

erated, sick, decorticate.) (2) The activity required of the animal is easy and familiar. Instead of a localized, differential response (retraction of the right fore-paw), any gross somatic behavior will do. The cage turns so readily as to require minimal incentive or energy. (3) It gives the animal unhampered freedom of limb movement and thus obviates "fighting the apparatus." Any form of restraint is particularly resented by cats. (4) Its principal feature is probably that no response is incorrect. With most devices, everything the animal may spontaneously do is wrong except the one reaction imposed by the experimenter; hence most of the training-time is consumed in extinguishing or inhibiting false starts. Here on the contrary, any movement gross enough to turn the cage is adequate. If the animal tries to escape, it also turns the cage; whether it walks forward, backward or sidewise is immaterial. Only inactivity is unacceptable.

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AN AID IN COLOR-BLINDNESS

THE general assumption relative to color-blindness seems to have been that no artificial aid was possible for persons suffering from the condition. Actually, such a pessimistic attitude is not justified in the case of this or almost any other sensory deficiency. The inconveniences of color-blindness can be partially offset by proper use of color-filters.

For example, there appear occasional news items telling of color-blind persons who have learned to distinguish the red and green traffic lights by their positions in the signal and who have then been thrown into confusion by trying to apply their method of discrimination in a town where the practice is different as regards the position of the two lights. These stories have resulted in some attempts at standardization of the signals, but irregularities of practice still exist.

An infallible and simple expedient for the color-blind person faced by this situation is to affix red and green color-filters, one above the other, to the windshield of his car in such a way that their positions can not become accidentally interchanged. Because red and green are complementary colors, the red signal will be visible only through the red filter and the green signal through the green.

The device is improved by placing a prism or reducing lens over each filter in such a way that the signal will be visible through both filters at the same time.

In this form, that is to say, with the lenses, the idea has been tried out and found operative.

The experimental model as constructed by the writer

employed red and green Eastman Wratten filters designated as 25A and 58B, respectively. These were mounted side by side between two pieces of glass, with a minus 3 diopter lens in front of each filter. Suction cups were provided for affixing the device to the windshield of a car, tests being made with color-blind volunteers both in traffic and in the laboratory.

Another possibility is that one of the color-filters might be perforated, and parts of the other set in it like polka-dots. Thus, if the red filter were perforated and the openings were filled with the green material, a red traffic light or other red object viewed through the resulting filter would appear bright with dark spots. A green object, on the other hand, would appear dark with bright spots. This is a type of discrimination which would be easy for the color-blind person.

Red-green color-blindness is probably not the only type that could be offset by the expedient of using color-filters, but to prescribe the suitable filters for other less well-defined types would be an undertaking requiring careful study and justified only in the event that the afflicted individuals can be persuaded to make use of the aid.

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