

[54] **HELP OR LOST BALLOON**

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222/5

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[58] Field of Search 116/124, 124 B, DIG. 44;
9/8, 9, 3; 222/3, 5; 340/366; 46/87, 90

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[57] **ABSTRACT**

A safety device comprising an inflatable balloon having an open neck; a hollow cylinder having opposite open ends, an end being secured to the neck, the cylinder having a first aperture intermediate the ends normally closed by a first spring loaded disc; a container of lighter than air gas having an opening coupled to the other end of the cylinder, the container having a second aperture in the opening which is normally closed by a second spring loaded disc; and a prong secured to the second disc and in contact with the fuel disc, whereby squeezing container and cylinder together causes the prong to bear against both discs and open both apertures to inflate the balloon with gas.

3 Claims, 5 Drawing Figures

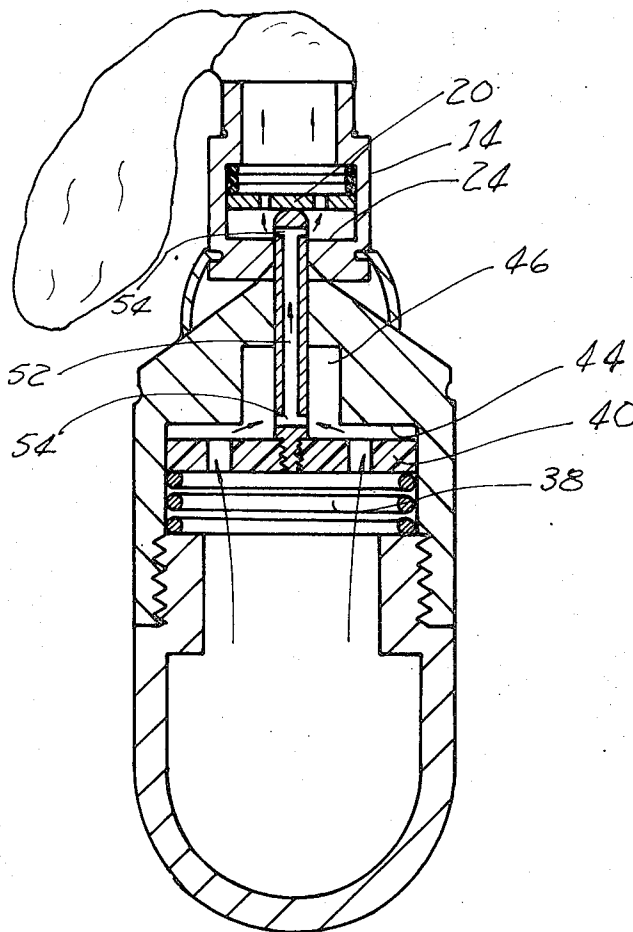


Fig-1

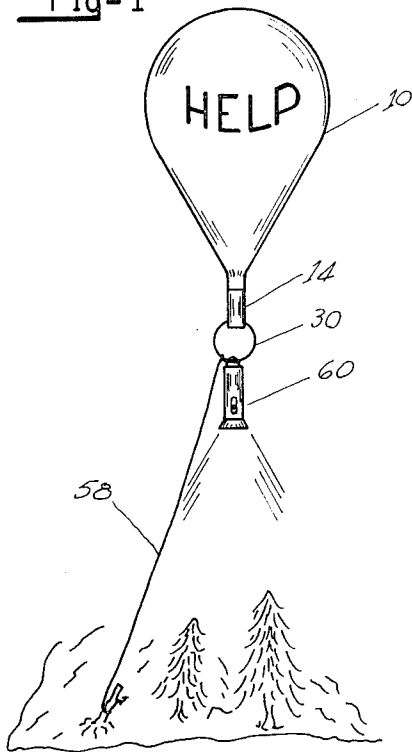


Fig-2

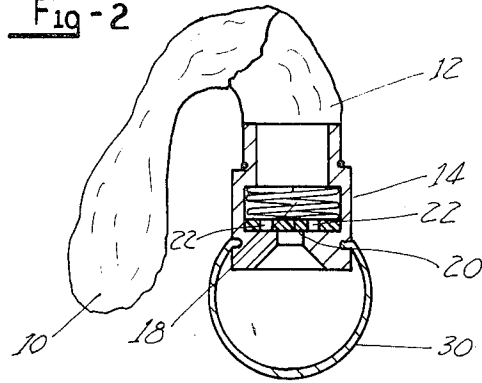


Fig-3

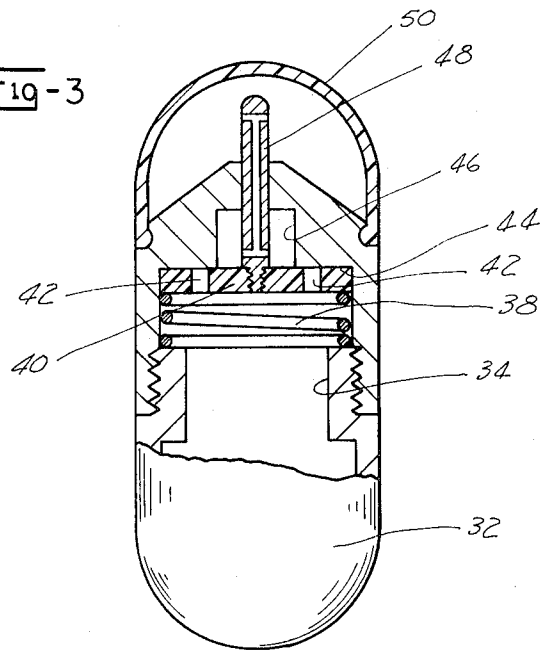


Fig-4

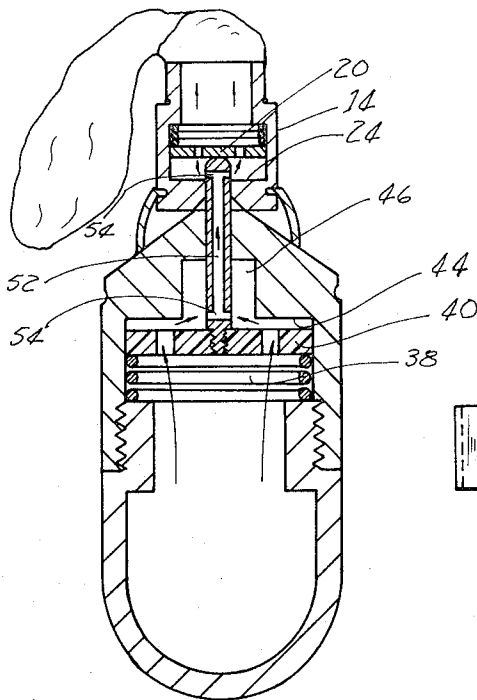
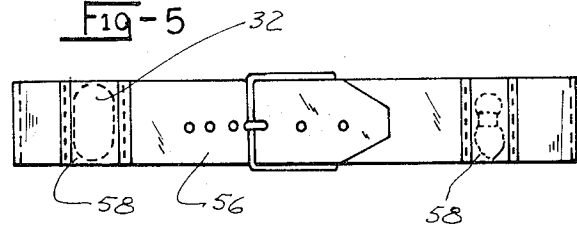


Fig-5



HELP OR LOST BALLOON

SUMMARY OF THE INVENTION

This invention is directed toward apparatus which can be carried with in kit form as for example on a belt and which includes an inflatable balloon whereby in an emergency the balloon properly secured can be inflated and allowed to use to a selected height as a signal requesting help or assistance.

