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 [21] Appl. No. **867,695**
 [22] Filed **Oct. 20, 1969**
 [45] Patented **Dec. 15, 1970**

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[54] **OUTDOOR LOCATION KIT**
 7 Claims, 6 Drawing Figs.

[52] U.S. Cl. 116/124,
 9/9
 [51] Int. Cl. **G09f 9/00**
 [50] Field of Search 116/124,
 124.9; 9/9, 316; 222/5; 340/27; 46/90; 137/223

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ABSTRACT: A housing container stores a plurality of deflated balloons, containers of compressed gas, reels having flexible line material wound on each, each line being affixed at one end to a corresponding one of the balloons, and valve controls in the housing container having one end in operative proximity with the valves of the gas containers and another end extending out of the housing container to facilitate manual operation of the valve means from outside the housing container to inflate a selected one of the balloons so that such balloon rises out of the housing container via an aperture formed therein and soars to a determined height while remaining captive via the line material.

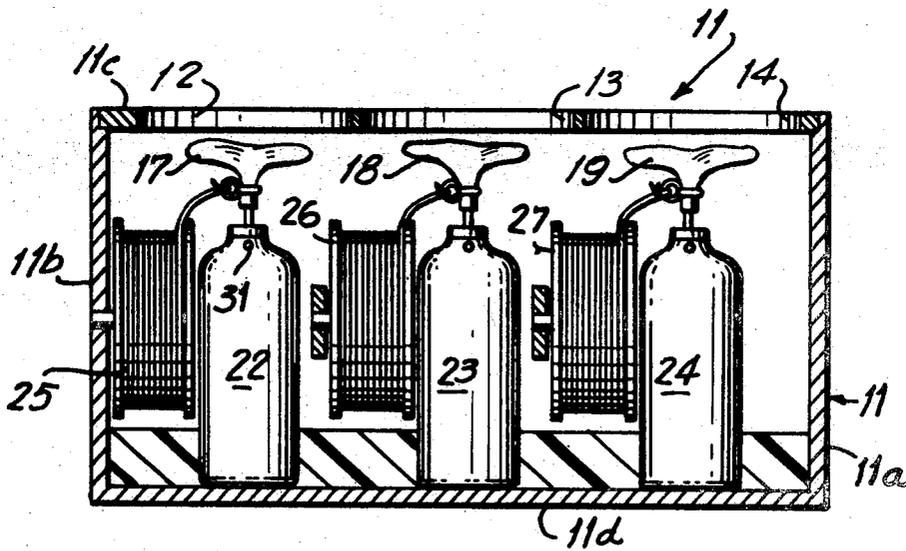


FIG. 2

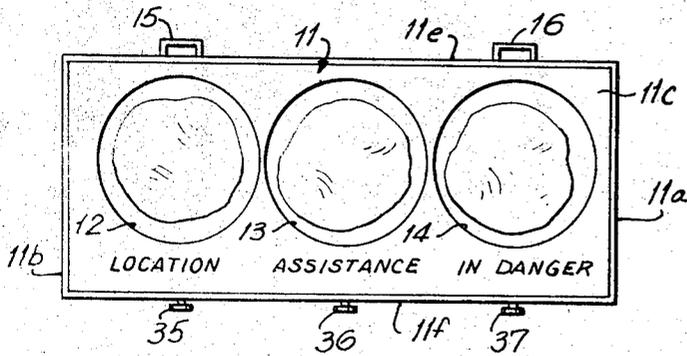


FIG. 4

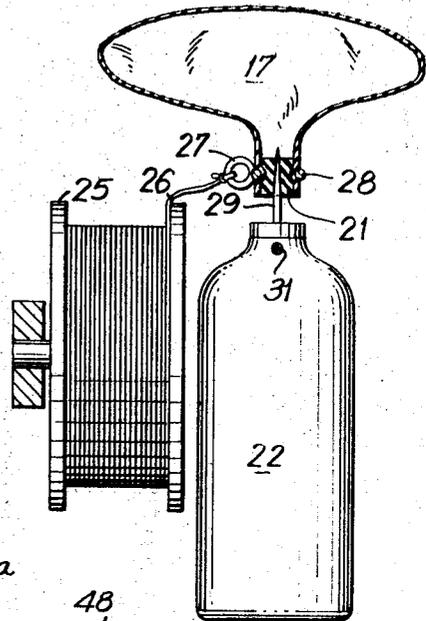


FIG. 1

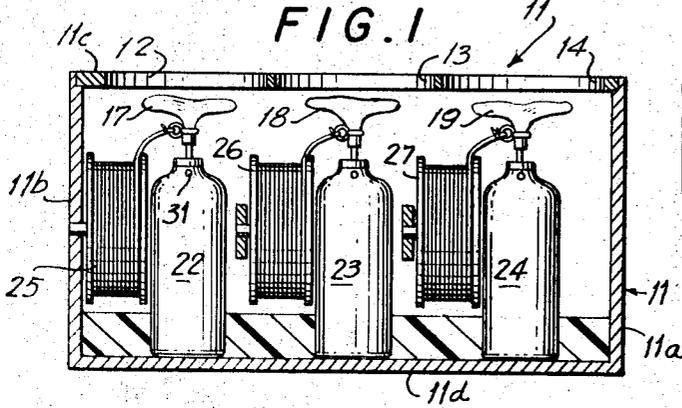


FIG. 3

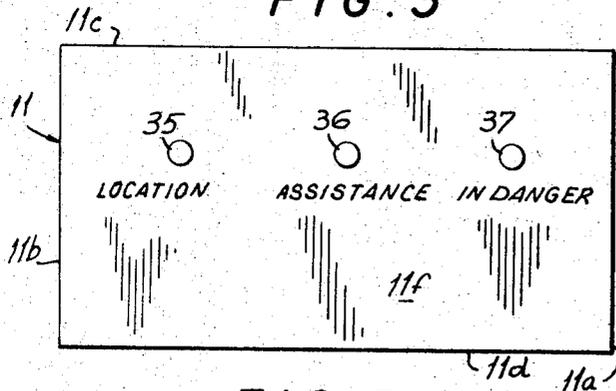


FIG. 5

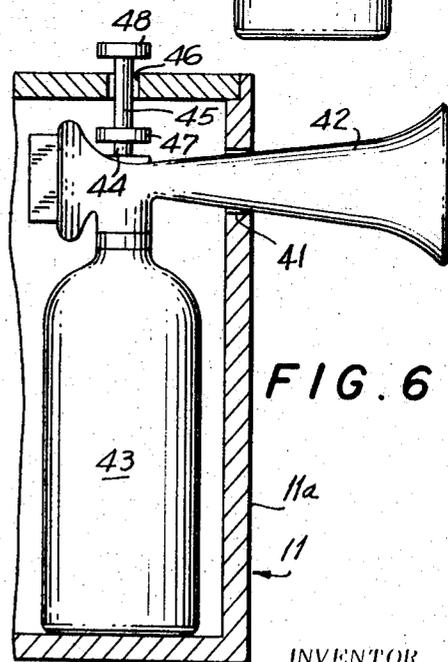
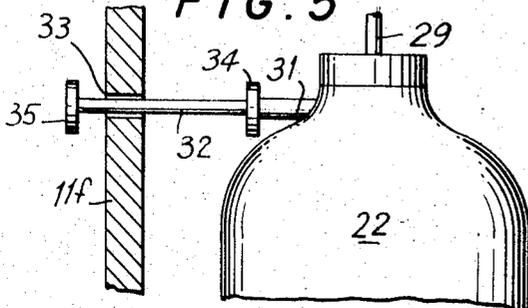


FIG. 6

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OUTDOOR LOCATION KIT

DESCRIPTION OF THE INVENTION

The present invention relates to an outdoor location kit. More particularly, the invention relates to an outdoor location kit which may be carried by anyone traveling outdoors and which enables the traveler to specify his location with facility and rapidity in the event that he needs assistance of any kind. The outdoor location kit of the present invention may also be used purely for signaling purposes, in the realm of military operations.

