Feb. 4, 1969 J. I. SALMI 3,425,390

EMERGENCY SIGNAL BALLOON APPARATUS

Filed Aug. 14, 1967

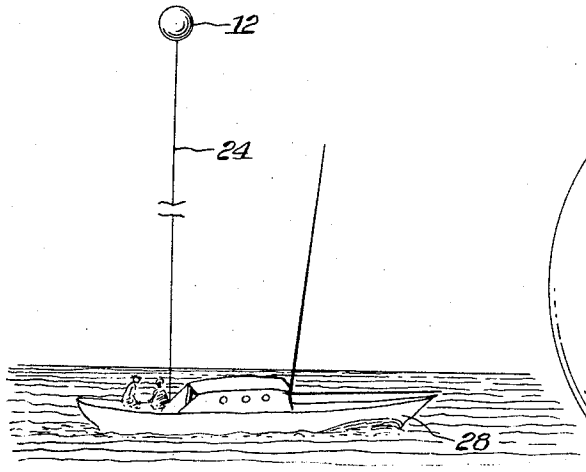


FIG. 1

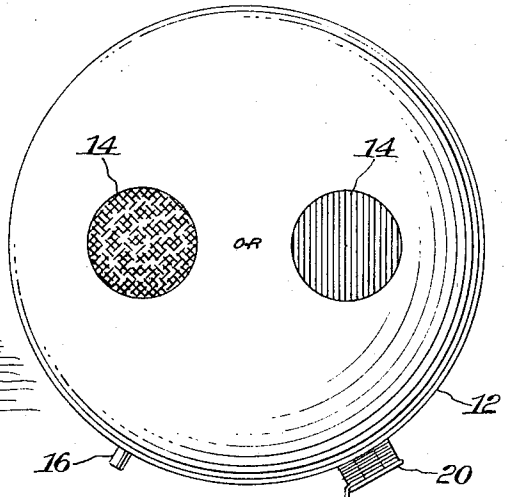


FIG. 2

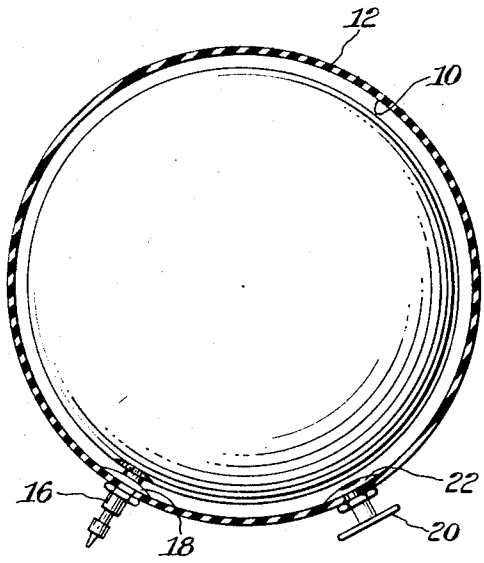


FIG. 3

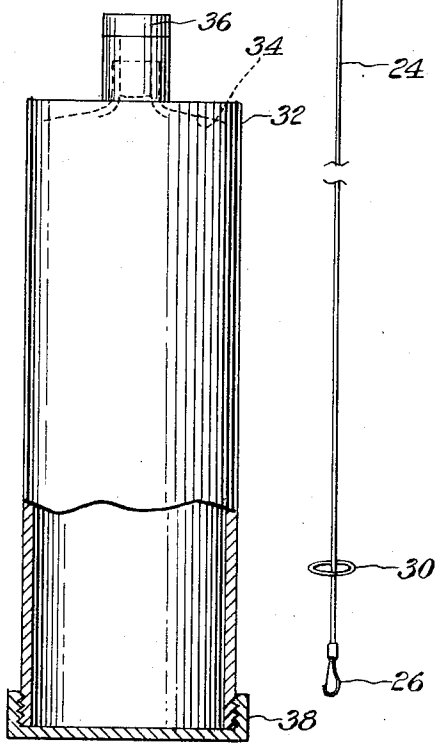


FIG. 4

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EMERGENCY SIGNAL BALLOON APPARATUS

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ABSTRACT OF THE DISCLOSURE

Emergency signal balloon apparatus including an inflatable balloon which can be stored in collapsed form on a boat or the like and which can be immediately inflated with a lighter-than-air gas during an emergency to signal an alarm.