To this end, an inflatable balloon is secured by an open neck to a mechanism having a first aperture communicating with the neck and normally closed by first spring loaded means. A container filled with lighter than air gas for inflating the balloon has a second aperture normally closed by second spring loaded means. To inflate the balloon, the two means are engaged and the mechanism and container are squeezed together. This action opens both apertures of the balloon to allow gas to flow into the balloon and inflate it. A cable or other means tied at one end of the neck can be secured at the other end to a suitable support to tether the balloon at desired altitude.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings:

FIG. 1 is a perspective view of the invention in use.

FIG. 2 is a detail cross section of the balloon with attached mechanism.

FIG. 3 is a detail cross section of the gas container;

FIG. 4 is a cross section of the parts of FIGS. 2 and 3, as joined together; and

FIG. 5 is a view of a belt in which the various parts can be stored when not in use.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENT

Referring now to FIGS. 1-5, an inflatable balloon 10 has a neck 12 secured to one open end of a generally cylindrical member 14. This end communicates with an enlarged bore 16 in which is disposed a spring 18 bearing downward against a disc 20 having openings 22 and normally facing the disc into seat 24. A small opening 26 with other end of the member has an outwardly flowing mouth 28. Opening 26 is sealed when the disc is sealed. A carrying ring-like member 30 is secured to the member.

A hollow container or cartridge 32 filled with lighter than air gas has an inner chamber 34 with an enlarged bore 36. A spring 38 in the bore normally faces disc 40 with holes 42 against seat 44. Seat 44 normally seals small opening 46. A prong 48 secured to disc 40 extends upwards and out of the container being covered by removable cap 50. The prong has an elongated hollow channel 52 communicating with side openings 54 in upper and lower ends.

In use, the container and cylinder are pressed together and squeezed by hand. Both discs are moved out of their seals and gas flows through holes 42, opening 54, channel 52, opening 54 and openings 22 into the balloon to inflate it.

A belt 56 can have pockets 58 or the like in which various parts can be carried in stored position when not in use. The belt can also store cord 62 for teathering the balloon after inflation as required.

A flashlight 60 can be included and carried on ring 30.

While certain novel features of my invention have been shown and described and are pointed out in the annexed claims, it will be understood that various omissions, substitutions and changes in the forms and details of the device illustrated and in its operation can be made by those skilled in the art without departing from the spirit of the invention.

I claim as follows:

1. A fitting adapted to admit gas into an inflatable balloon and retain the gas in the balloon after inflating, comprising an inlet with conical walls in communication with a small opening leading to a chamber having an apertures disc in said chamber normally sealing said opening, including spring means bracing said disc to the closed position, including an outlet portion leading from said chamber adapted to be attached by insertion into the neck of a balloon whereby axial pressure against the disc towards said outlet will break the sealing engagement causing gaseous communication between the inlet and outlet via said disc apertures, said chamber being external of the balloon.

2. A fitting as in claim 1 in combination with device for filling the balloon with gas via said fittings, wherein said device comprises a gas filled cartridge under pressure greater than atmospheric pressure and a dispenser unit normally separate from said fitting, having means for normally retaining gas within said cartridge when separate from said fitting and additional means for connection with said fitting and admitting said gas into said balloon through said fitting when said fitting and said unit are connected, wherein the first said means comprises an apertured washer sealingly engaging a valve seat encompassing an outlet duct, said washer being braced to the sealed position by spring means, and wherein the said additional means comprise an outer-conical surface encompassing an axial bore, including prong slidably mounted in said bore and extending externally of said unit axially beyond said conical surface, said prong being affixed to said washer and having an internal conduit, including an intermediate chamber surrounding said prong between the said bore and said disc wherein said conical surface is adapted to fit sealingly in said conical walls of fitting to connect the fitting and the unit, and wherein such insertion causes said prong to sealingly enter said small opening in said fitting thereby simultaneously causing opposing axial pressure on said disc and washer whereby gas flows from cannister to balloon.

3. The combination of claim 2 wherein the prong is of a length that will cause unseating of the disc when the conical surface is in snug sealing contact with the conical walls and the conduit in said prong will be within the first said chamber.

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