

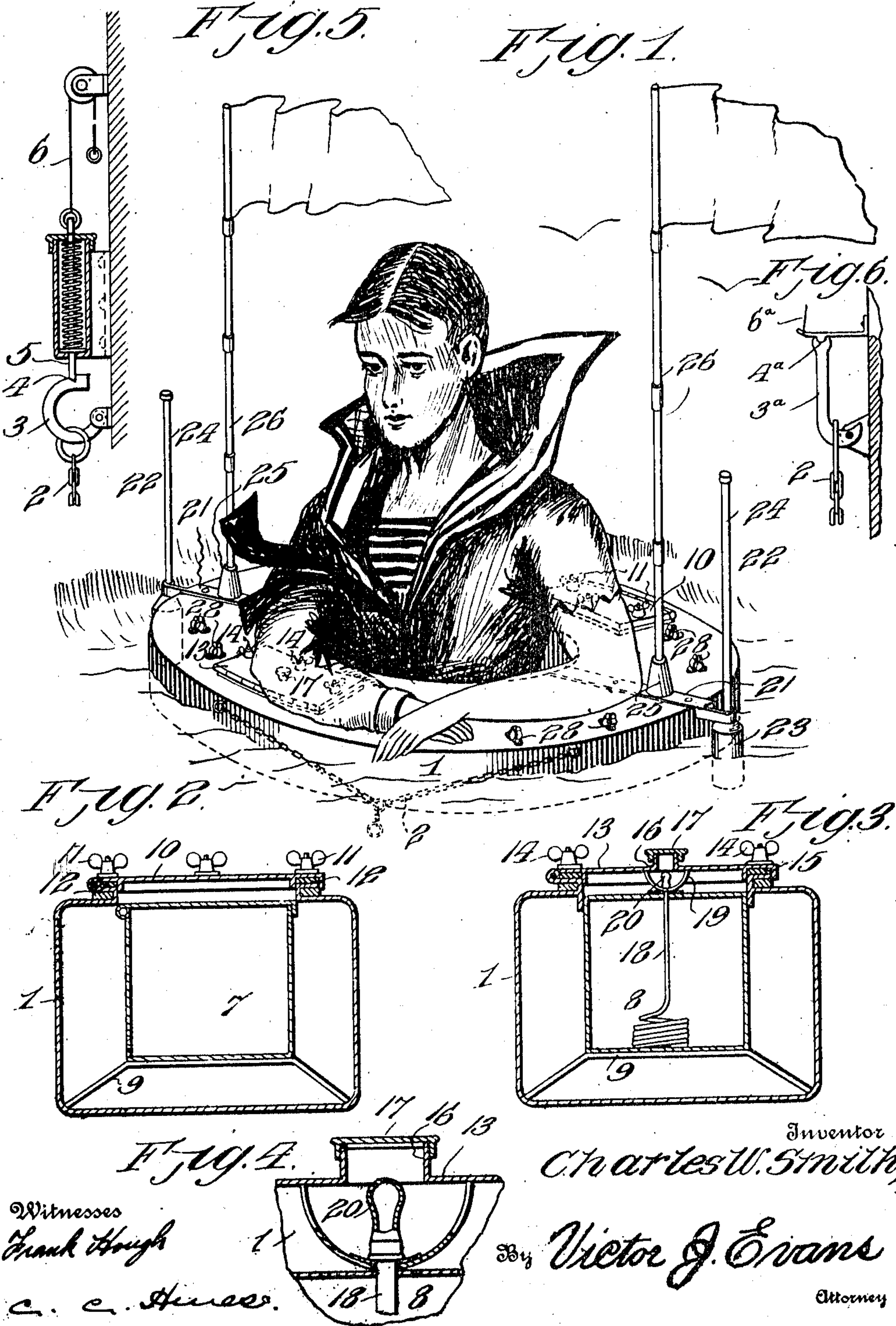
C. W. SMITH.

LIFE BUOY.

APPLICATION FILED MAY 20, 1910.

988,830.

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UNITED STATES PATENT OFFICE.

CHARLES W. SMITH, OF LARIMORE, NORTH DAKOTA.

LIFE-BUOY

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES W. SMITH, a citizen of the United States, residing at Larimore, in the county of Grand Forks and State of North Dakota, have invented new and useful Improvements in Life-Buoys, of which the following is a specification.

