Aug. 19, 1930. T. E. COLLINS 1,773,346

SAFETY SIGNAL

Filed Oct. 10, 1927

Fig. 1

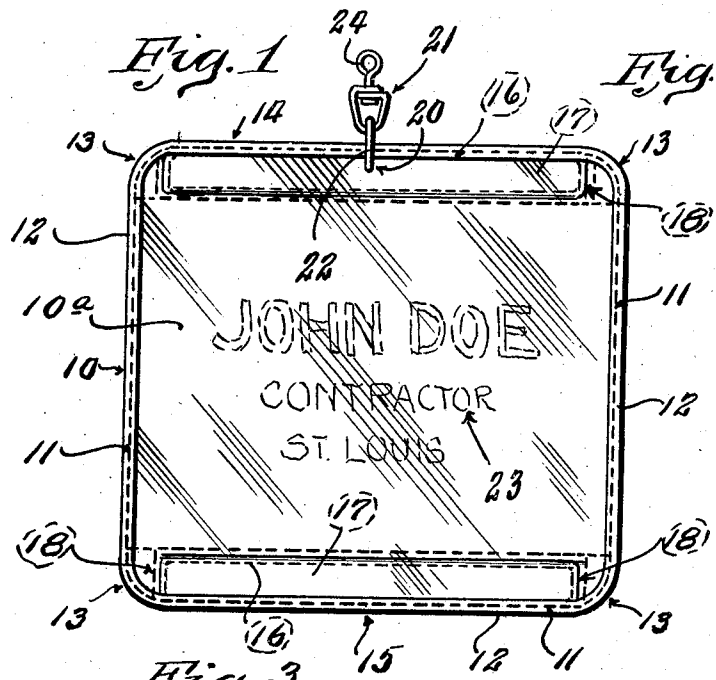


Fig. 2

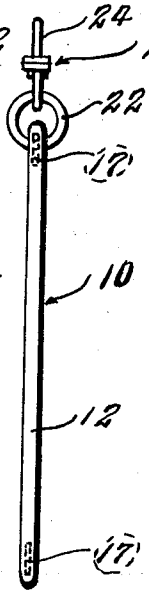


Fig. 3

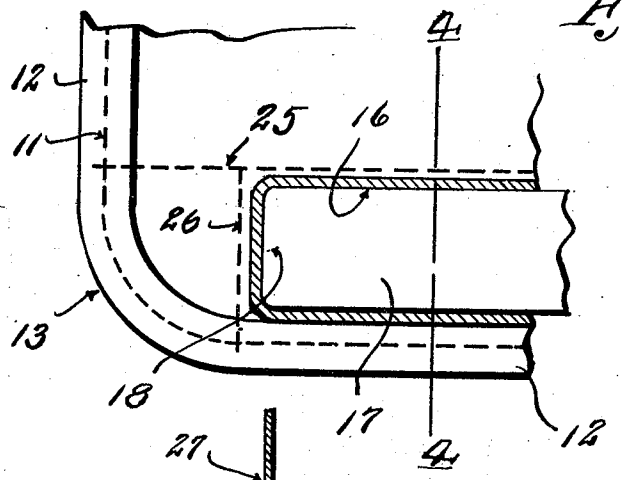


Fig. 4

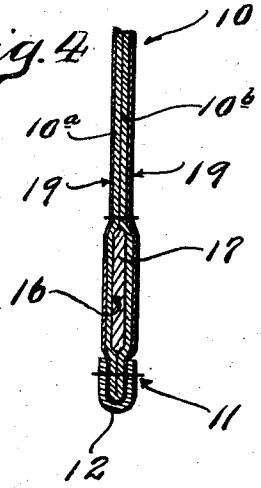
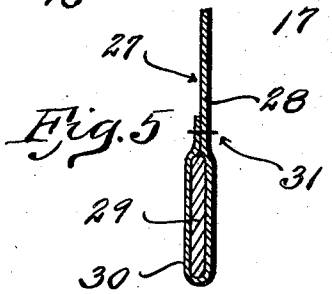


Fig. 5



Inventor
Thomas E. Collins
By Cornwall, Bedell & James
Attys.

