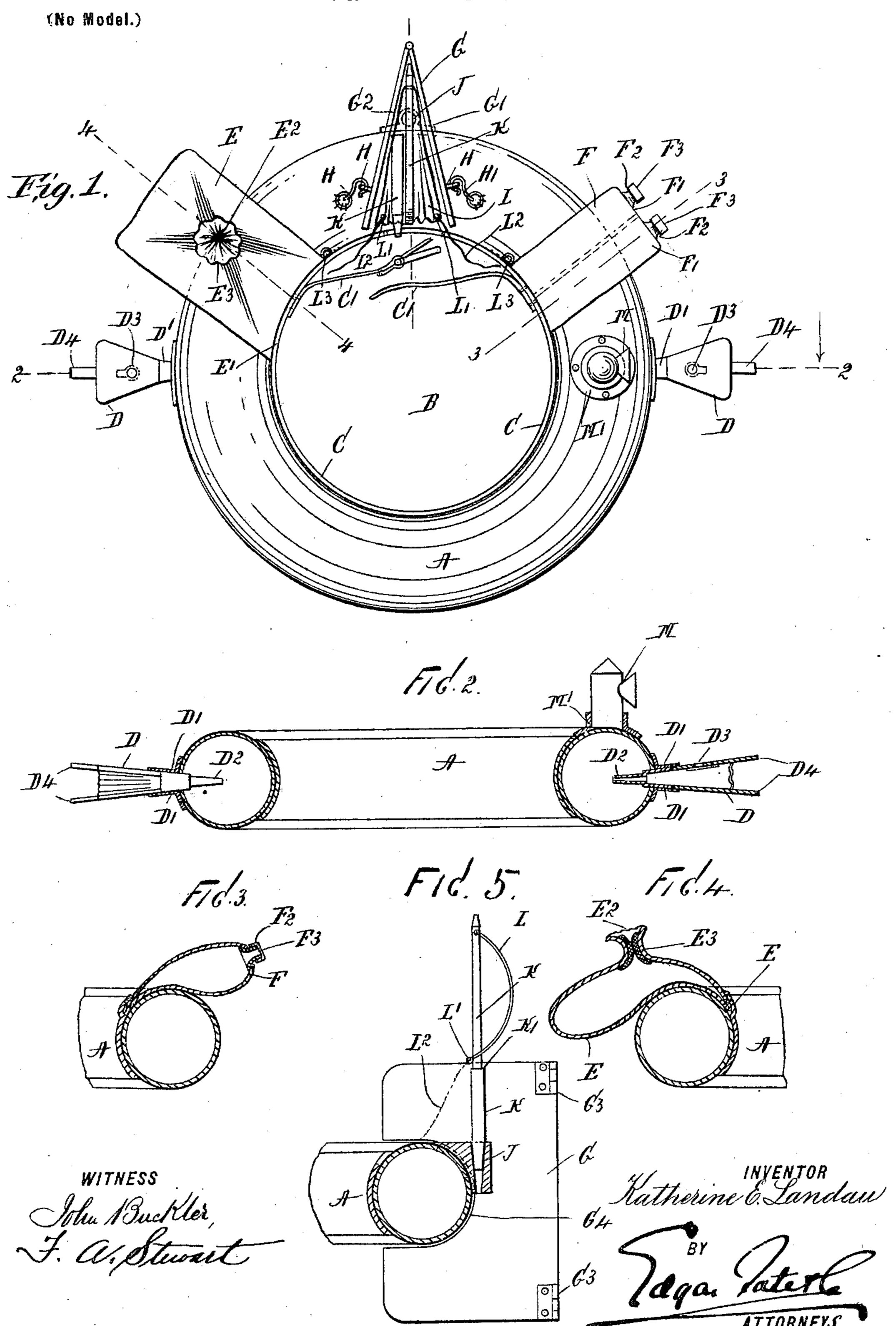
## K. E. LANDAU.

## LIFE PRESERVER.

(Application filed Sept. 24, 1898.)



## United States Patent Office.

KATHERINE E. LANDAU, OF NEW YORK, N. Y.

## LIFE-PRESERVER.

SPECIFICATION forming part of Letters Patent No. 626,283, dated June 6, 1899.

Application filed September 24, 1898. Serial No. 691,759. (No model.)

To all whom it may concern:

Be it known that I, KATHERINE E. LANDAU, a citizen of the United States, residing at New York, in the county of New York and State 5 of New York, have invented certain new and useful Improvements in Life-Preservers, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and to use the same.

This invention relates to life-preservers, and more especially to life-preservers adapted to be inflated and fastened below the arms of the wearer.

The object of this invention is to furnish a life-preserver comparatively cheap, simple to operate, and having additional features and functions which capacitate it for extended use in the case of shipwreck or similar ex-20 posure.

Reference is made to the accompanying drawings, forming part of this specification, in which like letters of reference denote like parts, and in which—

Figure 1 is a plan view of the improved lifepreserver. Fig. 2 is a sectional view of Fig. 1 on the line 22; Fig. 3, a sectional view of Fig. 1 on the line 33; Fig. 4, a sectional view of Fig. 1 on the line 44, and Fig. 5a sectional view of 30 Fig. 1 on the line 5 5.

