

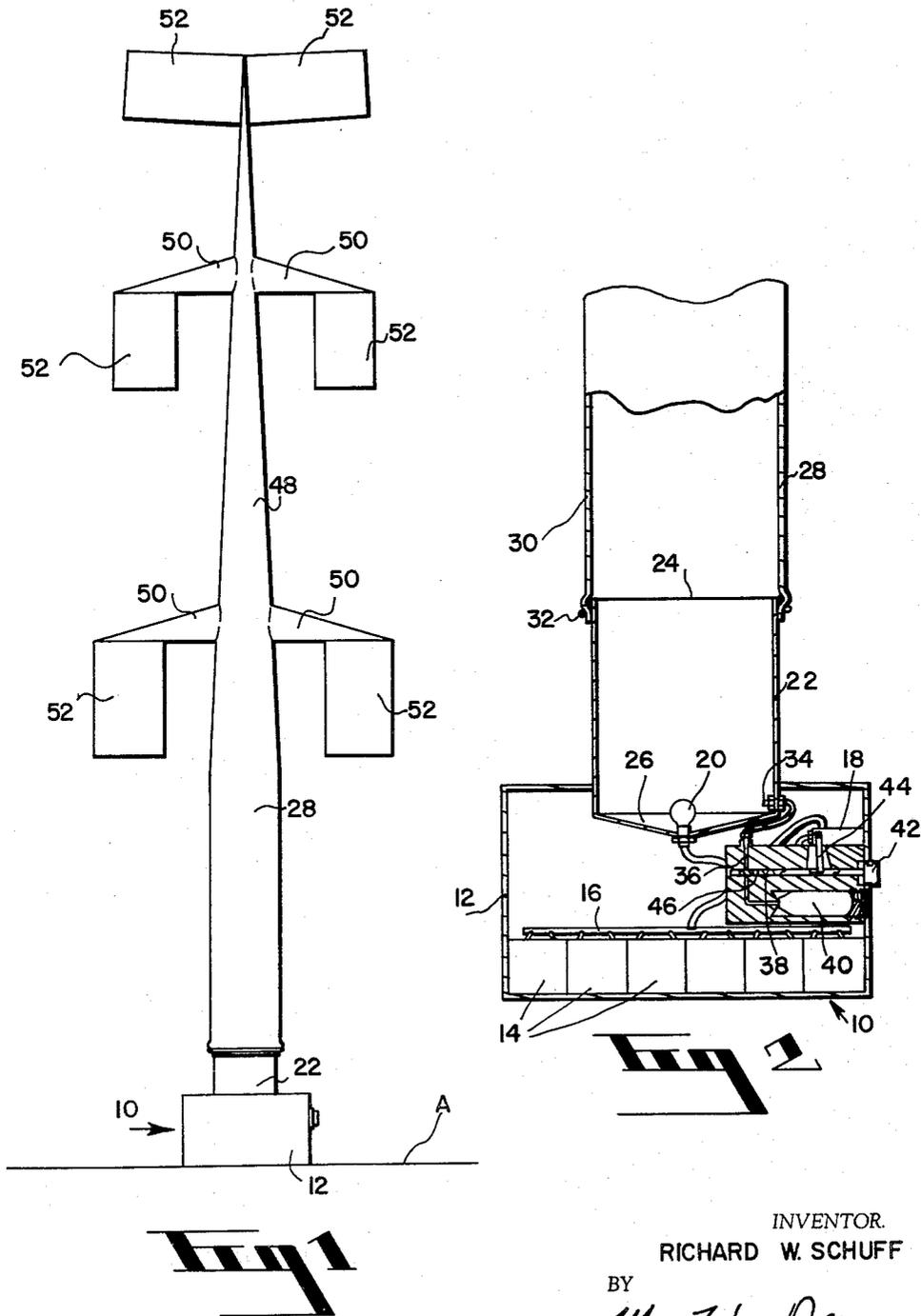
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INFLATABLE ILLUMINATED HIGHWAY BARRICADE

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**3,197,628**  
**INFLATABLE ILLUMINATED HIGHWAY**  
**BARRICADE**

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This invention relates to an inflatable illuminated highway barricade and more particularly to an inflatable illuminated highway barricade for use by the highway patrolmen or other authorized persons in areas of accidents or to warn motorists of various dangers which may be encountered in and along various roadways and/or highways.

