J. A. WERTZ & P. G. MYERS

SIGNALING DEVICE.

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1,298,840.

Patented Apr. 1, 1919.

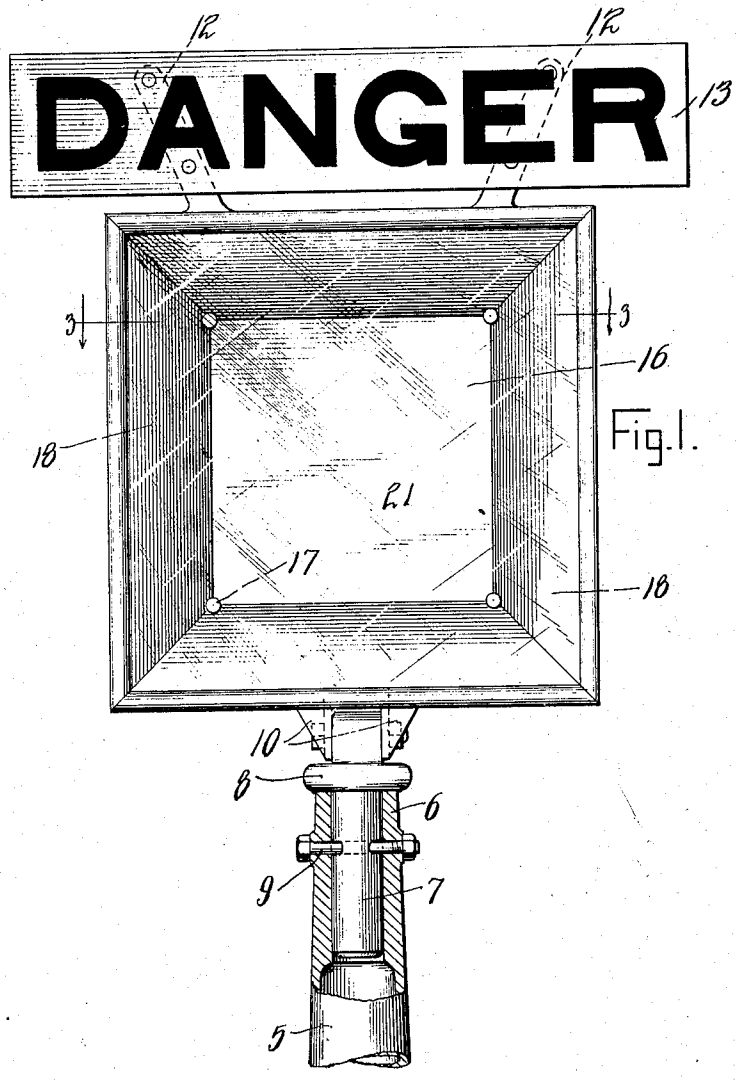


Fig. 1.

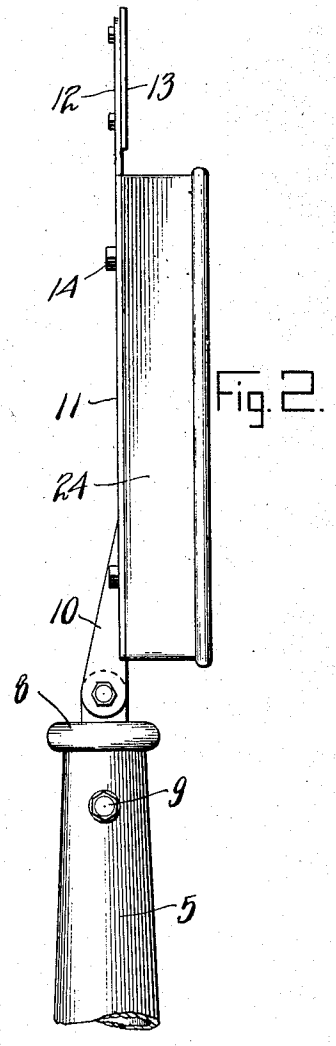


Fig. 2.