Many sportsmen fish and hunt in highly inaccessible or wilderness areas. On occasion, a sportsman becomes lost and cannot be located without the expenditure of considerable time and energy by many agencies utilizing many men. Quite often the search does not locate the lost sportsman until it is too late. Other sportsmen may not be lost, but may be in need of food, shelter or medical assistance. On other occasions, a sportsman may be in danger of injury or may be in imminent danger of losing his life. Under these conditions, it is necessary that help be available without delay. This is practically impossible in a highly undeveloped backwoods area, when the sportsman is on foot and has no means of communication with the outside world.

My invention enables a sportsman or any other traveler, anywhere, to indicate his position or location and what type of assistance he requires, immediately and with facility. The invention also enables a soldier in the field to signal others, such as aircraft and ground troops.

The principal object of the present invention is to provide a new and improved outdoor location kit.

An object of the invention is to provide an outdoor location kit for immediately signaling the position or location of the user.

An object of the present invention is to provide an outdoor location kit for immediately indicating the type of assistance required by the user.

An object of the present invention is to provide an outdoor location kit which functions to indicate the location of the user with facility and rapidity, and which is lightweight, easy to transport, easy to use, simple in structure, compact, sturdy and efficient, effective and reliable in operation.

An object of the present invention is to provide an outdoor location kit for indicating the location and the assistance requirements of the user, which location kit is inexpensive, may be mass produced and is simple enough for a child to utilize.

In accordance with the present invention, an outdoor location kit comprises a housing container having a plurality of sides and a plurality of apertures formed in the sides. A plurality of deflated balloons are positioned in the housing container. Each of the balloons has a self-sealing plug. Gas means in the housing container is coupled to the balloons via the self-sealing plugs thereof for inflating the balloons. The gas means has valve means for selectively controlling the flow of gas to the balloons. Reels are mounted in the housing container for rotation. Flexible line material is wound on the reels and affixed at one end to a corresponding one of the balloons. Valve control means in the housing container has one end in operative proximity with the valve means of the gas means and another end extending out of the housing container to facilitate manual operation of the valve means from outside the housing container whereby operation of the valve control means opens the valve means to inflate a selected one of the balloons and the selected balloon rises out of the housing container via a selected one of the apertures and soars to a determined height while remaining captive via the line material.

A plurality of bores are formed through the sides of the housing container. The gas means comprises a plurality of compressed gas containers each affixed to a corresponding one of the balloons and each having a valve for controlling the flow of gas therefrom. The valve control means comprises a

plurality of valve control rods each extending through a corresponding one of the bores and having one end in abutment with a corresponding one of the valves and another end outside the housing container.

The apertures of the housing container may be formed in one side thereof in spaced relation with each other.

A bore may be formed through a side of the housing container. An audible alarm means may be positioned in the housing container. The audible alarm means is operable by compressed gas. A compressed gas container is affixed to the audible alarm means and has a valve for controlling the flow of gas therefrom. A valve control rod extends through the bore and has one end in abutment with the valve of the audible alarm means and another end outside the housing container.

The reels comprise a plurality of reels each rotatably mounted in proximity with a corresponding one of the balloons and each having a flexible line material wound thereon and affixed at one end to a corresponding one of the balloons.

Each of the compressed gas containers has a cap and a needlelike conduit extending outwardly from the cap thereof into the self-sealing plug of a corresponding one of each of the balloons.

In accordance with the present invention, apparatus for inflating a balloon having a nozzle comprises a plug of self-sealing material sealing the nozzle of a balloon. A source of compressed gas is provided. Coupling means comprises a needlelike conduit extending from the source of compressed gas and injected into the balloon through the plug whereby gas from the source inflates the balloon and the balloon is gastightly sealed upon withdrawal of the needlelike conduit by the self-sealing of the plug.