It has been a problem to provide a barricade for roadways having sufficient size and elevation to be seen by motorists approaching a given roadway area from a considerable distance. Such barricades must be transportable by highway patrol cars or other vehicles and must during transportation be very compact, otherwise, they cannot be carried in such vehicles. Accordingly, it has been a problem to equip highway patrol vehicles with means which may serve as a highway barricade and which will be of substantial size and elevation when installed as a barricade structure in a roadway.

Various barricades, such as wooden rails or the like, have been used and other means such as these are not practical for transportation in highway patrol vehicles. Additionally, such barricades are not of sufficient elevation to be seen by motorists approaching a given area of roadway from considerable distances and particularly where the surfaces of the roadways are of uneven elevation.

Accordingly, it is an object of the present invention to provide an inflatable illuminated highway barricade which is very compact when the barricade is deflated and which may accordingly be transported in a very small amount of space within a highway patrol vehicle.

Another object of the invention is to provide an inflatable illuminated highway barricade which is very compact and which may be readily and quickly moved from the interior of a highway patrol vehicle to a position in the road and inflated to a substantial elevation and size.

Another object of the invention is to provide an inflatable illuminated highway barricade which comprises a hollow inflatable barricade structure which is normally collapsed and of flexible material and which, when inflated, rises to a considerable elevation and which may be internally illuminated, thereby, providing an imposing barricade which is readily observed either by day or night as motorists approach the same.

Another object of the invention is to provide an inflatable illuminated highway barricade comprising a small base upon which batteries and a gas bottle are supported and whereon a cup shaped hollow tubular member is coupled to a flexible inflatable barricade structure so that gas from the bottle may be directed into the inflatable structure and the batteries served to illuminate the interior thereof when inflated.

Further objects and advantages of the invention may be apparent from the following specification, appended claims and accompanying drawings, in which:

FIG. 1 is a side elevational view of an inflatable illuminated highway barricade shown inflated and in vertically distended position; and

FIG. 2 is an enlarged fragmentary vertical sectional view of an inflatable illuminated highway barricade in accordance with the present invention.

As shown in FIG. 1 of the drawings, the inflatable illuminated highway barricade of the present invention is provided with a base 10 which may be in the form of a

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box structure 12 shown in FIG. 2 of the drawings. Contained in the lower portion of this box structure and supported on the base 10 are batteries 14 having electrical conductors 16 which are coupled to a switch 18 internally of the box structure 12. The switch 18 is also coupled to an electric lamp 20 contained in a hollow tubular member 22 having an open upper end 24 and an enclosed lower end 26. This open end 24 of the hollow tubular member 22 is directed upwardly and adapted to support an inflatable flexible barricade structure 28 in a vertical position. This flexible inflatable barricade structure 28 is preferably made of a thin plastic material such as polyethylene or the like which may be colored red or any other suitable material. This material is transparent or translucent and adapted to be illuminated by the lamp 20 so that the light passes through the walls of the inflatable barricade and may be seen in accordance with the color of the material for considerable distances.

The inflatable barricade structure 28 is provided with a tubular section 30 which surrounds the upper open end 24 of the hollow tubular structure 22 and is held in fluid tight relationship therewith by a surrounding snap ring 32. It will be appreciated by those skilled in the art that the inflatable flexible barricade 28 is inflatable by gas introduced through an inlet tube 34 which communicates with a valve passage 36 controlled by a slide valve member 38 communicating with a gas bottle 40. A manually operable plunger 42 connected to the slide valve 38 also operates a switch actuating arm 44 which operates switch 18 so that when the manual knob 42 is pressed inwardly a port 46 in the slide valve 38 conducts gas from the bottle 40 to the interior of the hollow tubular member 22 and inflates the flexible inflatable barricade 28. Concurrently, the switch arm 44 is moved and actuates the switch 18 thereby conducting energy from the batteries 14 to the lamp 20 and thus, illuminating the interior of a hollow inflatable illuminated barricade 28. This barricade 28 is preferably provided with upwardly converging hollow tubular structure 48 having hollow limbs 50 and integral flag portions 52, all of which are translucent or transparent and disposed to conduct light throughout their entire service areas and throughout the entire vertical length of the hollow flexible inflatable barricade structure 28. Since this barricade structure is very thin and flexible, it may be packed in the hollow tubular structure 22 when in collapsed form and when inflated, may extend upwardly several feet, as for example, eight to ten or more feet above the surface of a roadway A as shown in FIG. 1 of the drawings.

