

(No Model.)

C. A. L. KÖPCKE.  
LIFE PRESERVER.

No. 455,667.

Patented July 7, 1891.

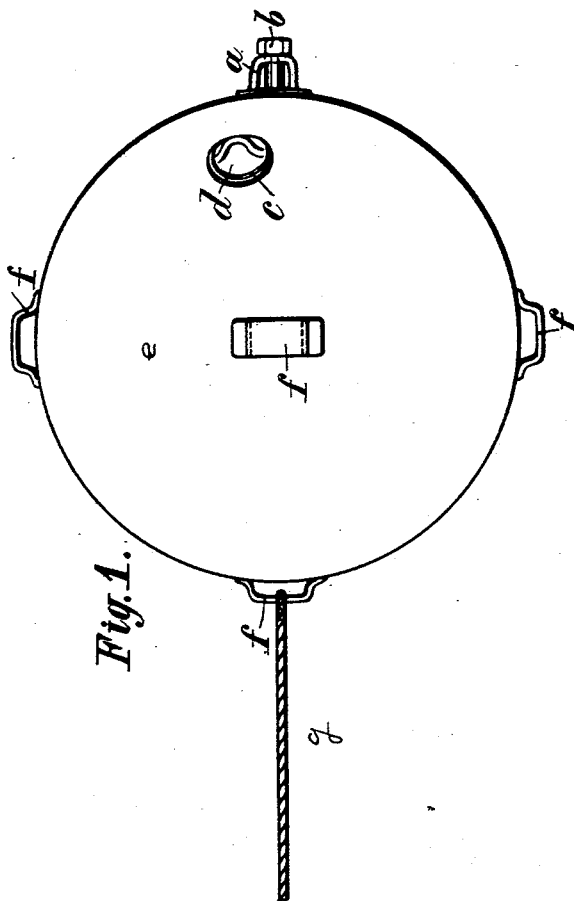


Fig. 1.

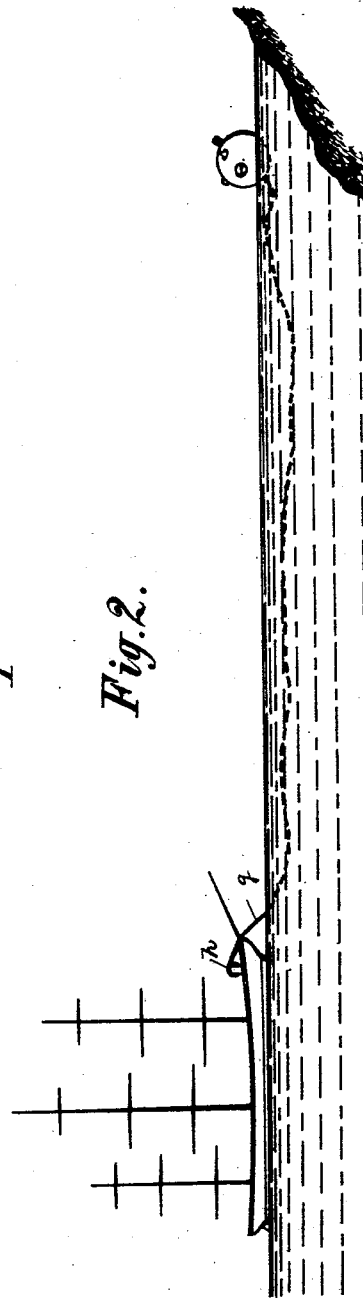


Fig. 2.

Witnesses:  
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Inventor  
*Carl A. L. Köpcke*  
per *O. E. Duffy*  
Attorney

# UNITED STATES PATENT OFFICE.

CARL AUGUST LUDWIG KÖPCKE, OF ROTTERDAM, NETHERLANDS.

## LIFE-PRESERVER.

SPECIFICATION forming part of Letters Patent No. 455,667, dated July 7, 1891.

Application filed January 7, 1891. Serial No. 376,963. (No model.)

*To all whom it may concern:*

Be it known that I, CARL AUGUST LUDWIG KÖPCKE, a subject of the King of Netherlands, residing at Rotterdam, Netherlands, have invented certain new and useful Improvements in Life-Preservers, of which the following is a specification.

This invention relates to certain improvements in life-saving apparatus.

The object of the invention is to provide improved means whereby communication may be established between a vessel and the shore or between two vessels.

The invention comprises a ball designed for transporting a rope from a ship to the shore or from one ship to another, so as to establish a connection either between the ship and the land or between two ships.

In the accompanying drawings, Figure 1 indicates a plan view of the ball. Fig. 2 is a view showing a ship and the shore and the invention as in use.

In the drawings, the reference-letter *a* indicates the hollow air-tight body or ball, which preferably has a diameter of about two meters and is made of water and air tight material, preferably india-rubber cloth. This ball is provided with the exterior handles or strong metal loops *f*, to which the rope *g* can be secured. The opposite end of this rope *g* can be secured to and wound upon a windlass or reel suitably located upon the vessel. The ball is inflated through metal tube *b*, opening thereinto and provided with suitable means—such as a check-valve—to prevent outflow of air or gas, but allow inflow. This tube *b* is protected by a bridge-piece *a*. The air outlet or exit is located in proximity to the inflating-tube and consists of the metal ring *c*,

secured in an aperture in the ball and internally screw-threaded, and the threaded cap *d*, secured therein and provided with a handle whereby it can be operated. When the ball is inflated, the air can be discharged therefrom by merely removing cap *d*, and the ball can then be folded into a small compass and packed in any desired portion of the vessel, and in case of emergency it can be quickly inflated by any suitable means and thrown overboard, whereupon it will be driven ashore by the motion of the water, and when it has reached the land the ball is caught by the persons there and the rope is detached from it, and connection is thus established with the land and the shipwrecked persons can be rescued from a stranded or otherwise injured vessel. Communication can be also established between two vessels in the same manner.

What I claim is—

The combination, with a vessel, of a reel thereon, a cable on said reel, a hollow air-tight ball of collapsible material provided with exterior metal loop-handles, to one of which the end of said cable is secured, the inflating-tube, the bridge-piece protecting such tube, the air-outlet composed of a metal ring secured in an aperture in the ball, and the threaded cap for such aperture having a handle, for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CARL AUGUST LUDWIG KÖPCKE.

Witnesses:

JACOB KÖPCKE,  
LEONARD KOOS.