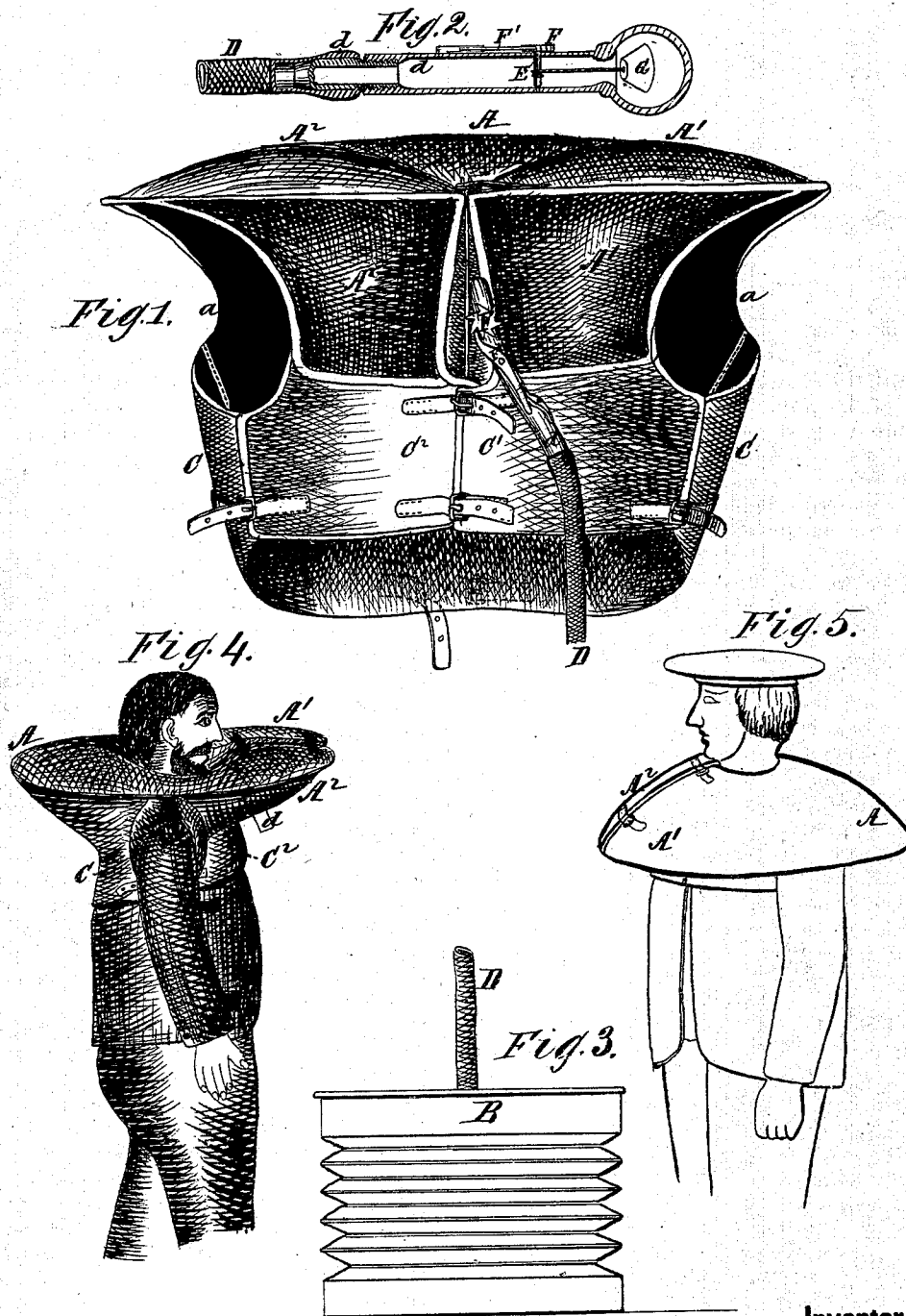


G. & C. PALMER.
Life-Preserving Capes.

No. 144,561.

Patented Nov. 11, 1873.



Witnesses:
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UNITED STATES PATENT OFFICE.

GEORGE PALMER AND CHARLES PALMER, OF MORRIS RUN, PENNSYLVANIA.

IMPROVEMENT IN LIFE-PRESERVING CAPES.

Specification forming part of Letters Patent No. **144,561**, dated November 11, 1873; application filed June 17, 1873.

To all whom it may concern:

Be it known that we, GEORGE PALMER and CHARLES PALMER, of Morris Run, in the county of Tioga and State of Pennsylvania, have invented a new and Improved Cape Life-Buoy; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification.

The invention will first be fully described, and then clearly pointed out in the claim.

Figure 1 is a front elevation of the cape when inflated. Fig. 2 is a longitudinal view, partly in section, of the pipe by which the cape is inflated and its stopper. Fig. 3 is a side elevation of bellows and pipe; and Figs. 4 and 5 are side elevations, showing the cape inflated and not inflated.

In the drawing, A A¹ A² represent a hollow circular cape, made of, or lined on the inside with, water-tight material, and provided with buckles and straps to fasten the same after being placed about the neck. B is a bellows, connecting with the chamber inside of cape by a rubber pipe, D, whereby the cape can be inflated. The cape A is made in three compartments, so as to allow openings *a a* to receive the shoulders. C C¹ C² are broad pieces, attached, respectively, to the compartments A A¹ A², and provided with buckles and straps, by which they are fastened under the arms. This has the effect to bring the strain beneath the arms, instead of allowing it to be brought to bear upon the neck or head.

This cape, as soon as collapsed, falls upon the shoulders, and may be ordinarily worn by sailors or others, affording a water-proof protector in bad weather, as well as a life-protector in case of accident.

The parts *d d* of pipe D are made of brass, and threaded to form nut and screw. E is a

pin, having a ratchet-head, F, held by a pawl, H, and attached to one end of a piece of cat-gut, whose other end is fastened to a rubber stopper, G.

As soon as the buoy is full, three turns of the ratchet-pin E will draw the stopper into the pipe sufficiently tight to prevent the air from escaping, while a pawl, H, will hold it. When it is to be emptied, the ratchet-pin is to be turned back the same number of times, and that part between the brass and the buoy pressed with the finger and thumb. This will force the stopper from its place, and cause it to hang inside, as shown in the drawing.

This buoy can be got ready for use within two minutes, filled before or after it is put on, and put on in the same manner as a vest. It will fit almost any size of person by altering the back and side straps, when the only straps then to be used are the front straps. We have tested it, and have tried all means to force ourselves under water, but failed to do so, and feel sure of its capability of keeping any person afloat. The bellows for filling it with air can be detached. When it is full, three turns of the screw will draw the stopper into its place. The bellows then can be taken off and put into the pocket.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

A sailor's water-proof cape constructed and adapted, as described, to be converted by inflation into a life-preserver, in which the point of suspension is by the arms, substantially as described.

GEORGE PALMER.
CHARLES PALMER.

Witnesses:

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