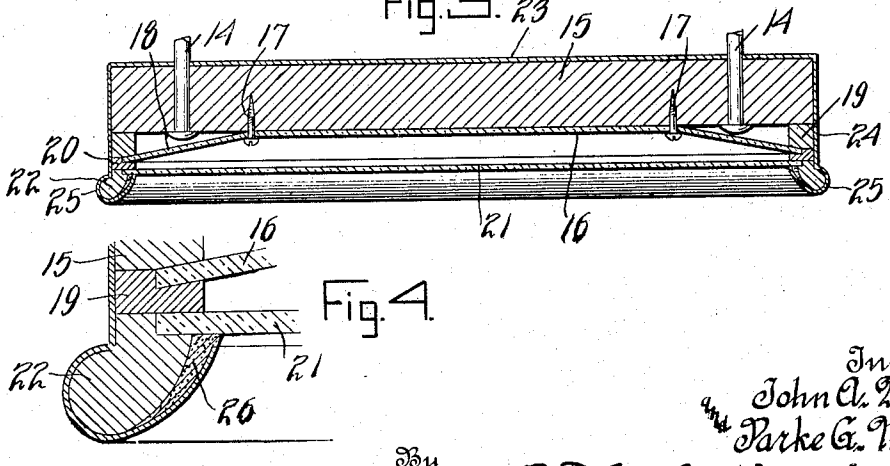


Fig. 3.

Fig. 4.

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UNITED STATES PATENT OFFICE.

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SIGNALING DEVICE.

1,298,840. Specification of Letters Patent. Patented Apr. 1, 1919.

Application filed October 4, 1917. Serial No. 194,757.

To all whom it may concern:

Be it known that we, JOHN A. WERTZ, a citizen of the United States, residing at Canton, Stark county, and State of Ohio, and PARKE G. MYERS, a citizen of the United States, residing at Canton, Stark county, and State of Ohio, have invented and discovered certain new and useful Improvements in Signaling Devices, of which the following is a specification.

Our said invention relates to signaling devices for roadways and traffic purposes and consists in the combinations and arrangements of elements hereinafter described and particularly set forth in the accompanying claims.

The invention has for its purpose to provide a visible signal adapted to be located at dangerous points along a roadway, such as bad curves, intersecting or cross-roads, or railway crossings and positioned to catch the rays from the headlight of an approaching vehicle and reflect said rays back to the driver and warn him of the approaching danger.

Another object of the invention is to provide a roadway signaling device comprising a plurality of reflecting surfaces positioned at such angles in relation to each other that they will concentrate the rays of light projected thereon, and one in which said reflecting surfaces are colored to impart the appearance of a ball of fire or like brilliant reflection, to the concentrated light rays, and further to provide adjustable mountings, whereby to accommodate the device to the particular conditions of the road at the point where the signal is to be erected.

The invention is disclosed by way of illustration in the accompanying drawings wherein:

Figure 1 is a front elevational view thereof, showing parts in section.

Fig. 2 is a side elevational view.

Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 1, and

Fig. 4 is an enlarged sectional view of a portion of the frame structure.

Referring to the structure in further detail and wherein like reference characters indicate corresponding parts in the different figures shown, 5 designates a post, or other suitable support adapted to be anchored in the ground at that point beside the roadway where it is designed to locate a signal. The post 5 has a socket end portion 6 that receives the shank or bolt portion 7 of a bracket 8, and said bracket has limited angular adjustment horizontally by the cross pin or bolt 9 that passes through the shank 7. The aperture in the shank 7 through which the pin 9 passes has flared or fan shaped end openings which allow the shank to turn within proper limits.

The upper portion 10 of the bracket has angular adjustment in a vertical direction and carries a back piece or plate 11, and said back piece is constructed to provide a pair of arms or lugs 12 adapted to have secured thereto the panel 13 which is designed to be marked with the word Danger conspicuously displayed.

A frame structure is mounted on the back piece 11 by means of the bolts 14 passing through the body member 15 of the frame structure (see Fig. 3), and thereby the frame may be readily removed from its supporting part when repairs may be necessary, or for any other purpose.

