

F. G. C. WEIR.  
Life-Preserver.

No. 213,152

Patented Mar. 11, 1879.

FIG. 1.

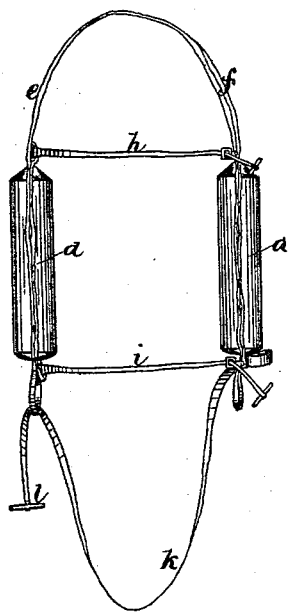


FIG. 2.

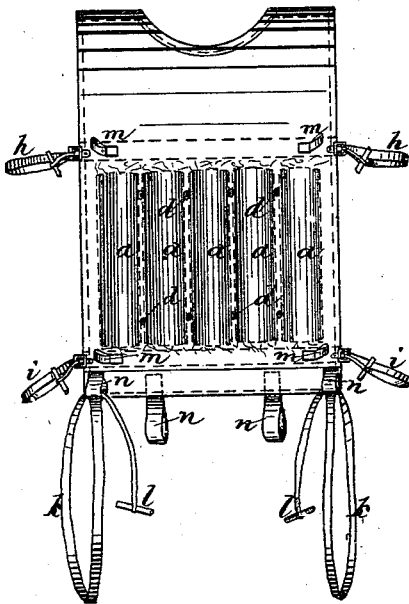


FIG. 3.

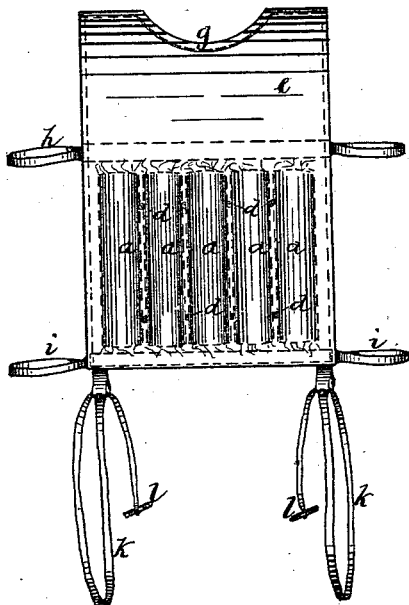


FIG. 4.



Witnesses

Charles Smith  
Geo. D. Pinckney

Inventor

Frederick G. C. Weir  
per Lemuel W. Serrell  
att'y

# UNITED STATES PATENT OFFICE.

FREDERICK G. C. WEIR, OF CLIFTON, ENGLAND.

## IMPROVEMENT IN LIFE-PRESERVERS.

Specification forming part of Letters Patent No. **213,152**, dated March 11, 1879; application filed November 25, 1878; patented in England, April 15, 1878.

*To all whom it may concern:*

Be it known that I, FREDERICK GEORGE CHARLES WEIR, of Clifton, in the county of Gloucester, England, have invented new and useful Improvements in Apparatus or Appliances for Supporting Persons in Water, which improvements are fully set forth in the following specification, reference being had to the accompanying drawings.

The primary object of this invention is intended for the preservation of life at sea and for use in cases of emergency, although it may be used at other times—while bathing, for example. It occupies, when rolled up, a very small space, and when opened for use is with great facility adjusted and secured to the body of the wearer.

My invention consists of a life-preserving jacket composed of a front and back portion connected together by a part passing over the shoulders, having an aperture for the head. Said jacket is made of two thicknesses of canvas, or any other desirable material, between which I place vessels or tubes of a cylindrical form, containing air, and sealed, the cylinders being held in place by cords and buttons, or by rows of stitches through the two thicknesses of canvas; and I provide straps at the sides of the jacket, connecting the same under the arms and at the waist, and other straps passing beneath the body, between the legs, to prevent the life-preserver working up when in the water.

Figure 1 is a side view of the apparatus constructed according to my invention. Fig. 2 is a front, and Fig. 3 is a back, view of same; and Fig. 4 is a section through the line A A of Fig. 2.

Similar letters of reference refer to like parts in all the figures.

*a a* are the cylindrically-shaped sealed vessels. *b* is the covering thereto. Each vessel is kept separate and distinct from one another by cords *c*, secured by buttons *d*, as best seen at Fig. 4, or completely sewed through, attaching closely the covering back to front between the cylinders, so as to yield more readily to the action of the body.

*e* is the back, and *f* the front, piece, with aperture therein at *g* for the head of the wearer to pass through. *h h* are straps passing under the arms; *i i*, waist-straps; *k k*, leg-

straps. These straps are preferably provided with toggles *l* at the end for keeping the straps in position when extended, by which it would be always perfect for immediate use—this, as regards the breast and waist and the leg straps, to be more convenient for securing same to loops, and with, when necessary, adjustable buckles. *m m* are the side, and *n n* the bottom, loops.

By these arrangements of straps the apparatus is kept in much the same position when fitted to the wearer, as it cannot move up or down or in any direction more than is allowed by the play of the straps or bands. The apparatus, when applied to a person's body, presents the appearance of a jacket. When removed from the body the hermetically-sealed vessels come close together, and consequently the apparatus, when packed, goes into a comparatively small space.

The vessels may be placed vertically, as shown in the drawings, or horizontally; but in practice I find a vertical position the better of the two. I find five vessels on each side a convenient number. However, it must be understood that I do not limit myself to this number, as they may be, according to circumstances, less or more. I call the apparatus the "Seamen's Safety."

I am aware that life-preserving jackets adapted to being passed around the body have been fastened with straps over the shoulders, and by straps extending down to stirrups for the feet, as in Letters Patent No. 156,443; and in other instances the buoyant substances have been at the front and back of the person.

I claim as my invention—

The life-saving jacket composed of the back *e* and front *f*, extending over the shoulders, and having an aperture at *g* for the head, and containing the air tubes *b*, in combination with the straps *h*, waist-straps *i*, and leg-straps *k*, the parts being constructed and operating substantially as shown and described.

FREDERICK GEORGE CHARLES WEIR.

Witnesses:

DAVID DAVIS REES,

HENRY LEAKEY,

Clerks to Messrs. Strick & Bellingham, Solicitors, Swansea.