This invention relates to life buoys or preservers, the object of the invention being to provide a buoy provided with means for holding water and food for sustaining life while the person wearing the same is afloat, and also provided with means for displaying a day or night signal, whereby the attention of passing vessels may be attracted.

The invention consists of the features of construction, combination and arrangement of parts, hereinafter fully described and claimed, reference being had to the accompanying drawing, in which:—

Figure 1 is a perspective view of a life buoy or preserver embodying my invention. Figs. 2, 3 and 4 are cross sectional views thereof. Fig. 5 is a detail view of the suspending and releasing sling. Fig. 6 is a detail view, showing a modified form of suspending and releasing sling.

Referring to the drawing, 1 designates the buoy which comprises a hollow body of annular form adapted to encircle the person of the wearer in the usual way. This body is adapted to be suspended by a chain 2 from a pivoted sling hook 3 mounted upon some suitable portion of the vessel, said hook having its free end notched, as at 4, to receive the lower end of a locking bolt 5, whereby the hook is normally held in closed position to support the buoy. A rope 6 or other operating device is provided by which the bolt may be retracted to permit the hook to drop and release the buoy, in order that the latter may be cast out into the water for the use of a person washed or falling overboard. The buoys may also be applied by persons deserting a sinking ship, as will be readily understood.

The hollow body of the buoy is provided with compartments 7 and 8 formed by boxes arranged therein and each stayed by suitable braces 9. The compartment 7 is designed for the use of suitable solid food to sustain life and is open at the top and adapted to be closed by a hinged lid or cover 10 adapted to be secured in closed position by a suitable clamping screw 11. The lid closes against a gasket 12, whereby

entrance of water to the compartment is prevented. The compartment 8 is designed to contain fresh water and is open at the top and adapted to be closed by a hinged lid or cover 13 similar to the cover 10, said cover 13 being secured in closed position by clamping screws 14 and arranged to bear in closed position against a gasket 15 to prevent entrance of sea water to the compartment. The cover 13 is provided with an opening surrounded by a threaded neck 16 closed by a screw cover 17. Through this opening a rubber tube or hose 18 arranged within the compartment is adapted to be partially withdrawn in order to enable the wearer of the buoy to draw water there-through from the compartment without removing the cover and permitting sea water to enter said compartment. The free end of this tube passes through a guide opening in a supporting bracket 19 and is provided with a mouth piece 20 normally resting on the bracket so that it may be readily gripped to draw the tube outwardly for use.

Secured to diametrically opposite sides of the buoy at right angles to the compartments 7 and 8 are brackets 21 which project outwardly to support illuminating devices 22, each comprising a bottom reservoir 23 for containing calcium carbide and a torch tube 24 extending upwardly therefrom. Through the admission of water into the reservoir through the torch tubes acetylene gas will be generated from the calcium carbide and may be ignited at the point it escapes from the tubes to produce signal lights or flames at night, in order to attract the attention of passing boats or vessels. In order to enable signals to be displayed during the day time, the brackets 21 are provided with sockets 25 to receive the butt portions of sectional flag staffs 26, which will be supported in the manner shown in Fig. 1 to display flags at an elevation sufficiently high to attract attention. The sections of these staffs are adapted to be engaged when not in use with spring clips or holders 28 arranged upon the upper surface of the buoy, by which they will be prevented from being washed away or injured during the time they are not in service.

As shown in Fig. 6, the pivoted swing hook 3^a may be slightly modified in form and notched at its free end 4^a to receive a projection 5^a upon a locking spring 5^b, whereby the hook is normally held in closed

position to support the bow, a rope 16^a or other suitable operating device being connected with the spring for retracting it to release the hook.

8 From the foregoing description, taken in connection with the drawings, the construction and mode of use of my improved life buoy will be readily understood, and it will be seen that a buoy is provided which will
10 carry without liability of injury from sea water a sufficient supply of food and fresh water to sustain life for a considerable period and which also carries signaling devices for both night and day use.

15 Having thus described the invention, I claim:—

A life buoy comprising a buoyant body having a compartment therein, a cover for

said compartment provided with an opening, a closure for said opening, a supporting bracket secured to the underside of the cover and having an aperture therein in alinement with the opening, a draft tube disposed within the compartment and having one end projecting therefrom through the top of the compartment and aperture in the bracket, and a mouth piece carried by said end of the tube and adapted to normally rest upon said bracket.

In testimony whereof I affix my signature 30 in presence of two witnesses.

CHARLES W. SMITH.

Witnesses:

O. A. HAZEN,
C. J. McKEON.