May 5, 1925. 1,536,627

T. I. POTTER

LIFE PRESERVER

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Fig. 1.

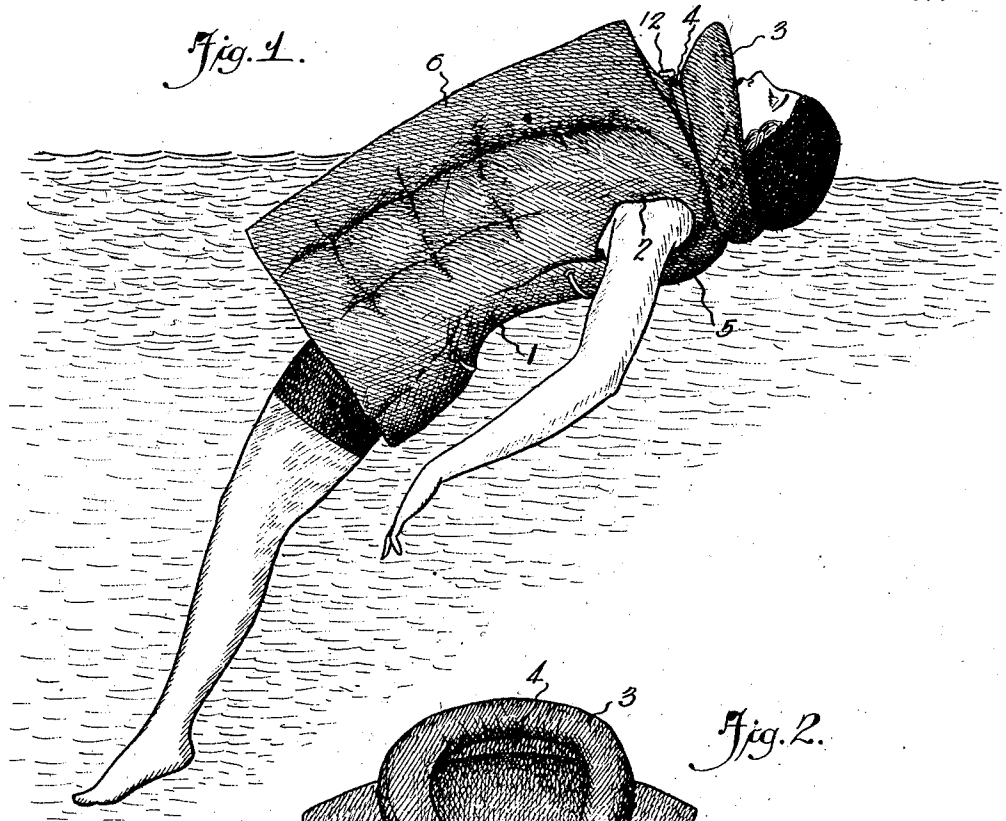
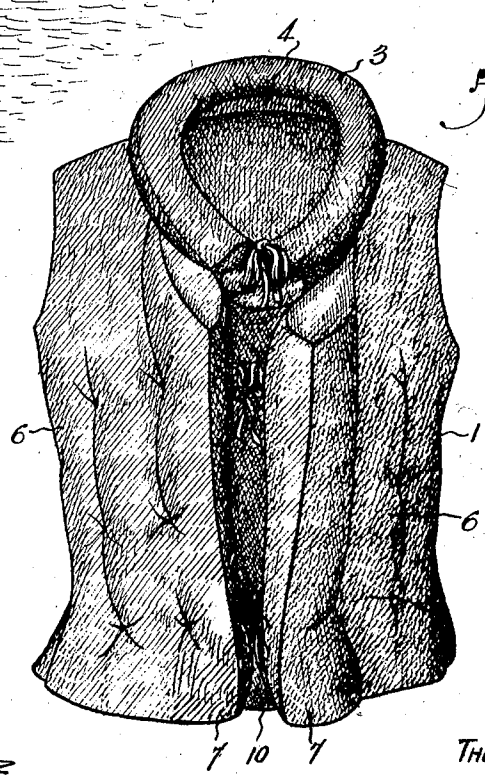


Fig. 2.



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LIFE PRESERVER

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Fig. 3.

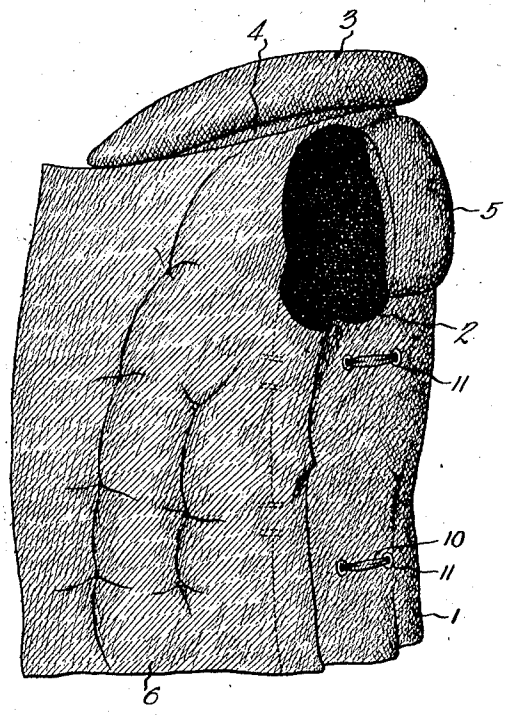


Fig. 5.