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UNITED STATES PATENT OFFICE

THOMAS E. COLLINS, OF ST. LOUIS, MISSOURI

SAFETY SIGNAL

Application filed October 10, 1927. Serial No. 225,057.

This invention relates to new and useful improvements in safety signal devices of the type used on objects projecting beyond the vehicle and also to mark road barriers, excavations or other dangerous locations, or road detour signs and the like.

Most cities require suitable safety or danger signals on all objects projecting a definite distance from trucks and on all obstructions located on public highways. Excavations, road barriers, and other unsafe places have to be suitably marked to call the attention of pedestrians and drivers to the dangerous locations. The laws covering the use of these signals usually require such signals to be of a predetermined area, in most cases of red color, and specify that such signals must be displayed in a prominent manner.

Heretofore, it has been customary to use a piece of textile material of proper size and color and tied in position in a suitable manner. This has been found highly unsatisfactory as the fabric becomes readily soiled and misplaced, when not in use, and as it is usually supported at a single point does not present to view the full area of the signal. In some cases signals formed of sheet metal of the required dimensions have been used but these were found dangerous for the reason that they are too heavy and easily become displaced and cause injury to the workingman or persons standing near by. Furthermore, in some instances persons were cut by the sharp edges of such signals when the latter were suspended from vehicles.

It is the object of the present invention to provide a safety signal which is of light weight, can be economically manufactured and which is so constructed as to retain its shape, present its entire area to the view under all weather conditions, thereby affording maximum protection.

Other objects of the invention are to provide a signal of the class described which is formed of material which may be readily folded, when not in use, so as to occupy minimum space and which is formed water-proof so that it will retain its color and shape in all weather.

Still other objects of the invention are to provide a signal of the class described which does not have sharp corners or edges thereby eliminating danger of injury to persons, which is so reenforced as to retain its shape when in use and allow folding thereof when not in use.

Further objects of the invention are to form the surfaces of the signal glazed, or enameled, so that the light rays are reflected thereby and said signal is rendered more conspicuous and can be used effectively at night, as well as in daytime, the light rays of the headlamps of automobiles being reflected by such glazed surfaces at appropriate distances to provide ample warning to the driver.

With these and other objects in view my invention consists in certain novel features and arrangements of parts hereinafter more fully described, claimed and illustrated, in which—

Figure 1 is a front elevational view of the signal.

Figure 2 is a side elevational view of same.

Figure 3 is an enlarged detail view partly broken away of one corner of the signal.

Figure 4 is a vertical cross section taken on line 4—4 of Figure 3.

Figure 5 is a detail cross section of the modified form of my signal.

Referring by numerals to the accompanying drawings 10 indicates a signal formed of a sheet of textile material of suitable size and shape and preferably finished in red color and water-proofed. In the construction shown in Figures 1 to 4 this signal comprises two sheets 10^a and 10^b arranged in juxtaposed relation and sewed together along the edges as indicated at 11. A tape 12 may be used to reenforce said edges. The corners are preferably rounded as indicated at 13 so as to avoid sharp projections and prevent accidental injury to persons standing close to the signal. The top and bottom 14 and 15, respectively, of signal 10, are provided with pockets 16 in which are disposed sections of stiffening material preferably in the form of flat iron bars 17. These bars serve to hold the signal in fully extended position and provide suitable weight whereby said signal

occupies at all times substantially vertical position.

The ends of these bars preferably terminate short of corners 13 as indicated at 18 in order to eliminate rigid corners so that all sides of the signal are bound by pliable, soft material and all danger of injury is eliminated.

The outer surfaces of sheets 10^a and 10^b are glazed, or enameled, as indicated at 19 thereby causing reflection of the light rays by said surfaces and increasing the visibility of the signal. This feature is particularly desirable where the signal is used at night as the glazed surfaces will reflect the light rays of the automobile headlights and provide ample warning to the driver of the approaching vehicle. Sheets 10^a and 10^b being water-proof are not affected by the water thereby prolonging the life and usefulness of the signal.

