Oct. 14, 1952 E. S. TRANSUE 2,613,463

PORTABLE ROAD SIGNAL

Filed May 2, 1949

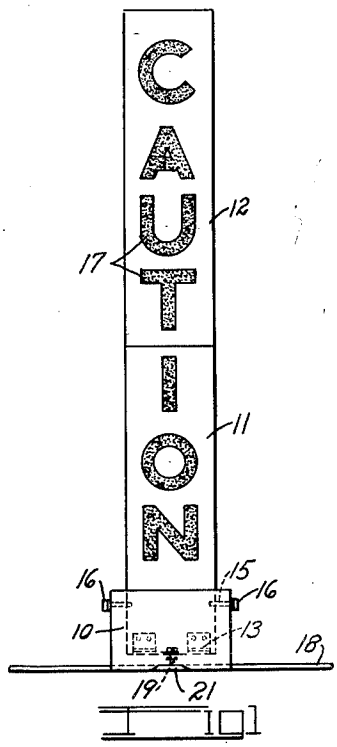


FIG 1

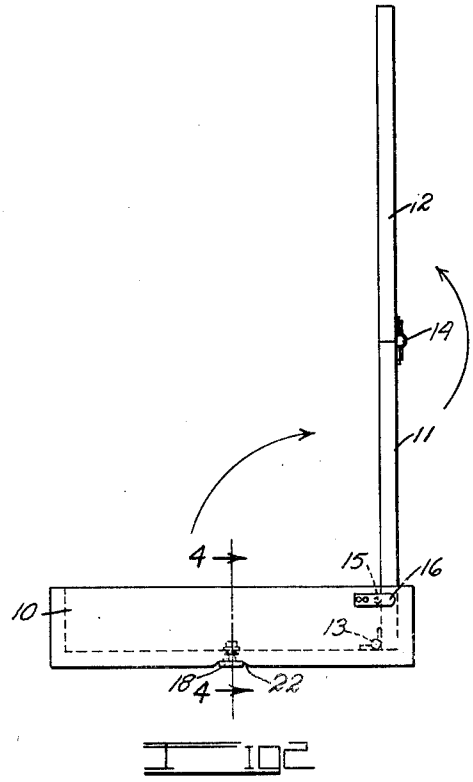


FIG 2

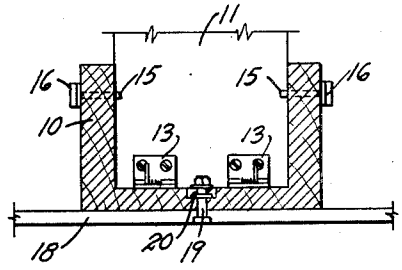


FIG 4

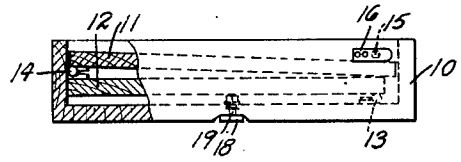


FIG 3

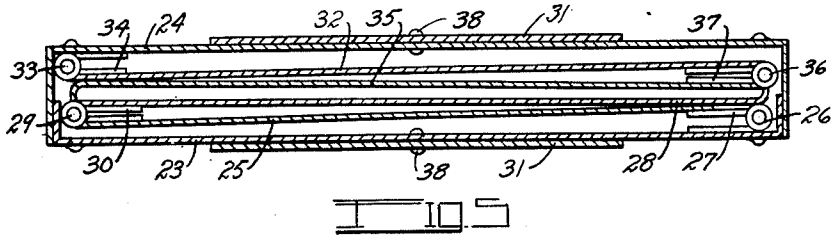


FIG 5

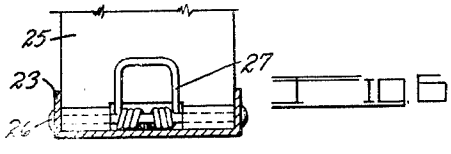


FIG 6

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PORTABLE ROAD SIGNAL

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3 Claims. (Cl. 40—125)

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This invention relates to a warning road signal device for automotive vehicles. It is occasionally necessary for a vehicle to stop on a busy road for repairs, etc. Trucks and buses carry signal flares and flags which can be placed in the roadway on such occasions to warn oncoming vehicles of the stoppage.

