

Position of Traffic Lights Important

Psychology

Automobile drivers who are color blind or color weak will be less likely to get into trouble when traffic signs and signals are standardized.

A report just completed by the committee of the American Engineering Council on traffic signs, signals, and markers, advocates standard usages throughout the country. While color blind people are not mentioned in the report, the adoption of many of these standards would obviously give a color blind driver additional clues that he could depend on.

When traffic lights at an intersection are arranged vertically, for example, the committee advocates always placing the red light at the top, below it the yellow light, if a yellow light is used, and at the bottom the green light. If the lights are set up in a row, the red should be at the left, the yellow in the middle, and the green on the right.

For the person with normal color reactions, this system has the advantage that the red light, meaning stop, is given the place of prominence. When traffic is thick, drivers may see the top light in a vertical set-up several seconds before the lower signal light can be seen. If the top signal is lighted, the driver is warned at the earliest possible

"Carnegie" Reaches Peru

Exploration

Despite unfavorable winds which drove her from the course after leaving Easter Island on December 12, the non-magnetic ship "Carnegie" reached Callao, Peru, on January 14, according to radio dispatches to the Carnegie Institution of Washington, owners of the vessel, through Science Service. This floating scientific laboratory is now on a three-year cruise during which most of the oceans of the world will be visited.

Even though blown off the planned course, all the desired observations of the earth's magnetism and electricity were made, Capt. V. P. Ault reported. On the part of the cruiser from Balboa to Easter Island and thence to Callao, twenty-three samples of the ocean bottom were obtained. Those from Easter Island to longitude 95 degrees west proved to consist of red clay and volcanic mud. Captain Ault expects to sail from Callao on February 3 for Papeete, Tahiti.

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moment to slow down for the corner stop. When the lights are horizontal, the natural order of seeing them, based on reading experience, is to note the one at the left first. The color-blind person would depend even more heavily on the position of the lighted lamp than the normal person, and when this is made arbitrary, he would have a safe guide.

Use of the words "Go," "Caution," and "Stop," on the luminous signals has not been suggested in the report. These may have been a help to the color-blind driver, but the present tendency is to reduce the amount of reading that a driver must do to a safe minimum.

The plan of having the different colored lights shaped differently is another sort of first-aid to the color-blind that has apparently been discarded. This system was tried out in New Orleans, where the green light was diamond shaped, the yellow light oblong, and the red light a circle.

The question of what shades of red and green light can best be distinguished by both color-blind and normal eyes has been settled by experiments which showed that red-orange and blue-green, the bluer the better, are the most clearly distinguished. The usual type of color-

blindness results in confusion of two sequences of colors. Red, orange, and yellow all appear yellow or brown. Blue-green and blue are taken for blue. There is no difficulty in distinguishing the colors that appear yellow from the colors that appear blue, unless they are very pale tints, but yellow and red lights may be confused and some red lights, instead of crying stop to the color blind, are practically invisible.

Since about four per cent. of men and a somewhat smaller percentage of women are color blind, and since many other people are weak on their ability to distinguish colors, there are several million people in this country who require all the help possible in making traffic signals unmistakable. In some cities, the color blind driver is refused a license, if he is detected. But pedestrians as well as drivers are expected to read traffic signals and conform to crossing regulations. Moreover, it has been pointed out by psychologists that the normal eye at certain angles of vision has the same difficulty in distinguishing colors as the color weak person, and at times, the automobile driver inevitably gets his view of the signals from one of these confusing angles.

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Ancient Plants in Pacific Islands

Botany

Seeds of American plants, or parts of plants with the seeds still clinging to them, probably made a long emigrant voyage southward by water millions of years ago, and their descendants are still growing in the islands of the South Seas.

This is the picture presented by Dr. Forest B. H. Brown, botanist of the Bernice P. Bishop Museum of Honolulu, as a result of his studies on plants of the dogwood family growing in the Marquesas and neighboring islands. The route would be impossible today, for ocean currents do not set southward from the Gulf of Mexico, and Central America and the Isthmus of Panama bar the way into the Pacific. But during Cretaceous times, when dinosaurs still walked the earth, there was open sea where the land link now binds the continents together, and Dr. Brown is of the opinion that much seed-bearing plant material then drifted down the Missis-

sippi, across the Gulf, through this strait and so into their great adventure southward.

Such a voyage route would account, in the opinion of the Hawaiian botanist, for the presence on the island of Rapa of the plant known as Lautea, which is a primitive relative of the American dogwoods and the only representative of its family ever found in the South Pacific islands. The American members of the family that stayed at home have evolved into more advanced forms, but fossils have been found in New Jersey that prove the presence of Lautea-like forms here some forty millions of years ago.

Associated with this far-from-home dogwood, Dr. Brown reports, are other primitive plants, including a creeping fern, which are abundantly represented in American fossil beds of Cretaceous age, distributed all the way from Greenland to the Gulf of Mexico. *Science News-Letter, January 26, 1929*