Referring to the drawings in detail, A is the life-preserver, which is tubular in crosssection and preferably composed of rubber, rubber and canvas, or other waterproof ma-35 terial and is circular in form, providing a circular interior space B centrally. The lifepreserver is passed about the body of the wearer approximately below the arms and tied or buckled snugly against the body by 40 the ends C' of tapes or straps C, attached to the life-preserver and surrounding the circular interior space B. Bellows D are mounted on the exterior curve of the life-preserver | life-preserver, is a wave-deflector G, compris- 95 approximately on a diametrical line passing 45 through the center of the circular space B by means of tacked and stitched or otherwisefastened strips D', the nozzles D<sup>2</sup> of the bellows projecting into the interior of the tubular life-preserver A. These bellows are of 50 any suitable form, but preferably of the ordinary two-faced compressible pattern, having a flap-valve and vent D<sup>3</sup> in the upper

face and operating lever-arms D<sup>4</sup> at the outer end. These bellows are designed to inflate the life-preserver and are so arranged that 55 the wearer can operate one at either side.

Between the bellows D and on the same side of the diametrical line in which the bellows are mounted, as the ends C' of the tapes or straps C, is mounted an elastic waterproof 60 receptacle E, being stitched, tacked, or otherwise fastened at the lower portion to the upper curve of the tubular life-preserver A, as at E'. The receptacle E may extend beyond the periphery of the life-preserver A 65 and be adapted to rest upon the water and is preferably ovally rounded in form to avoid splashing of contacting water. Resting on the water thus the receptacle E may be kept. cool by the water. In the upper side of the 70 receptacle is an upwardly-extending purseshaped mouth E2, preferably lined with an elastic strip E<sup>3</sup>, which tends to keep the mouth E<sup>2</sup> closed. This receptacle is adapted to receive food, valuables, or other substances, 75 and the purse-shaped elastic mouth prevents the entrance of water normally and during insertion of the hand into the receptacles.

Between the receptacle E and the farthest adjacent bellows D, that it may be conven- 80 iently placed with respect to the hands of the life-preserver wearer, is another receptacle or pair of receptacles F, similar in construction and method of attachment to the lifepreserver A, excepting that the body is ap- 85 proximately bottle-shaped and the mouth or opening at the outer end has a hollow plug F2, threaded exteriorly and fitted with a screwcap F<sup>3</sup>. The receptacle F is designed to hold milk, water, whisky, or other stimulant or bev- 90 erage. Two of these receptacles F are shown in Fig. 1.

Between the receptacles E and F, arranged with respect to the face of the wearer of the ing two parts or sides G' G2, hinged at top and bottom G<sup>3</sup>, and fitting at their center portions, which are concavely cut away for the purpose about the exterior curve of the lifepreserver, as at G4. These deflector sides G' 100 G<sup>2</sup> bear exteriorly eyes H, which are adapted to receive hooks H', secured to the upper and lower curve of the life-preserver A. Any suitable fastening means may, however, be substituted for the above. Fixed to the exterior curve of the life-preserver, between the sides G' and G² of the deflector, is a socket J, into which a mast K may be stepped, and said 5 mast K preferably is jointed at or near its middle portion, as at K', and bears a triangular sail L, which may be folded and placed with the disjointed mast between the sides of the deflector G. The sail L may have eyes to L' and cords or sheets L², which may be fastened to eyes L³, secured to the life-preserver A. This sail L may be used for moderate propulsion or for steadying the life-preserver and wearer.

A lantern M is removably secured to the upper curve of the life-preserver by means of cleats or a socket M', and acts as a guide to searching parties when the life-preserver is used in shipwrecks. It is preferably made as waterproof as possible.

It is evident that many changes may be made in the details of construction of this device without departing from the spirit of my invention, and I reserve the right to make all such alterations in said construction as fairly come within the scope of the invention.

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

1. A pneumatic life-preserver, comprising an annular tubular waterproof body, means for inflating the same attached thereto and means consisting of vertical wings or plates for deflecting the waves from the said life-preserver, substantially as shown and described.

2. A pneumatic life-preserver, comprising an annular tubular waterproof body, bellows approximately diametrically opposite, connected with said body and communicating with the interior thereof, a line connecting them dividing the said body into approximately two equal segmental parts, means for securing said life-preserver about the body, consisting of tapes terminating on one side of

said diametrically connecting line, and on the same side of said line, a food-receptacle, a liquid-receptacle and means for deflecting the waves from the face and body of the wearer of the life-preserver, substantially as shown 50 and described.

3. The combination with a life-preserver, constructed as herein described, of vertically-projecting wings arranged to deflect the waves, substantially as shown and described. 55

4. A pneumatic life-preserver, comprising an annular tubular waterproof body, means for inflating the same attached thereto, and means consisting of vertical hinged wings extending below and above said life-preserver 60 for deflecting the waves from the said life-preserver, substantially as shown and described.

5. The combination with a life-preserver provided with a tubular body portion, of a 65 wave-deflector comprising two hinged plates, the free edges of which are cut away to fit said body portion, and devices secured to said body portion and said plates for removably attaching said wave-deflector to said body 70 portion, substantially as shown and described.

6. The combination with a life-preserver of the class described, provided with a body portion having a socket-piece, of a collapsi- 75 ble mast adapted to fit said socket-piece, a triangular sail secured at the upper corner to said mast, the lower corners being provided with sheets or cords, and devices secured to said life-preserver and to which said cords 80 are adapted to be secured, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 23d 85 day of September, 1898.

KATHERINE E. LANDAU.

Witnesses:

F. A. STEWART,

V. M. Vosler.