(No Model.)

E. BAUER.

LIFE PRESERVER.

No. 281,824. Patented July 24, 1883.

Fig. 1



Fig. 4

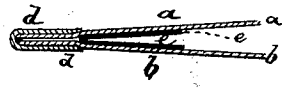


Fig. 2

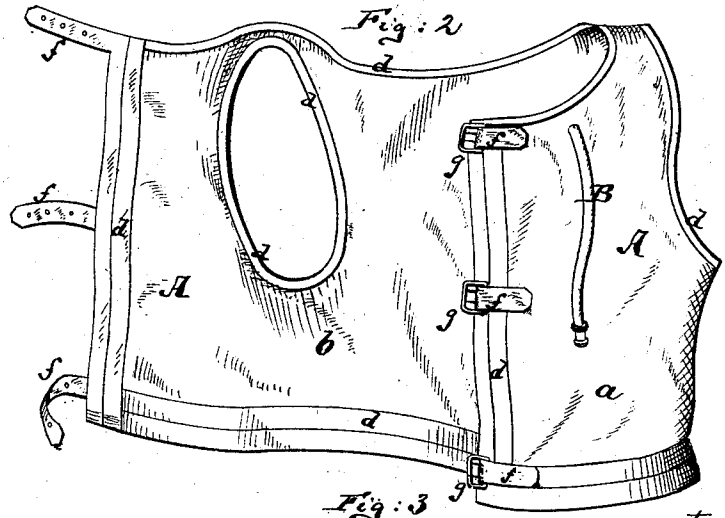
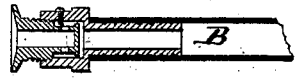


Fig. 3



Witnesses:
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UNITED STATES PATENT OFFICE.

ERNST BAUER, OF BROOKLYN, NEW YORK.

LIFE-PRESERVER.

SPECIFICATION forming part of Letters Patent No. 281,824, dated July 24, 1883.

Application filed March 17, 1883. (No model.)

To all whom it may concern:

Be it known that I, ERNST BAUER, of Brooklyn, Kings county, State of New York, have invented an Improvement in Life-Preservers, of which the following is a specification.

Figure 1 is a perspective view of my improved life-preserver, showing it on the wearer. Fig. 2 is a perspective view of the same, showing it unfolded. Fig. 3 is a horizontal section of the mouth end of the tube for inflating the garment with air. Fig. 4 is a detail cross-section of one of the seams of the garment.

This invention has for its object to provide for sea-faring men and travelers a garment which may serve as an ordinary vest, coat, or under-garment in ordinary times, but which, in case of danger, can at once be inflated with air to become a life-preserver.

The invention consists in the new construction of such a garment, as hereinafter more fully described.

In the drawings, the letter A denotes the vest, which may be made of cloth lined with india-rubber, gutta-percha, or other suitable water-tight and air-tight material. This vest may be cut in any desired shape so that it will properly fit around the upper part of the human body, and is provided with openings for the neck and arm. It is made of two thicknesses of material, the letter *a* representing the outer thickness and the letter *b* the inner thickness of the material of which said vest is composed. Wherever these two thicknesses join at the edges or contour of the garment or any of its apertures, the seam connecting them is formed as shown in Fig. 4—that is to say, by an outer overlapping portion, *d*, and an inner connecting portion, *e*, of water-proof fabric. The seam is constructed as follows: The folded piece of fabric *e*, for the inner connection, is first placed between the parts *a* and *b* at some distance from their ends, and is then united thereto by cement or in any other suitable manner; but cement is preferred. The projecting portions of the parts *a b*, where they extend beyond the angle of the folded piece *e*, are then incased in the outer folding or overlapping piece *d*, as shown in Fig. 4, which piece *d* is also cemented in place.

It will thus be seen that I make the joint doubly secure, for should the outer piece, *d*, give way the inner piece, *e*, will still constitute a tight joint; and in like manner, if the inner piece should first give way, the outer will still prevent the garment from leaking; and, moreover, in having the part *d* lapped over the fabrics *a b* at those parts only where they project beyond the inner folded part, *e*, the bulkiness which would otherwise result from the joint use of an inner and an outer lap-piece is avoided.

From any suitable part of the garment A extends a tube, B, having a mouth-piece such as is indicated in Fig. 3, that can be readily closed or opened for the purpose of inflating the garment or letting out the air.

The practical operation of my life-preserver vest is as follows: As ordinarily worn it forms an ordinary vest with a double thickness of material, containing only the usual amount of air between the thicknesses of which it is made; but when it is desired to use the vest as a life-preserver the tube B is put to the mouth of the wearer, as shown in Fig. 1, or air is otherwise forced through it into the space between the layers of fabric, *a* and *b*, of which the vest is composed, and this space is thus filled with air, and the walls of the vest are inflated as far as desired. The valve at the end of the tube B is then closed, so as to prevent the air from again escaping.

Thus the vest A forms a life-preserver which will readily support a person wearing it when in the water. When the occasion for its use as a life-preserver has passed, then by merely opening the valve in the tube B, the air can be let out and the vest become again an ordinary garment.

In front, or wherever the ends of the vest meet on the body of the wearer, it is provided with straps *f* and buckles *g*, or other fastening contrivance.

I claim—

1. In a water-proof garment made of an outer fabric, *a*, and an inner fabric, *b*, the

combination thereof with the outer lapping fabric, *d*, and inner folded fabric, *e*, for forming the joints or connections between the parts *a* and *b*, as specified.

2. The water-proof vest A, made of two thicknesses of water-tight material, joined at the edges by fabrics *d e*, substantially as described, and provided with straps *f* and buckles *g*, and with the filling-tube B, substantially as and for the purpose specified.

ERNST BAUER.

Witnesses:
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