Summary of the invention

My apparatus includes an inflatable balloon provided with valve means which permits rapid introduction of lighter-than-air gas into the balloon to inflate same and which blocks escape of gas out of the balloon. A spool is secured to the outer surface of the balloon. A line is secured at one end to the spool and can either be coiled thereon or uncoiled therefrom. A hollow container filled with said gas is detachably securable to the valve means for inflation purposes. A snap hook is secured to the other end of the line to be attachable to a suitable spot on a boat after the balloon is inflated whereby it rises to maximum height above the boat to serve as a signal.

Brief description of the drawings

In the drawings:
FIG. 1 is a perspective view of my apparatus in use;
FIG. 2 is a side view of the inflated balloon;
FIG. 3 is a cross section of the balloon; and
FIG. 4 is a partially cut away view of the gas container.

Detailed description of preferred embodiment

Referring now to FIGS. 1–4, an inflatable spherical inner tube **10** is disposed within a collapsible spherical outer casing **12** having an outer surface brightly colored and light reflective including spots or circles **14** of different colors. A one way valve **16** which permits gas to flow therethrough into, but not out of, tube **10** extends from the outer surface of the casing into the tube itself. A reinforced rubber cap **18** is disposed around the valve and is secured to the inner surface of the casing as a valve support.

A spool **20** is secured at one end to the casing and is reinforced in position by a second like cap **22** also secured to the inner surface of the casing. A line **24** is secured at one end to the spool and can be coiled thereon for storage and uncoiled when the apparatus is in use. The other end of the line carries a snap hook **26** which can be secured to any suitable place on a boat **28** when the apparatus is in use. A tying ring **30** is freely slidable along the line; the ring can be used for tie in in addition to the use of the snap hook.

A light metal hollow container **32** contains a hollow tube **34** filled with lighter-than-air gas under pressure has a breakable cap **36** whereupon, after the cap is broken, the tube can be connected to the valve for rapid inflation as described previously. The bottom cap **38** of container **32** can be threadedly engageable therewith and detachable therefrom whereby, after use, a new tube can be inserted.

In addition to securing the spool, cap **22** can also be used to hold one end of the line in position at all times.

While I have described my invention with particular reference to the drawings, my protection is to be limited only by the terms of the claims which follow.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. Emergency balloon signal apparatus comprising:
an inflatable balloon provided with valve means through which lighter-than-air gas may be introduced to inflate the balloon, said means preventing escape of said gas from the balloon;
a spool secured to the outer surface of said balloon;
a line secured at one end to said spool and coilable thereon and uncoilable therefrom; and a snap hook secured to the other end of said line.

2. Apparatus as set forth in claim **1** wherein said balloon includes an inflatable inner tube disposed within a collapsible outer casing, said valve means extending through said casing into said tube, said spool being secured to the outer casing.

3. Apparatus as set forth in claim **2** further including first and second reinforced caps, both caps being secured to the inner surface of the outer casing, one cap being secured to the valve means, the other being secured to one end of the spool.

4. Apparatus as set forth in claim **3** further including a hollow container filled with lighter-than-air gas under pressure and detachably securable to said valve means to fill the inner tube with gas.

5. Apparatus as set forth in claim **4** further including a tying ring freely slidable along said line.

References Cited

UNITED STATES PATENTS

1,329,584	2/1920	Marinis	244—30
2,409,166	10/1946	Tracy et al.	244—33
2,830,309	4/1958	Lawson	9—9
3,002,490	10/1961	Murray	116—124
3,123,842	3/1964	Oeland et al.	9—9

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U.S. Cl. X.R.

9—9; 244—33