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FOLDABLE BARRICADE AND SIGN FRAME

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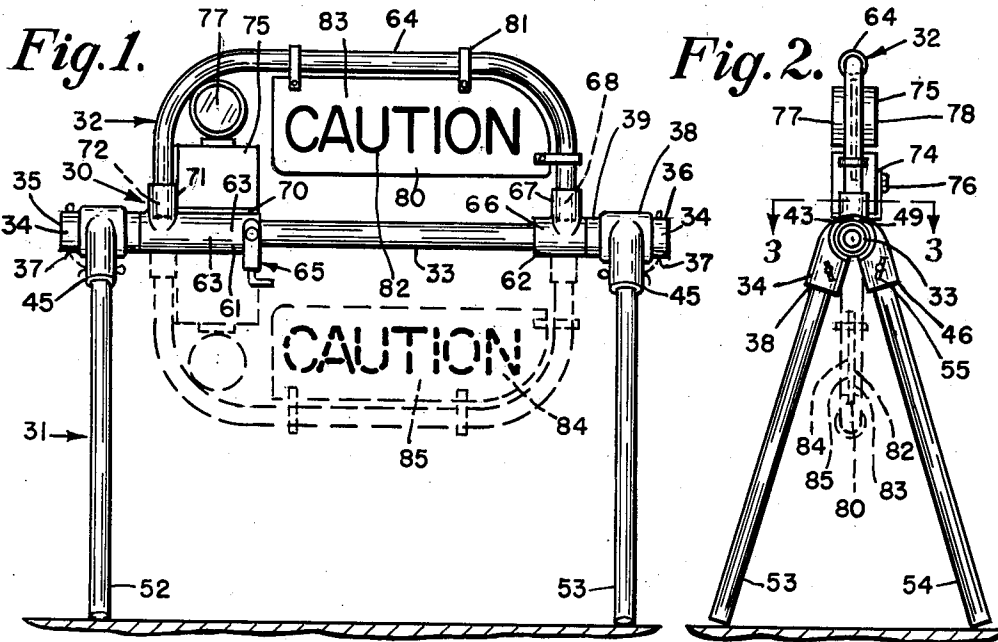
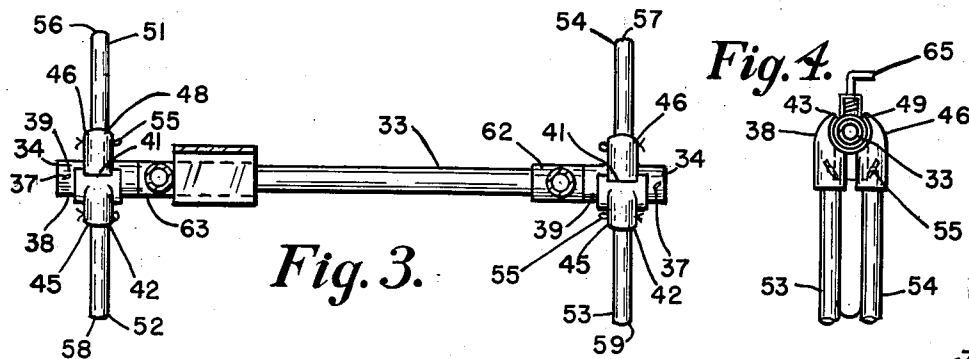
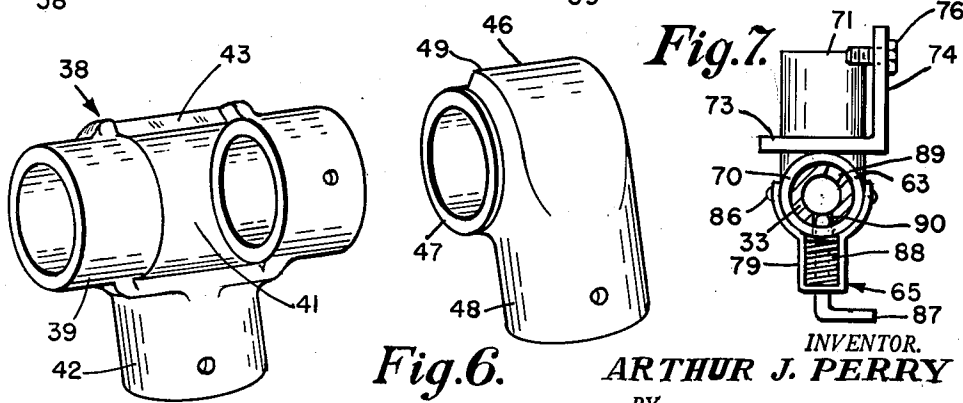


Fig. 5.