In order that the present invention may be readily carried into effect, it will now be described with reference to the accompanying drawing, wherein:

FIG. 1 is a view, partly in section, of an embodiment of the outdoor location kit of the present invention;

FIG. 2 is a top view of the housing container of an embodiment of the outdoor location kit of the present invention;

FIG. 3 is a view of part of a side of the housing container of an embodiment of the outdoor location kit of the present invention;

FIG. 4 is an enlarged view of a single unit of the outdoor location kit of FIG. 1, including a single balloon, a single compressed gas container and a single wound reel;

FIG. 5 is an enlarged view of an embodiment of the valve control means of the outdoor location kit of FIG. 1; and

FIG. 6 is a view, partly in section, of an embodiment of audible alarm means which may be included in the outdoor location kit of FIG. 1.

In FIG. 1, a housing container 11 has a plurality of sides 11a, 11b, 11c and 11d. In view of FIG. 2, additional sides 11e and 11f of the housing container 11 are shown.

A plurality of apertures 12, 13 and 14, as shown in FIGS. 1 and 2, are formed in the sides of the housing container 11. The apertures 12, 13 and 14 may be formed in one or more of the sides. In the embodiment of FIG. 1, the apertures 12, 13 and 14 are formed in the single side, or top, 11c, in aligned spaced relationship.

In order to facilitate carrying the housing container 11, strap loops 15 and 16 may be affixed to the side 11e of said housing container, as shown in FIG. 2. The strap loops 15 and 16 enable the outdoor location kit to be carried on the back of the user or on a pack animal or other transport. The outdoor location kit is of sufficient lightweight and compact construction that it may be carried with ease on the back or shoulders of a sportsman, woodsman, fisherman, hunter, soldier, hiker, or the like.

The housing container 11 may comprise any suitable lightweight, sturdy, waterproof material such as, for example, canvas or aluminum.

A plurality of deflated balloons 17, 18 and 19, as shown in FIG. 1, are positioned in the housing container 11. Each of the balloons 17, 18 and 19 has a self-sealing plug. The self-sealing

plug 21 of one of the balloons 17 is shown in FIG. 4. The self-sealing plug 21 may comprise any known self-sealing material such as, for example, cork or self-sealing rubber. The plug 21 seals the nozzle of the balloon 17 so that said balloon is gastight. Each of the other balloons 18 and 19 has a self-sealing plug which seals it gastightly in the same manner, such other plugs not being shown in the FIGS.

Each of the balloons 17, 18 and 19 has a compressed gas container 22, 23 and 24, respectively, coupled thereto via its self-sealing plug. The compressed gas containers 22, 23 and 24 inflate the balloons to which they are coupled. In order to provide and control such inflation, each of the gas containers 22, 23 and 24 has a valve for controlling the flow of gas therefrom. Each of the gas containers 22, 23 and 24 may comprise any suitable known compressed gas container, containing a gas which is suitable for inflating a balloon and causing such balloon to ascend or soar. A suitable gas is helium, hydrogen, or the like.

A plurality of reels 25, 26 and 27 are mounted in the housing container 11, as shown in FIG. 1. FIG. 4 discloses one of the reels 25 in greater detail. The reel 25 is rotatably mounted adjacent the balloon 17. The reel 26 is rotatably mounted adjacent the balloon 18. The reel 27 is rotatably mounted adjacent the balloon 19.

A flexible line material such as, for example, strong, lightweight wire, fishing line, or the like, is wound on each reel 25, 26 and 27. One end of the line or wire is affixed to the reel and the other end of said line or wire is affixed to a corresponding one of the balloons. To facilitate the affixing of a line to a balloon, each balloon has a ring around its nozzle in the area of the self-sealing plug thereof. The ring has a second ring affixed thereto, to which second ring the wire or line is tied or otherwise affixed. Thus, as shown in FIG. 4, the reel 25 has a wire or line 26 wound thereon. One end of the wire 26 is affixed to the reel 25 and the other end of the wire 26 is affixed to a ring 27, which is affixed to a ring 28, which is affixed around the plug 21 of the balloon 17, with the nozzle of said balloon between said ring 28 and said plug.

