March 5, 1940. C. R. PURDY 2,192,203

LIFESAVING APPARATUS

Filed Dec. 7, 1938

Fig. 1

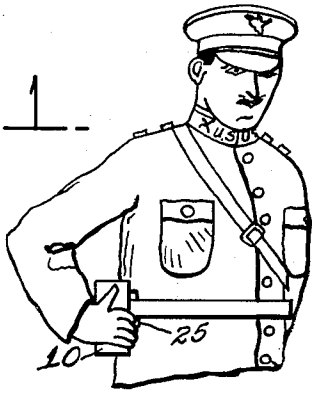


Fig. 2

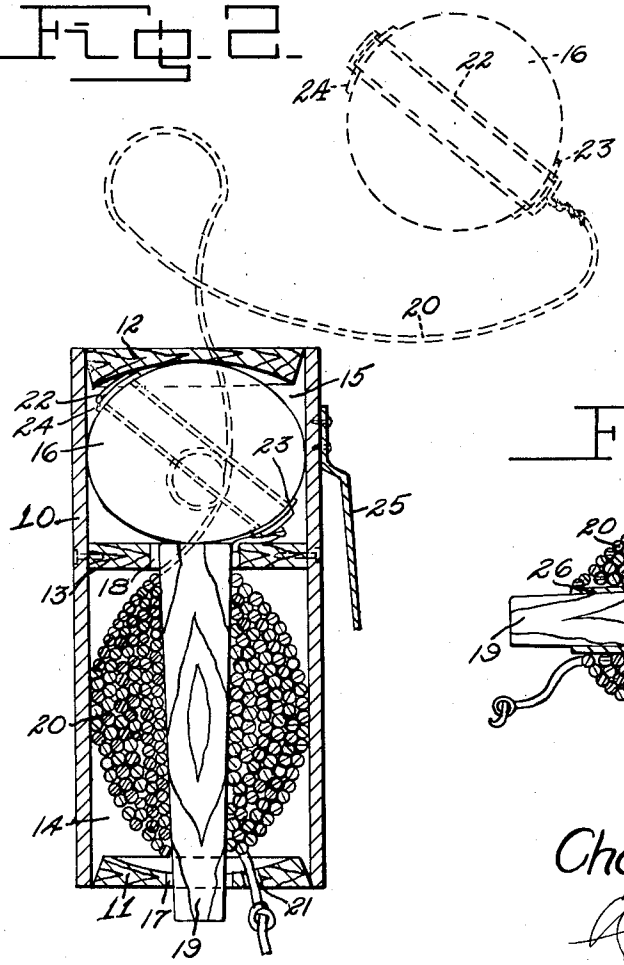
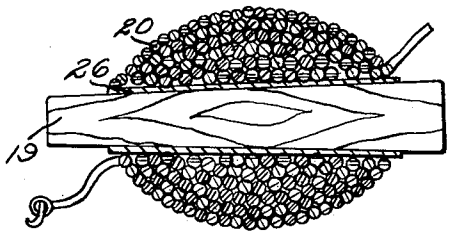


Fig. 3



INVENTOR
Charles R. Purdy
BY
Adams & Richmond
ATTORNEY

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UNITED STATES PATENT OFFICE

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LIFESAVING APPARATUS

Charles R. Purdy, St. Paul, Minn.

Application December 7, 1938, Serial No. 244,383

5 Claims. (Cl. 9—14)

(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757)

This invention described herein may be manufactured and used by or for the Government for governmental purposes, without the payment to me of any royalty thereon.

This invention relates to lifesaving apparatus and more especially it is directed to an emergency compact or kit containing rescue equipment in the nature of a suitable length of life line and a carrier for the line adapted to be removed from the casing and thrown to the aid of a person in the water requiring assistance.

One object of this invention is to provide a lifesaving emergency compact or kit containing a winding of life line and a buoyant carrier for the line adapted to be conveniently removed from the kit and thrown to the aid of a person in distress.

Another object of this invention is to provide an emergency kit or compact of the character specified having the life line wound upon a core which normally supports the line within the kit, but which when removed leaves the life line in condition to permit its untangled release from the kit commensurate with the flight of the carrier.

Another object of this invention is to provide a lifesaving compact which may be body-attached and worn by the members of a ship crew for rescue purposes, the kit containing a linen life line having sufficient strength to support the weight of two individuals.

Another object of this invention is to provide a device of the class described which is simple in its construction, durable and efficient in use, light in weight, conveniently operable and comparatively inexpensive to manufacture.

With these and other objects in view this invention consists of certain details of construction, combination and arrangement of parts to be more particularly hereinafter described and claimed.

In the drawing wherein like numerals of reference designate corresponding parts throughout the several views:

Fig. 1 is a perspective view showing the compact attached to the belt of an operator;

Fig. 2 is a partially sectionized view showing the life line and float mounted within the casing, and likewise illustrating in dotted outline the float removed from the casing; and

Fig. 3 is a sectionized elevation illustrating a modified construction in which a thin shim is interposed between the spindle and the life line windings.