Fig. 6.

Fig. 7.

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FOLDABLE BARRICADE AND SIGN FRAME

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1 Claim. (Cl. 40—125)

This invention relates to foldable highway barricades of the trestle type combined with a foldable sign frame including a lantern.

It has heretofore been proposed to provide a trestle type highway barricade formed of tubular bars joined by brackets and having a sign and a lantern as in U.S. Patent No. 2,507,880 to Bell of May 16, 1950, U.S. Patent No. 2,583,244 to Underwood of January 22, 1952 and U.S. Patent No. 2,777,415 to Martin of January 15, 1957. Such barricade structures have been non-foldable as in the Martin patent or have had foldable legs, with a sign hanging therebetween, as in the Bell and Underwood patents. As far as I am aware, there have been no such barricade structures in which the sign and lantern are both supported above the legs but foldable downwardly into the plane of foldable legs for storage purposes.

One object of the invention is, therefore, to provide a combined trestle, sign and lantern in which the legs of the trestle are foldable and the sign and lantern support is also foldable from a locked position in extension of the trestle to a position within the folded legs of the trestle for protection against damage during storage or shipment.

Another object of the invention is to provide a portable, foldable, highway barricade in which the legs at each end are of commercially available tubular material but are foldable in a common longitudinal plane rather than each in a different longitudinal plane, whereby a better support and a wider sign span are achieved.

A further object of the invention is to provide a foldable trestle with a combined electric lantern and sign rotatable from normal upstanding position to depending position within the confines of the trestle when it is desired to lower the centre of gravity on windy days.

Still another object of the invention is to provide a portable trestle principally formed of tubular pipe, in any desired lengths, there being novel leg, electric lantern and sign frame brackets all sleeved on a common cross beam for rotation into compact folded condition.

A still further object of the invention is to provide rotatable sign frame means for a foldable trestle, the sign frame means being latchable in either of two opposite angular positions and having a sign and lantern which are operable in either of the angular positions.

Other objects and advantages of the invention will be apparent from the claims, the description of the drawing and from the drawing in which:

FIG. 1 is a front elevation of a trestle type highway barricade and sign constructed in accordance with this invention.

FIG. 2 is a side elevation of the device shown in FIG. 1.

FIG. 3 is a plan view in section on line 3—3 of FIG. 2.

FIG. 4 is a view similar to FIG. 2 showing the device folded in storage position,

FIG. 5 and FIG. 6 are enlarged, detail, perspective views of the interfitting leg brackets, and

FIG. 7 is an enlarged end view of one of the sign frame brackets including the lantern platform.

In the drawing, the highway barricade 30 of the invention includes the foldable trestle means 31 and the rotatable sign frame means 32. The trestle means 31 comprises the tubular cross beam, or bar, 33 of cylindrical shape and circular cross section which is usually about five feet longitudinally although it may be any desired

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length. A first pair 34 of leg brackets is provided, each bracket 38 of the pair being sleeved on an opposite end 35 and 36 of the cross beam 33 and fixed in position by the pins 37. Each leg bracket 38, of the first pair 34, includes the elongated sleeve body 39, a central opening 41, a central leg socket 42 and a central stop flange 43, the latter extending longitudinally parallel to beam 33 when the body 39 is sleeved thereon. Preferably each bracket 38 is formed of cast aluminum as are the other brackets of the device, to be hereinafter described.

A second pair 45 of leg brackets is also provided, each bracket 46 of the pair being located at an opposite end of the cross beam 33, and each bracket 46 of the second pair 45 having a sleeve body 47, a leg socket 48 and a stop flange 49. The sleeve body 47 of each bracket 46 fits within the central opening 41 of a leg bracket 38 and is rotatably sleeved on the cross beam 33 while firmly anchored against axial movement by the stationary bracket 38. As best shown in FIGS. 2 and 4 each bracket 46 is pivotable, or rotatable from a folded position to an open position through an angular distance of about thirty degrees at which point the longitudinally extending stop flanges 49 and 43 abut each other.

Four legs 51, 52, 53 and 54 are provided each of tubular material similar to that of cross beam 33 and each having one end seated in one of the leg sockets 42 or 48 of one of the leg brackets 38 or 46. Cotter pins, such as 55, are preferably used to permit the legs to be detachable from the sockets when desired.

