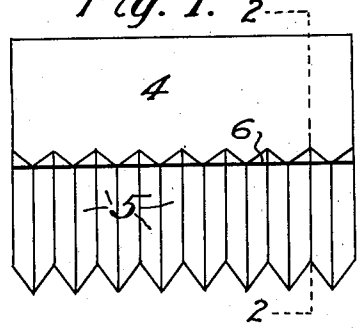
Sept. 1, 1925. 1,552,166

C. A. JAMES

HIGHWAY DANGER REFLECTOR

Filed Sept. 2, 1924

Fig. 1.



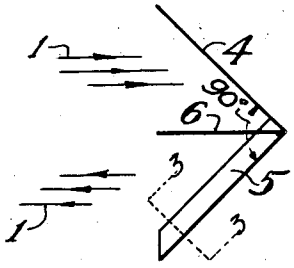


Fig. 2.

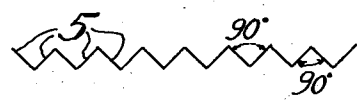


Fig. 3.

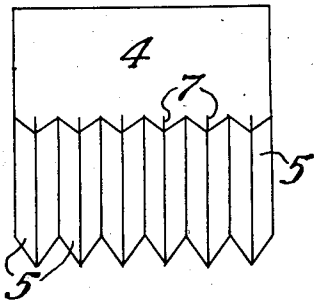


Fig. 4.

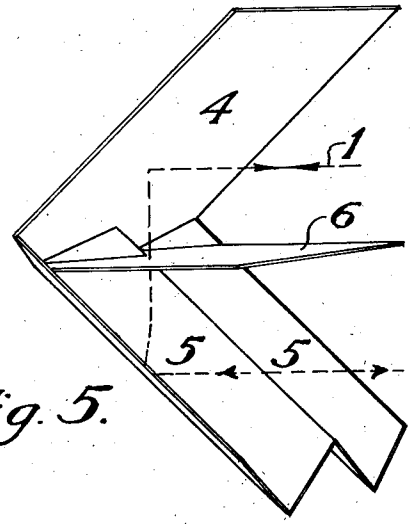


Fig. 5.

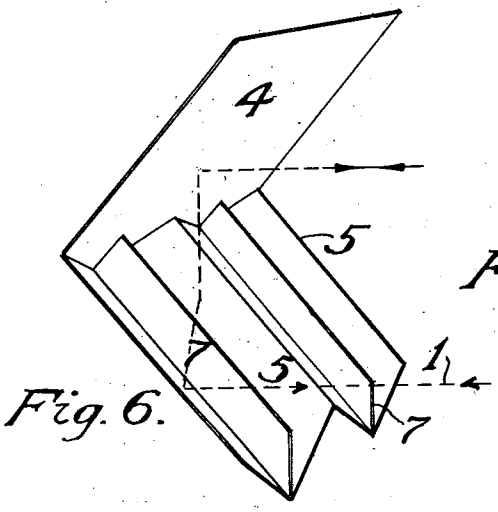


Fig. 6.

Inventor.

Cleveland A. James.

Patented Sept. 1, 1925. 1,552,166

UNITED STATES PATENT OFFICE.

CLEVELAND A. JAMES, OF PHILADELPHIA, PENNSYLVANIA.

HIGHWAY DANGER REFLECTOR.

Application filed September 2, 1924. Serial No. 735,465.

To all whom it may concern:

Be it known that I, CLEVELAND A. JAMES, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Highway Danger Reflector, of which the following is a specification.

My invention relates to an improved arrangement of reflectors in a highway danger signal whereby the light from the headlights of an approaching vehicle is passed through a transparent or semi-transparent colored screen, or screens, and reflected back toward the vehicle as a colored beam of light, thus serving, when the device is placed alongside a highway at sharp curves, railroad crossings or other dangerous points, as a caution or danger signal to warn the driver of the vehicle.

I attain this object by the arrangement illustrated in the accompanying drawing, in which.

Figure 1 is a front elevation of the device which consists of two reflectors, one a plane surface, the other grooved, with light coloring screens placed between them; Figure 2 is a vertical section through same on the line 2 2; Figure 3 is a longitudinal section through the grooved reflector on line 3 3; Figure 4 is a front elevation of the device showing a second arrangement of light coloring screens differing from that shown in Figure 1; and Figures 5 and 6 are perspective views showing the two arrangements of the screens for coloring the light and the action of the light rays.

Similar numerals refer to similar parts throughout the several views.

The reflector 4 is a flat plate, its reflecting surface facing toward the reflecting surface of the grooved reflector, and making an angle of ninety degrees with it. The grooved reflector is composed of a series of planes, 5 5, at right angles to reflector 4 and to each other. A light ray, 1, striking reflector 4 is deflected to one of the two planes, 5 5, of a groove in the grooved reflector, thence to the second plane 5 of the groove, and is reflected thence back toward its source in a line parallel with the path of the incident ray. This combination of reflectors will reflect back toward its source any light originating within the planes of the reflectors and the planes of the surfaces 5 5 of the grooves.

By placing a transparent or a semi-transparent colored screen, 6, between the reflectors themselves, or transparent or semi-transparent screens, 7 7, between the reflecting planes, 5 5, of the grooves of the grooved reflector, the light is colored so that reflected rays appear as a colored beam of light.

In practice the reflectors may be constructed of silvered glass, silver plated metal or of any material susceptible of a bright polish; the coloring screens may be made of celluloid, glass or other suitable material; and the whole may be enclosed in a suitable case with a clear glass front for protection from dust and the weather.

While the drawing shows the reflectors placed so that their intersection is horizontal, I do not limit myself to this construction as my invention is adapted to construction in the form of an "X" to indicate a railroad crossing, or in other forms that may be suggested by conditions along a highway. As the details of construction of this device may be varied I do not wish to be limited to such features except as may be required by the claims.

I claim—

1. In a highway danger signal the combination of two reflectors placed at right angles to each other and with their reflecting surfaces facing one another, one of the reflectors having a plane surface, the other being grooved, the grooves running at right angles to the plane reflector, and each groove being composed of two plane surfaces placed at right angles to one another.

2. In a highway danger signal a combination as in claim 1 with a transparent or semi-transparent light coloring screen placed between the reflecting surfaces of the two reflectors.

3. In a highway danger signal a combination as in claim 1 with transparent or semi-transparent light coloring screens placed between the reflecting planes of the grooves of the grooved reflector.

CLEVELAND A. JAMES.