One of the bars 17 located in the top portion 14 is pierced as indicated at 20 preferably at a point equi-distant from its ends for the reception of suitable attaching devices 21 by means of which said signal can be readily attached in position. In the present instance this device consists of a ring 22 passing through said aperture and through aligned apertures formed in sheets 10^a and 10^b and a suitable loop member 24 engaging said ring and having a portion adapted to detachably engage a suitable support.

In Figures 1 to 4 a signal is shown having a double thickness of material and finished with highly reflecting surfaces to cause reflection of light rays emanating from headlights of approaching vehicles. However in some instances it may be desirable to use a signal which is transparent or translucent so that a lamp placed behind the signal will render such signal readily visible at night. As shown in Figure 5, this signal 27 comprises a sheet 28 of appropriate color and formed transparent to enable the passage of light rays therethrough. Each horizontal edge is reenforced with a bar 29 which is held in position by folding the edge as at 30 and sewing it as indicated at 31.

The reenforcing members 17 and 29 may be of any size or shape or cross section and of other substances than that herein specified. The signal may have printed thereon any suitable warning signal or other legend, and in addition give the address and business of the owner or manufacturer, or certain other deirable information.

When the signal is used to mark dangerous places, the color customarily used is red. Where the signal is to be used as a road mark, or a detour signal, the color may be yellow or any other color generally used in that particular locality.

My improved signal is compact and of light weight, can be economically manufactured, and is so made that it will retain its shape under all conditions.

Obviously, various changes can be made in my signal without departing from the spirit of my invention.

I claim:

1. A signal of the class described comprising a sheet of water-proof textile material, horizontally disposed members secured to the top and bottom of said sheet for reenforcing the same, said reenforcing members being spaced from the edges of said sheet and the corners of said sheet being rounded and means secured to the top portion of said sheet for detachably supporting said signal in position.

2. A signal of the class described comprising a flat member formed of textile material having glazed surfaces for reflecting light rays, horizontally disposed rigid bars secured to the top and bottom of said member for reenforcing the same and maintaining it in fully extended position, the ends of said rigid members terminating short of the vertical edges of said sheet and the corners being rounded to eliminate sharp and rigid corners and edges and means secured to one of said rigid members for suspending said signal.

3. A signal of the class described comprising a pair of sheets of textile material arranged in juxtaposed relation and sewed togethed along their edges, elongated pockets formed in the top and bottom portions of said combined sheets, sections of flat metallic bars inserted in said pockets and terminating short of the vertical edges of said sheets, thereby reenforcing said sheets at top and bottom, the outer surfaces of said sheets being finished to provide reflecting surfaces, and means for detachably suspending said signal in position.

4. A signal of the class described comprising in combination a sheet of fabric having its surfaces treated to provide a water-proof enamel finish of suitable color and of highly-reflecting quality, signal characters arranged on said surfaces in contrasting color and having a dull finish, and binding material secured to all of the edges of said sheet for reinforcing the same.

5. A signal of the class described comprising in combination a sheet of fabric having its surfaces treated to provide a water-proof enamel finish of suitable color and of highly-reflecting qualities, signal characters arranged on said surfaces in contrasting color and having a dull finish, binding attached to and enclosing all of the edges of said sheet for reinforcing the same, and means in the upper end of said sheet for detachably attaching said signal in position.

6. A signal of the class described comprising in combination a pair of sheets of fabric arranged in juxtaposed relation, means secured to and reinforcing all of the edges of said sheets, means disposed between and entirely enclosed by said sheets for reinforc-

ing the same, the outer surfaces of said sheets being treated to provide a water-proof enamel finish of suitable color and of highly reflecting qualities, signal characters painted on said surfaces in contrasting color and having a dull finish so as to differentiate said signal characters from said enamel reflecting surfaces.

In testimony whereof I hereunto affix my signature this 18th day of July, 1927.

THOMAS E. COLLINS.