It should be noted that the legs 52 and 53 are thus stationary with relation to cross beam 33 while the legs 51 and 54 are individually movable in the longitudinal plane of the legs 52 or 53 to erect the barricade. It should also be noted that the free terminal tips 56, 57, 58 and 59 of the legs form a true rectangle when extended, thereby giving the maximum support to cross bar 33. It is only necessary to lift the barricade 30 by the cross beam 33, for the legs 51 and 54 to fall into folded position against legs 52 and 53 and only necessary to slightly turn cross beam 33 to cause the legs 51 and 54 to move outwardly when the barricade is being installed.

The sign frame means 32 includes a third pair 61, of sign frame brackets such as 62 and 63, a tubular sign frame bar 64 and spring latch means 65. One sign frame bracket 62 comprises the sleeve body 66, rotatably mounted on the cross beam 33 and having a socket 67 in which one terminal end 68 of the frame bar 64 is seated. The other frame bracket 63, comprises the sleeve body 70, rotatably mounted on the cross beam 33, the socket 71 in which the other terminal end 72 of frame bar 64 is seated and the lantern platform 73. Platform 73 is integral with sleeve body 70 and provided with an upstanding flange 74 so that a lantern 75 may rest on platform 73, within the confines of sign frame bar 64, and be bolted to flange 74 by the bolt 76.

Lantern 75 is of the commercially available electric flash type and includes the forward face 77 and the rearward face 78 for casting its beam forwardly and rearwardly at the same time.

The sign frame bar 64 is preferably tubular and similar to the cross beam 33 except that bar 64 is bowed, as illustrated. A sign 80 is detachably fixed to the frame bar 64, by the clips 81 and bears a right side up inscription 82 on one face 83 and an upside down inscription 84 on the opposite face 85, for example the word "Caution."

The spring latch means 65 includes the frame pieces 79 fixed to the sleeve body 70 of bracket 63 by screws 86, the latch pin 87 and the coil spring 88, there being suitable latch pin holes 89 and 90 in the cross beam 33. As shown in FIGS. 1-3, when the barricade 30 is erected,

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the sign frame means 32 is normally in upstanding position above the trestle means 31 and held in that position by spring latch means 65. If the inscription 84 on the opposite face 85 is desired to be presented to the public way, for example if high winds are expected, the latch means 65 may be released and the frame means 32 permitted to fall by gravity into the dotted line position shown in FIGS. 1 and 2. When depending by gravity from the cross bar 33, the centre of gravity of the device is lowered and the pin 87 is locked in the hole 89, thus avoiding any danger of the wind toppling over the barricade.

The barricade 30 may be easily folded to the position shown in FIG. 4 with the sign frame means 32 latched in position between the stationary legs 52 and 53, and the folded legs 51 and 54. The face portion of the lantern 75, and the sign 80 are of substantially less thickness than the thickness of the folded legs such as 51 and 52, or of the folded leg brackets 34 and 45, thereby assuring that the glass of the lantern and the inscription on the sign will not be damaged during storage.

As best shown in FIG. 2 the rightside up inscription 82 will be visible from the left of the drawing when the frame 32 is in the up position. When the frame 32 is in the down position as shown in dotted lines, the inscription 85 becomes rightside up and readable from the left of the drawing.

I claim:

A foldable highway barricade comprising an elongated tubular cross bar; a first pair of identical leg brackets, each fixedly sleeved on said bar at an opposite end thereof, each said fixed bracket having a central opening, a central leg socket and a central stop flange; a second pair of identical leg brackets each rotatably sleeved on said bar in the opening of one of said first pair of brackets,

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each having a leg socket and each having a stop flange adapted to engage said first mentioned stop flange; four identical tubular legs, each having one terminal end fixed in one of said leg sockets and the legs at each opposite end of said bar having a common plane of rotation; a third pair of brackets, each rotatably sleeved on said bar, each having a sign frame socket and one of said brackets having a lantern platform integral therewith; an elongated, tubular, bowed sign frame bar having each terminal end mounted in one of said sign frame sockets to freely rotate therewith, around said cross bar from a vertical depending position between said pairs of legs to a vertical upstanding position above said cross bar; a sign mounted on said sign frame bar, said sign having opposite inscription faces, one inverted relative to the other, and spring latch means on said barricade, detachably locking said sign frame sockets to said cross bar in one said position or the other.

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