In order to maintain the clarity of illustration, the wires or lines and the rings are not identified by reference numerals in FIG. 1. Each of the wires and rings is identical, however, and is therefore the same as that shown as the wire 26 and the rings 27 and 28 in FIG. 4.

Each of the compressed gas containers 22, 23 and 24 has a cap and a needlelike conduit extending outwardly from the cap thereof into the self-sealing plug of a corresponding one of the balloons. Thus, as shown in FIG. 4, the compressed gas container 22 has a needlelike conduit 29 extending from a cap 31 of said container. Compressed gas is thereby injected from the container 22 into the balloon 17 via the conduit 29 and the plug 21. Compressed gas is injected into the balloon 18 from the container 23 and into the balloon 19 from the container 24 in the same manner.

Each of the compressed gas containers 22, 23 and 24 has a valve for selectively controlling the flow of gas to the corresponding one of the balloons. The valves of the compressed gas containers are not shown in FIGS. 1 and 4 in order to maintain the clarity of illustration. FIG. 5 illustrates the upper part of a compressed gas container such as, for example, the container 22, and shows the projecting portion 31 of the valve of said compressed gas container. Since a compressed gas container having a valve is well known in the art, the details of such valve are not shown.

A plurality of valve control rods are provided in the housing container 11. All of the valve control rods are not shown in FIG. 1, in order to maintain the clarity of illustration. Each of the valve control rods extends through a corresponding bore formed through one of the sides of the housing container 11. Thus, for example, as shown in FIG. 5, a valve control rod 32 extends through a bore 33 formed through a side 11f of the housing container 11. One end 34 of the valve control rod 32 is in abutment with the valve 31 of the compressed gas container 22. The other end 35 of the valve control rod 32 is outside the housing container 11.

Each of the compressed gas containers 22, 23 and 24 has its valve controlled by a corresponding one of the valve control rods, in the manner illustrated and described for the valve control rod 32 and the compressed gas container 22. Thus, the outside end 35 of the control rod 32 is shown in FIG. 3. FIG. 3 also shows the outside ends 36 and 37 of the valve control rods for the compressed gas containers 23 and 24, respectively. Any desirable legend or words may be printed on the side of the housing container 11 adjacent the outside ends 35, 36 and 37 of the valve control rods. This enables the user to select a specific one of the balloons 17, 18 and 19 for inflation.

Each of the balloons 17, 18 and 19 is of a different color. Thus, for example, the balloon 17 may be a green balloon which represents the fact that the user is merely signaling or indicating his location or position. The balloon 18 may be a yellow balloon which indicates that the user is lost and is in need of assistance or help. The balloon 19 may be a red balloon which indicates that the user requires medical assistance or is in danger of life or limb. Each of the outside ends 35, 36 and 37 of the valve control rods may thus be appropriately labeled. Thus, the outside end 35 may be colored green and may be labeled "LOCATION," the outside end 36 may be colored yellow and may be labeled "ASSISTANCE" and the outside end 37 may be colored red and may be labeled "IN DANGER."

Thus, when the user wishes to indicate his position to the outside world or to possible searchers, or wishes to locate his base camp so that he himself may return to it, or otherwise wishes to locate any other point so that he or someone else may approach it from a distance, he presses in the outside end 35 of the valve control rod 32, which is in the shape of a pushbutton. This causes the opening of the valve 31 of the compressed gas container 32 which thereby inflates the balloon 17 with gas from said gas container. When the balloon 17 has sufficient gas in it to ascend or soar, it raises itself off the conduit 29 of the compressed gas container 22. As soon as the balloon is removed from the gas container 22, its self-sealing plug 21 seals itself to a gastight condition. The balloon rises to the height of the line or wire 26, which may be selected as any suitable length such as for example, 500 or 1000 yards.

