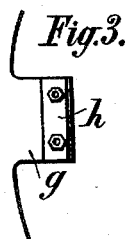
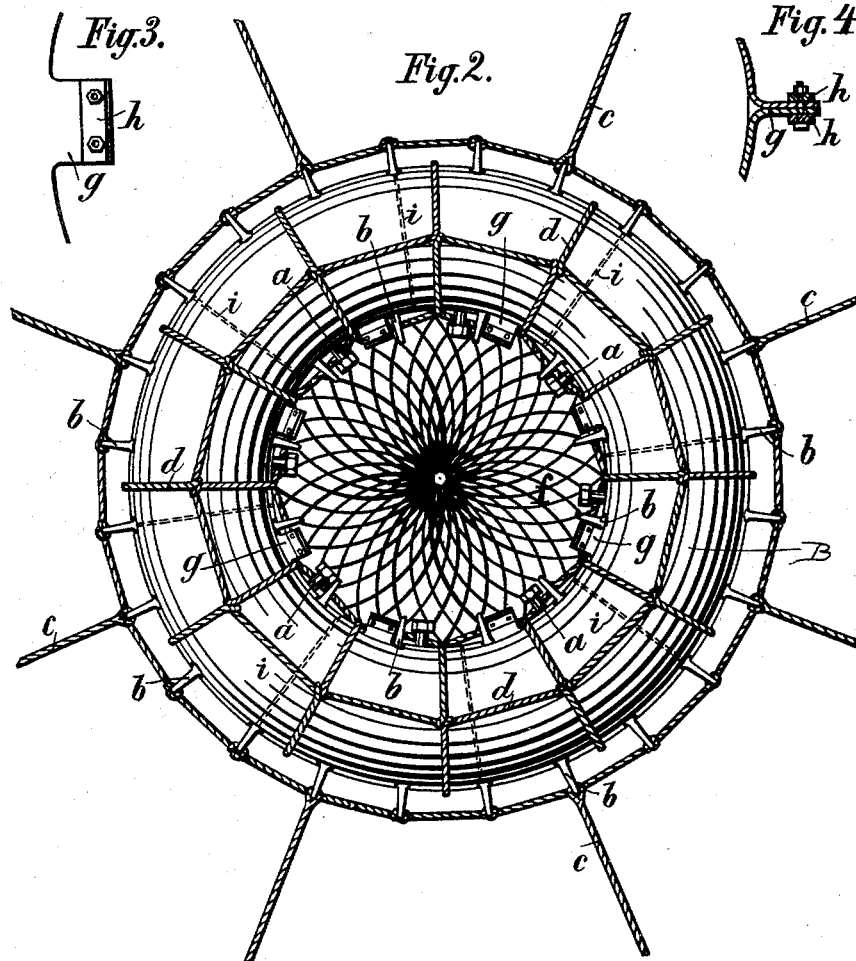
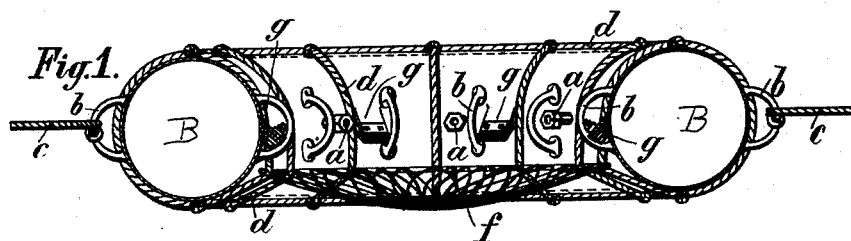


(No Model.)

C. A. L. KÖPCKE.
LIFE PRESERVER.

No. 456,621.

Patented July 28, 1891.



Witnesses:

E. C. Duffy

H. E. Peck

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. 456,621, dated July 28, 1891.

Application filed January 7, 1891. Serial No. 376,962. (No model.)

To all whom it may concern:

Be it known that I, CARL AUGUST LUDWIG KÖPCKE, a subject of the King of the 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-preservers.

The object of the invention is to provide an improved life-preserver simple, cheap, and durable in construction and capable of supporting a great number of persons.

This invention consists in certain novel features of construction and in combinations of parts more fully described hereinafter, and particularly pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is a cross-section of the life-preserver. Fig. 2 is a top plan. Figs. 3 and 4 are detail sections of the air-escapes from the various compartments of the preserver, the sections being taken at right angles to each other.

In the drawings, reference-letter B indicates a ring made of water and air tight material, preferably collapsible. This ring is divided into a series of separate compartments by the interior radial partition-walls *i*. These compartments are inflated or collapsible in succession. Each compartment is provided with an inflating-tube *a*, located on the inner side or periphery of the ring and provided with the check-valve or other means to prevent outflow of the air or gas. Each ring is also provided with an air-discharge, consisting of an opening, and two exterior lips *g* on opposite sides of said opening, and the opening is tightly closed by the clamping-plates *h* drawn tightly together by screws, as shown. The air can be discharged by releasing or moving these clamping-plates *h*. The ring is provided on its exterior and interior peripheries with series of metal loops or handles *b*, so that shipwrecked persons can easily cling to the life-preserver. To any suitable number of these handles are attached short ropes *c*,

whereby persons may be able to tie themselves to the ring. The ring is also bound exteriorly with ropes *d*, which form hand-holds for persons clinging to the preserver. The inner opening of the ring is filled by an extended net *f*, securely fastened to the inner periphery of the ring, preferably, by means of the ropes *d*. This net serves as a support for women, children, and valuable articles in case of shipwreck. The ring when collapsed can be folded into a small compass and can be quickly and easily inflated when desired for use.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The life-preserver consisting of the single hollow collapsible air-tight ring divided into separate radial compartments, each provided with inflating and discharge openings on the inner side of the ring, each discharge composed of the two opposite exterior lips and the clamping-plates and bolts, the handles on the exterior of the ring, the netting closing the center of such ring, and the exterior binding of rope securing such netting and forming hand-holds, as shown and set forth.

2. The life-preserver consisting of the single collapsible ring divided into separate radial air-compartments, each provided with an inflating-opening at the inner side of the ring, the rigid loops on the exterior of the ring, the netting in the center of the ring, the exterior binding of rope extending around and longitudinally of the ring, forming hand-holds and securing the netting, as shown and 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 KOOT.