The Influence of Fog, Mist, Snow and Steam on Signal Lights is very important. A white lantern exposed to snow and rain, by absorption of light from the dimmed glass, may appear green to the color blind, who depends on the intensity of the light to guide him. So, also, may a green light appear red. By the accidental use of thicker and darker green glass or thinner and brighter red glass, the difference in the intensity of the light may be destroyed, and hence arise all the conditions for the occurrence of dangerous mistakes. Steam also affects the color of the light. As seen through different degrees of pressure, it may appear red, green, or violet. The importance of this fact is self-evident.

Experience and experiment show that we are forced to use red and green lights on vessels, and at least red lights on railroads. Some roads have discarded green and use only red. Form cannot be substituted for color at night, as the rapid movement of the train alters the appearance of the lights, and thus mistakes may arise.

It should always be borne in mind that the color blind judge of color by the *intensity of the light alone*, and that turning a white light up or down represents to him different colors. With regard to this, Dr. Wilson, of Edinburgh, writes: "How often it must fall to the lot of engine drivers to watch lamps through an atmosphere which will convert the safety signal (white) into a danger signal, completely alter the color of the lantern signal (green), and so darken the danger signal (red) as to render it invisible." Dr. Joy Jeffries, of Boston, further remarks: "In the even slightly color blind these changes will be intensified, and to the completely color blind, his only means of distinguishing the signals will be gone, viz., the difference in the intensity of the light."

Dr. Joy Jeffries elsewhere says: "A red and a green light appears to excite one and the same element in the retina of the red-blind. A ray, red and green, must seem fundamentally to the red-blind to be one and the same color, and if, in especial cases, he knows how to discriminate, his judgment is simply guided by the intensity of the light.

"If, then, a red-blind individual finds that a red and a green tint are exactly alike, it is necessary that the green be to the normal eye much less intense than the red."