When the user is lost and wishes to obtain assistance from the outside, he presses the pushbutton 36 for such assistance. The operation of the compressed gas container 23 and the balloon 18 is then similar to that described for the container 22 and the balloon 17. When the user is in physical danger or in need of medical assistance, he presses the pushbutton 37 which causes the compressed gas container 24 to inflate the balloon 19 in the same manner as described for the compressed gas container 22 and the balloon 17.

If desired, in a modification of the outdoor location kit of the present invention, a bore 41, as shown in FIG. 6, may be formed through a side such as, for example, the side 11a, of the housing container 11. An audible alarm 42 may be positioned in the housing container 11. The audible alarm 42 is of known type and is operable by compressed gas. A compressed gas container 43 is affixed to the audible alarm 42 and has a valve 44 for controlling the flow of gas therefrom. A valve control rod 45 extends through another bore 46 formed through a side of the housing container 11. One end 47 of the valve control rod 45 is in abutment with the valve 44 of the audible alarm means and the other end 48 of said valve control rod is outside the housing container 11. Thus, the user may depress the outside end 48 of the valve control rod 45 and thereby operate the audible alarm device 42 to produce a loud noise which may be heard miles away. An alarm device of this type is well known as a portable ship's horn in popular use on small motor boats.

While the invention has been described by means of a specific example and in a specific embodiment, I do not wish to be limited thereto, for obvious modifications will occur to those skilled in the art without departing from the spirit and scope of the invention.

I claim:

1. An outdoor location kit comprising:

a housing container having a plurality of sides and a plurality of apertures formed in said sides;
 a plurality of deflated balloons in said housing container, each of said balloons having a self-sealing plug;
 gas means in said housing container coupled to said balloons via the self-sealing plugs thereof for inflating said balloons, said gas means having valve means for selectively controlling the flow of gas to said balloons;
 reel means mounted in said housing container for rotation; flexible line material wound on said reel means and affixed at one end to a corresponding one of said balloons; and valve control means in said housing container having one end in operative proximity with the valve means of said gas means and another end extending out of said housing container to facilitate manual operation of said valve means from outside said housing container whereby operation of said valve control means opens said valve means to inflate a selected one of said balloons and the selected balloon rises out of said housing container via a selected one of said apertures and soars to a determined height while remaining captive via said line material.

2. An outdoor location kit as claimed in claim 1, further comprising a plurality of bores formed through the sides of said housing container, and wherein said gas means comprises a plurality of compressed gas containers each affixed to a corresponding one of said balloons and each having a valve for controlling the flow of gas therefrom and said valve control means comprises a plurality of valve control rods each extending through a corresponding one of said bores and having one end in abutment with a corresponding one of said valves and another end outside said housing container.

3. An outdoor location kit as claimed in claim 1, wherein the apertures of said housing container are formed in one side thereof in spaced relation with each other.

4. An outdoor location kit as claimed in claim 1, further comprising a bore formed through a side of said housing container, audible alarm means in said housing container, said audible alarm means being operable by compressed gas, a compressed gas container affixed to said audible alarm means and having a valve for controlling the flow of gas therefrom, and a valve control rod extending through said bore and having one end in abutment with the valve of said audible alarm means and another end outside said housing container.

5. An outdoor location kit as claimed in claim 2, wherein said reel means comprises a plurality of reels each rotatably mounted in proximity with a corresponding one of said balloons and each having flexible line material wound thereon and affixed at one end to a corresponding one of said balloons.

6. An outdoor location kit as claimed in claim 2, wherein each of said compressed gas containers has a cap and a needlelike conduit extending outwardly from the cap thereof into the self-sealing plug of a corresponding one of said balloons.

7. An outdoor location kit as claimed in claim 5, further comprising a bore formed through a side of said housing container, audible alarm means in said housing container, said audible alarm means being operable by compressed gas, a compressed gas container affixed to said audible alarm means and having a valve for controlling the flow of gas therefrom, and a valve control rod extending through said bore and having one end in abutment with the valve of said audible alarm means and another end outside said housing container and wherein each of said compressed gas containers has a cap and a needlelike conduit extending outwardly from the cap thereof into the self-sealing plug of a corresponding one of said balloons.

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