The principal object of this invention is to provide a simple, highly efficient, light-weight, economical, easily carried, and easily erected device which can be carried in a passenger automobile to be placed in the roadway to warn oncoming vehicles of a stopped vehicle.

Other objects and advantages reside in the detail construction of the invention, which is designed for simplicity, economy, and efficiency. These will become more apparent from the following description.

In the following detailed description of the invention, reference is had to the accompanying drawing which forms a part hereof. Like numerals refer to like parts in all views of the drawing and throughout the description.

In the drawing:

Fig. 1 is a face view of the improved caution signal device in the erected position;

Fig. 2 is a side view thereof;

Fig. 3 is a similar side view, illustrating the device in the folded position;

Fig. 4 is an enlarged cross-section, taken on the line 4—4, Fig. 2;

Fig. 5 is a longitudinal section through an alternate metallic double form of the device; and

Fig. 6 is a fragmentary detail section illustrating a spring hinge construction employed in the alternate form of the device.

The improved warning signal device is contained in an open-topped, elongated box 10 which may be formed either of wood, metal, plastic, or other light-weight, economical, sturdy material.

A signal board comprising a lower board section 11 and an upper board section 12 is contained within the box 10. The lower board section 11 is mounted upon suitable spring hinges 13 secured to the bottom of the box 10 at one extremity thereof. The springs of the hinges 13 constantly urge the section 11 upwardly toward a vertical position against one end of the box. The length of the section 11 is such as to fit snugly into the length of the box 10 when the former is folded downwardly therein.

The upper board section 12 is mounted upon the upper extremity of the section 10 by means of spring hinges 14. The springs of the hinges 14

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constantly urge the upper sections into abutting alignment with the lower section 11, as shown in Fig. 2.

The lower board section 11 may be locked in its upright, vertical position by means of locking pins 15 which extend through the sides of the box from leaf springs 16 attached to the exterior thereof. By lifting the springs outwardly from the box, the pins 15 may be released from the section 11.

Both the board sections 11 and 12 carry suitable lettering 17 on either or both sides displaying any suitable wording, such as "Danger," "Slow," "Caution," etc. The lettering 17 is preferably formed from phosphoric or reflecting paint or from reflecting glass beads so as to be visible at night and in the headlights of approaching vehicles.

A cross foot member 18 is mounted at its middle on a pivot bolt 19 extending through the bottom of the box. The cross foot is arranged to rest in either a longitudinal recess 20 or a transverse recess 21 formed in the bottom of the box. The cross foot is constantly pulled into the recesses 20 and 21 by means of a bolt spring 22.

When it is desired to fold the device, the springs 16 are released and the lower board section 11 is forced downwardly against the action of the spring hinges 13 into the box, and the upper board section is folded backwardly against the action of the spring hinges 14 onto the top of the lower section, where it is locked in place within the box by means of the pins 15.

To erect the device, it is only necessary to pull outwardly on the springs 16, allowing the spring hinges 13 and 14 to snap the two sections of the signal board to their vertical positions.

In Figs. 5 and 6 a metal form of the invention is illustrated having the same elements as the previously described form. This form employs a rectangular metal box 23 closed by means of a rectangular box-like lid 24. A first elongated sign member 25 is hinged within one extremity of the box 23 upon a hinge pin 26. A coiled wire spring 27 surrounds the pins 26 and constantly urges the member 25 to a vertical position against one end of the box. A second sign member 28 is hinged to the extremity of the first member 25 upon a hinge pin 29 surrounded by a spring 30 which urges the two members into vertical alignment as in the previously described form.