The frame structure comprises the frame or body member 15, preferably of wood, and a sheet 16 of appropriate material having a highly reflecting surface. The reflecting sheet is secured to the body part 15 by the screws 17, or otherwise, and the central portion of said sheet is preferably of square or rectangular design and the marginal portions 18 or surrounding sections of the sheet are disposed relatively angularly to said central portion and are symmetrically arranged as shown. Said reflectors are so disposed that light rays projected thereon will be reflected and concentrated into a bar of light of high brilliancy.

The marginal edges of the several angular reflectors 18 are spaced from the body member 15 by the several strips 19 and a like number of smaller strips 20 overlie the outer edges of said reflectors. A plate of glass 21 or other transparent medium is fitted against the strips 20, and said plate is held in position by means of the strips 22 having curved outer surfaces as indicated, and has a transparent color medium on its back. Instead of having the coloring medium on the back of the glass plate it may be incorporated within the body of the glass, or in the reflector. Also the coloring matter may be located between the glass and the reflector.

A sheet of metal 23 overlies the back of the body member 15, and has side portions 24

whose marginal edges 25 are shaped to closely fit the curved surfaces of the glass plate retaining strips 22. The extreme edge portions of said plate are slightly spaced from the inner surfaces of the strips 22 and a filler of putty, cement, or other sealing substance 26 is contained in the spaces thus provided and thereby form a dust proof and water tight seal between the glass face and the several reflectors.

It is obvious that those skilled in the art may vary the details of construction and arrangement of parts without departing from the spirit of our invention, and therefore we do not wish to be limited to such features except as may be required by the claims.

Having thus described our invention what we now claim as new and desire to secure by Letters Patent is:

1. In a signaling device the combination of a suitable support, a frame mounted on the support, central and surrounding deflecting surfaces located in said frame and disposed to concentrate the reflected light rays, a transparent plate overlying the reflecting surfaces, and a light ray coloring medium located between the reflectors and the transparent plate, substantially as set forth.

2. In a signaling device the combination of a suitable support, a frame mounted on the support, a plurality of angularly disposed reflectors located in said frame and adapted to coöperate to concentrate the reflected light rays into a bar of light of high brilliancy, and means incorporated in the device for coloring the reflected light rays, substantially as set forth.

3. In a signaling device the combination of a suitable support, a frame mounted to have angular adjustment on the support in horizontal and vertical directions, a central reflector of rectangular design mounted in the frame, a plurality of reflectors of rhomboidal design mounted in the frame surrounding the central reflector and at angles relatively thereto, a transparent plate mounted in the frame and covering the reflectors, and a light ray coloring medium located between the reflectors and the transparent plate, substantially as set forth.

4. In a signaling device the combination of a suitable support, a frame mounted on the support comprising a body member, a reflector sheet having angularly disposed portions mounted thereon, a transparent plate overlying the reflector sheet, a sheet of metal mounted on said body member and overlying the edges of the transparent plate, and a sealing filler substance between said overlying sheet edges and the transparent plate, substantially as set forth.

5. In a signaling device the combination of a suitable support; a frame mounted on the support comprising a body member, a reflector sheet having angularly disposed portions mounted on one face of said body member, a transparent plate overlying the reflector sheet and spaced therefrom, strips securing said transparent plate along the marginal edges thereof, a sheet of metal mounted on the body member and overlying said strips, and a filler substance between said strips, the transparent plate, and the edges of the metal sheet, substantially as set forth.

6. In a signaling device the combination of a suitable support; a frame mounted on the support comprising a body member, a reflector sheet secured to one face of said body member and having a central and angularly disposed portions symmetrically arranged, strips securing the marginal edges of the reflector sheet, a transparent plate overlying the reflector sheet and spaced therefrom, strips overlying the marginal edges of the transparent plate, and a sheet metal casing secured to said body member and overlying the last named strips and holding the aforesaid elements in assembled relation, substantially as set forth.

In witness whereof, we have hereunto set our hands and seals at Canton, Ohio, this 30 day of August, A. D., nineteen hundred and seventeen.

JOHN A. WERTZ. [L. S.]
PARKE G. MYERS. [L. S.]

Witnesses:
CHARLES S. MCDOWELL,
GERTRUDE MILLER.