much of the literature of the past, is the recommendation to put an unexposed plate in a slide with the shutter half drawn, then hold it in front of the developing lamp window, expose thereto for five minutes, and afterwards pour on the developer to see if it gives fog on

vertically before it for five minutes, at a distance of nine inches, and suppose the plate to be then slightly fogged. Had it been held eighteen inches off, at K, probably it would not have been fogged, because the intensity of the light there is four times less. Again, it probably would not have been fogged had it been