It has been found that the entire base 12 and hollow tube 22 with the flexible barricade collapsed and packed therein may not occupy a space greater than one cubic foot. This barricade may be carried in highway patrol cars and may quickly be operated by pressing the button 42 whereupon the barricade may be inflated to a substantial elevation and concurrently illuminated for use at night. This barricade may be seen for considerable distances even when placed on vertically uneven roadways. It presents a formidable appearance since the limbs 50 and flags 52 represent a considerable amount of area. Thus, a highway patrolman may carry this safety device which will operate very quickly and very effectively to provide a substantial visual and physical barricade in or adjacent to various highways or roadways to indicate danger to oncoming motorists.

It will be obvious to those skilled in the art that various modifications of the present invention may be resorted to in a manner limited only by just interpretation of the following claims.

I claim:

1. In an inflatable illuminated highway barricade, the combination of: a portable base; batteries supported

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thereon; an upstanding hollow tubular member having a closed bottom and an open top and supported on said base; a flexible and inflatable barricade means coupled to the upper open end of said tubular member; said hollow tubular member having an upper open end adapted to receive said flexible barricade when it is deflated for, thus, stowing said flexible barricade in said tubular member; second means communicating with the interior of said tubular member at a lower portion thereof for pneumatically inflating said barricade means.

2. In an inflatable illuminated highway barricade, the combination of: a portable base; batteries supported thereon; an upstanding hollow tubular member having a closed bottom and an open top and supported on said base; a flexible and inflatable barricade means coupled to the upper open end of said tubular member; said hollow tubular member having an upper open end adapted to receive said flexible barricade when it is deflated for, thus, stowing said flexible barricade in said tubular member; second means communicating with the interior of said tubular member at a lower portion thereof for pneumatically inflating said barricade means; and third means coupled to said batteries and disposed in said tubular means for illuminating the interior thereof, and the interior of said flexible inflatable barricade means.

3. In an inflatable illuminated highway barricade, the combination of: a portable base; batteries supported thereon; an upstanding hollow tubular member having a closed bottom and an open top and supported on said base; a flexible and inflatable barricade means coupled to the upper open end of said tubular member; said hollow tubular member having an upper open end adapted to receive said flexible barricade when it is deflated for, thus, stowing said flexible barricade in said tubular member; second means communicating with the interior of said tubular member at a lower portion thereof for pneumatically inflating said barricade means; and third means coupled to said batteries and disposed in said tubular means for illuminating the interior thereof, and the interior of said flexible inflatable barricade means; switch means coupling said batteries and said third means; said second means comprising a valve and a gas bottle supported on said base.

4. In an inflatable illuminated highway barricade, the combination of: a portable base; batteries supported thereon; an upstanding hollow tubular member having a closed bottom and an open top and supported on said base; a flexible and inflatable barricade means coupled to

the upper open end of said tubular member; said hollow tubular member having an upper open end adapted to receive said flexible barricade when it is deflated for, thus, stowing said flexible barricade in said tubular member; second means communicating with the interior of said tubular member at a lower portion thereof for pneumatically inflating said barricade means; and third means coupled to said batteries and disposed in said tubular means for illuminating the interior thereof, and the interior of said flexible inflatable barricade means; switch means coupling said batteries and said third means; said second means comprising a valve and a gas bottle supported on said base; and manual means for actuating said switch and said valve for energizing said third means and conducting gas from said bottle to the interior of said tubular member.

5. In an inflatable illuminated highway barricade, the combination of: a portable base; batteries supported thereon; an upstanding hollow tubular member having a closed bottom and an open top and supported on said base; a flexible and inflatable barricade means coupled to the upper open end of said tubular member; said hollow tubular member having an upper open end adapted to receive said flexible barricade when it is deflated for, thus, stowing said flexible barricade in said tubular member; second means communicating with the interior of said tubular member at a lower portion thereof for pneumatically inflating said barricade means; and third means coupled to said batteries and disposed in said tubular means for illuminating the interior thereof, and the interior of said flexible inflatable barricade means; switch means coupling said batteries and said third means; said second means comprising a valve and a gas bottle supported on said base; and manual means for actuating said switch and said valve for energizing said third means and conducting gas from said bottle to the interior of said tubular member; said manual means being common to both said switch means and said valve.

**References Cited by the Examiner**

**UNITED STATES PATENTS**

1,217,942	3/17	Hoffman	240—61.1
1,698,966	1/29	Quick	116—65
1,776,182	9/30	Cook	240—6.4
2,346,325	4/44	Oliver	240—6.4
2,561,016	7/51	Ford et al.	46—87

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