The lid 24 also has a first sign member 32, hinged within one extremity thereof on a hinge pin 33 provided with a spring 34, and a second

sign member 35 hinged to the first member 32 upon a pin 36 provided with a spring 37. When the lid 24 is removed and inverted the springs 34 and 37 act to force the two members 32 and 35 into vertical alignment as in the previously described forms. The sign members of the second form of the invention also carry warning lettering as in the first form.

In the second form both the box 23 and the lid 24 carry cross foot bars 31 mounted on pivot rivets 38 so that both the box and the lid can be set up as independent road warning signs.

It can be readily seen that when not in use, the improved warning signal forms a neat, closed, easily carried box, and when erected, forms a very visible, sturdy warning sign.

While a specific form of the improvement has been described and illustrated herein, it is to be understood that the same may be varied, within the scope of the appended claims, without departing from the spirit of the invention.

Having thus described the invention, what is claimed and desired secured by Letters Patent is:

1. A portable road sign signal device comprising: an elongated, open-topped box; a lower sign section having a length and a width to fit snugly within said box parallel to the bottom thereof; hinges hingedly securing the lower extremity of said lower sign section to the bottom of said box adjacent one end of the latter; means for holding said lower sign section in the vertical position; an upper sign section corresponding substantially in length and width to said first section; hinges securing said two sections together so that when in use they may swing into vertical alignment above said box when the latter is rested horizontally upon the ground and into a horizontal parallel position within said box when not in use; warning characters carried upon the faces of said sign sections; a first spring means urging said lower sign section toward the vertical position; and a second spring means urging the upper sign section into vertical alignment with the lower sign section; and withdrawable locking means extending into said box at a position to lock said sign sections in either the vertical or the horizontal positions.

2. A portable road sign signal device comprising: an elongated, open-topped box; a lower sign section having a length and a width to fit snugly within said box parallel to the bottom thereof; hinges hingedly securing the lower extremity of said lower sign section to the bottom of said box adjacent one end of the latter; means for holding said lower sign section in the vertical position; an upper sign section corresponding substantially in length and width to said first section; hinges securing said two sections together so that when in use they may swing into vertical alignment above said box when the latter is rested horizontally upon the ground and into a horizontal parallel position within said box

when not in use; warning characters carried upon the faces of said sign sections; a first spring means urging said lower sign section toward the vertical position; a second spring means urging the upper sign section into vertical alignment with the lower sign section; withdrawable locking means extending into said box at a position to lock said sign sections in either the vertical or the horizontal positions; a cross foot member; and a pivot member pivotally securing said cross foot member beneath the bottom of said box at the mid-points of both the member and the bottom so that the member may be swung either longitudinally or transversally of the axis of said box for preventing sideward tipping of the latter.

3. A portable road sign signal device comprising: an elongated, open-topped box; a lower sign section having a length and a width to fit snugly within said box parallel to the bottom thereof; hinges hingedly securing the lower extremity of said lower sign section to the bottom of said box adjacent one end of the latter; means for holding said lower sign section in the vertical position; an upper sign section corresponding substantially in length and width to said first section; hinges securing said two sections together so that when in use they may swing into vertical alignment above said box when the latter is rested horizontally upon the ground and into a horizontal parallel position within said box when not in use; warning characters carried upon the faces of said sign sections; a first spring means urging said lower sign section toward the vertical position; a second spring means urging the upper sign section into vertical alignment with the lower sign section; withdrawable locking means extending into said box at a position to lock said sign sections in either the vertical or the horizontal positions; a cross foot member; and a pivot member pivotally securing said cross foot member beneath the bottom of said box at the mid-points of both the member and the bottom so that the member may be swung either longitudinally or transversally of the axis of said box for preventing sideward tipping of the latter, there being longitudinal and transverse recesses in the bottom of said box for receiving said foot in either position.

EDWARD S. TRANSUE.

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