In the illustrated embodiment characterizing this invention there is shown an emergency kit or compact consisting of a cylindrical casing 10 having its opposite ends open but adapted to be normally closed by end caps or closure members 11 and 12 of the type shown in the drawing, and a partition 13 which divides the casing into two compartments 14 and 15, one compartment 14 for the reception of a life line and the other compartment 15 for the reception of a float 16; as will be further described in the specification.

The closure member 11 and the partition 13 are provided with centrally located circular openings 17 and 18 which are aligned for the reception of a tapered core or spindle 19 on which is wound the life line 20. One end of the life line 20 is attached to the closure member 11 by being passed through a hole 21 drilled therein and then knotted at its exterior extremity, and the other end of the line is passed through the central opening 18 in the partition 13 into the adjacent compartment 15 in the clearance space allowed between the perimeter of the hole or circular opening 18 and the larger end of the tapered spindle.

In the adjacent compartment 15 the other end of the life line is attached to a line-carrier in the nature of a float 16, which is preferably spherical in shape and made of sponge rubber, cork or other suitable means and which is provided with a central U-shaped weighting member 22 inserted centrally through the float and clamped so as to retain washers 23 and 24 at either end thereof. The life line is preferably attached to one end of this weighting member which also forms a secure means of attachment.

The casing 10 is provided with a clip hanger 25 for attaching the same to the belt of the operator as shown in Fig. 1.

In the operation of the device the casing is removed from the operator's belt, the closure member 12 of the compartment 15 containing the float 16 removed, the float removed and the casing inverted so that the spindle 19 will be allowed to drop out. The weighted float 16 may then be thrown, and as it departs from the operator it will pull the trailing life line from the compartment 14 without tangling the line in the unwinding of the same.

To reload the compartment, the closure member 11 is removed and the entire length of the life line 20 pulled through the central opening 18 in the partition 13 until the life line-carrier or float is drawn up into its compartment 15. The closure member 12 is then replaced in the opening of this compartment, the spindle rewound

with the life line and the whole inserted in its former position in compartment 14. The closure member 11 is then replaced in its former position and the device is again ready for use.

To facilitate the removal of the central core or spindle 19 a thin shim 26 of paper or other suitable material may be wrapped around it before winding the life line thereon as shown in the modified form illustrated in Fig. 3. The paper shim 26 allows the spindle 19 to drop out of the life line windings more readily and does not hinder the unwrapping of the line as its flexibility permits the cord to compress the shim when the same is under excessive tension.

The device may be carried by a person as an attachment to a belt as described above or it may be supported by a suitable anchoring member such as a ship, dock or the like and in a convenient location for use as a life line to be thrown to a drowning person. It may also be carried by a swimmer and used as a marking device to indicate the location of the swimmer in case of emergency. In the latter case it would be only necessary to release the float from its compartment. The float would rise to the surface of the water and thus indicate the location of the swimmer.

Having described my invention, what I claim as new and wish to secure by Letters Patent is:

1. A lifesaving compact comprising a casing, open at its opposite ends, closure members for said open ends, means within and dividing said casing into life line and float housing compartments, a tapered core, a life line wound on said core, means to removably support the core and its life line within the life line compartment, a float positioned in said float compartment and adapted to be removed therefrom and thrown to the aid of a distressed person in the water, said float being attached to one end of the life line, the other ends of said line being connected to a closure member of said casing.

2. A lifesaving compact comprising a casing, open at its opposite ends, closure members for said open ends, means within and dividing said casing into life line and float supporting compartments, a tapered core, a life line wound on said core, means to removably support the core and its life line within the life line compartment, a weighted spherically shaped float positioned in said float compartment and adapted to be removed therefrom and thrown to the aid of a distressed person in the water, said float being attached to one end of the life line, the other end of said line being connected to one of the closure members of said casing.

3. A lifesaving compact comprising a casing, open at its opposite ends, closure members for said open ends, a tapered core, a life line wound on said core, means to removably support the core and its life line within the casing, a float and means to removably support the float within said casing and above the core, whereby said float may be thrown to the aid of a distressed person in the water, said float being atached to one end of the life line, the other end of said line being connected to a closure member of said casing.

4. A lifesaving compact comprising a casing, open at its opposite ends and provided with a partition located between said ends dividing said casing into upper and lower compartments, said partition having a central opening therein, upper and lower closure members for said ends, said lower closure member having a central opening therein, a float removably retained within said upper compartment between said partition and said upper closure member, a tapered spindle supported within the central openings of said partition and said lower closure member, and a life line wound on said spindle and attached to said float and to a closure member.

5. A lifesaving compact comprising a casing open at its ends, upper and lower closure members for said ends, said lower member having a central opening therein, a partition provided with a central opening and adapted to separate the casing into life line and float compartments, a spindle mounted within the openings in said partition and said lower closure element, a float retained within said upper compartment, and a life line wrapped on said spindle having one end passing through the central opening in said partition and attached to said float and the other end attached to said lower closure member.

CHARLES R. PURDY.