UNITED STATES PATENT OFFICE.

HANS DAHL, OF WILMERSDORF, BERLIN, GERMANY.

SIGNAL DEVICE FOR SPEED-INDICATORS.

1,239,672. Specification of Letters Patent. Patented Sept. 11, 1917.

Application filed June 6, 1914. Serial No. 843,536.

To all whom it may concern:

Be it known that I, HANS DAHL, a subject of the King of Norway, and residing at Wilmersdorf, Berlin, German Empire, have invented certain new and useful Improvements in Signal Devices for Speed-Indicators, of which the following is a specification.

This invention relates to improvements in the signal devices for speed-indicators of that class in which the speed is indicated by means of electric light of one or more colors.

A defect of such devices is that the degree of illumination necessary in bright daylight proves so intense in the evening that it dazzles the eyes of the driver of the vehicle on which the apparatus is mounted and prevents him from properly seeing the road, thus rendering use of the contrivance at night quite impracticable.

The object of the present invention is to obviate this drawback, so that the driver at night also can clearly observe at what speed he is traveling, without his view of the road being disturbed.

With this purpose in view, the invention provides means which can, when desired, be applied to prevent the electric light from shining directly in the eyes of the driver.

The arrangement may be such that the light is coverable by a screen of translucent but not transparent substance, such for instance as a paper material, ground glass, a non-transparent celluloid mass, or the like. Or the direct rays of electric light may be temporarily completely shut off from the eye of the driver, but the light allowed to illuminate adjacent objects, which then serve as indirect light signals for the driver.

If screens of various thicknesses or degrees of translucence are provided, if desired in conjunction with electric resistances, the intensity of the light signals, suitable for any particular prevailing conditions can be attained.

One form of construction of apparatus according to this invention is illustrated, by way of example, in the accompanying drawing.

Figure 1 is a longitudinal section.

Fig. 2 is a cross section on the line I—II of Fig. 1.

Fig. 3 is a cross-sectional view showing the device employed in another position.

The case 3 contains electric incandescent lamps 4, 5, 6, located below three windows, whose panes 8, 9, 10, are of different colored glass, *e. g.* white, red, green.

The case is provided with a lid or cover 11, hinged to it at 11* and having three apertures 12, 13, 14, each covered by a translucent, but not transparent, medium, such for example as more or less translucent paper between layers of celluloid. When the cover 11 is closed, the windows 8, 9, 10, are screened by the translucent material at the apertures 12, 13, 14, whereby the intensity of the light is reduced.

In Fig. 3 the device is shown employed in a different manner, the windows of the case 3 being turned away from the driver, so that the direct light of the lamps cannot be seen by him at all. In this case the light of the lamp which if burning for the time being can only be observed by illumination of the cover 11, which is inclined at a suitable angle. Thus the illuminated parts appear in white, red, green, indirect (reflected) light and constitute the speed signals for the driver.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is—

1. In a signal-device for speed-indicators, in combination, a source of electric light serving as a signal for a certain speed, and an adjustable element, located in front of the said luminous source, which over its entire effective area is uniformly translucent but non-transparent and presents a regular plane surface, and which is adapted, as required, depending upon the position given to the luminous source relatively to the observer, to serve as a reflector or as a dimmer for the luminous source without changing the said signal.

2. In a signal-device for speed-indicators, in combination, a plurality of sources of electric light of different colors, each for signaling a distinct speed, means for screening the direct rays of the individual sources of light from the observer when desired, and means for reflecting rays of the screened light in such manner that they can be seen by the observer without changing the prevailing signal.

3. In a signal-device for speed-indicators, in combination, a plurality of singly-operating sources of electric light of different colors, each for signaling a distinct speed, and translucent but not transparent means for screening the rays of each such individual source of light from the observer

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2. In a signal-device for speed-indicators, in combination, a plurality of sources of electric light of different colors, each for signaling a distinct speed, means for screening the direct rays of the individual sources of light from the observer when desired, and means for reflecting rays of the screened light in such manner that they can be seen by the observer without changing the prevailing signal.

3. In a signal-device for speed-indicators, in combination, a plurality of singly-operating sources of electric light of different colors, each for signaling a distinct speed, and translucent but not transparent means for screening the rays of each such individual source of light from the observer