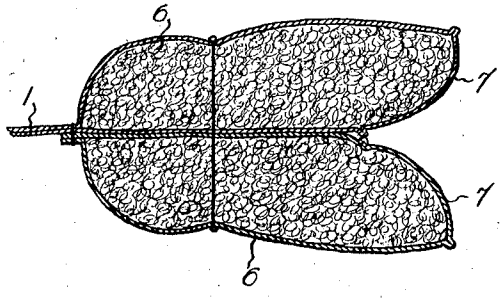


Fig. 7.

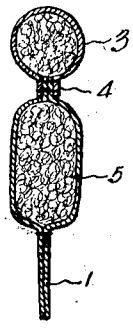
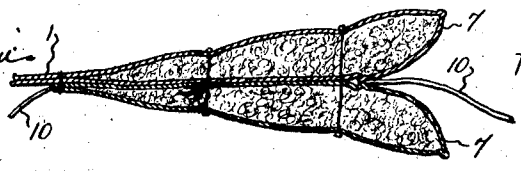


Fig. 6.



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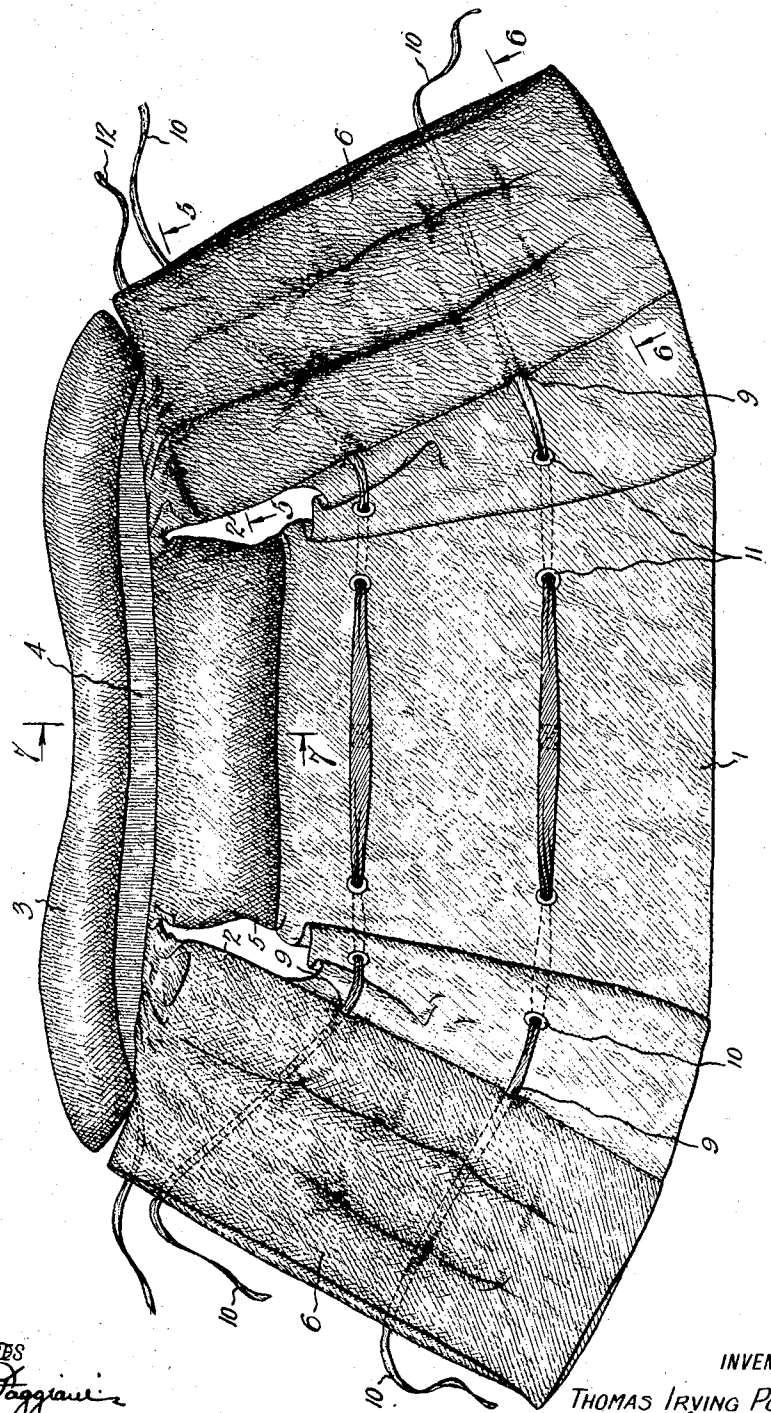


Fig. 4.

WITNESSES

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UNITED STATES PATENT OFFICE.

THOMAS IRVING POTTER, OF ORANGE, NEW JERSEY, ASSIGNOR TO FEDERATED ENGINEERS DEVELOPMENT CORPORATION, OF JERSEY CITY, NEW JERSEY, A CORPORATION OF DELAWARE.

LIFE PRESERVER.

Application filed August 19, 1922. Serial No. 582,973.

To all whom it may concern:

Be it known that I, THOMAS I. POTTER, a citizen of the United States, and a resident of Orange, in the county of Essex and State of New Jersey, have invented a new and Improved Life Preserver, of which the following is a full, clear, and exact description.

This invention relates to improvements in life preservers, particularly to a life preserver which is adapted to prevent the drowning of an unconscious wearer.

To be more specific, the primary object of the invention is the provision of a life preserver which will serve to maintain a wearer in a backwardly reclining position with his face well out of the water and a preserver which by virtue of its construction will quickly turn a wearer on his back regardless of the position in which he may fall into the water, and regardless of whether or not he is conscious.

The invention further contemplates the provision of a device of this character in the nature of a reversible jacket which may be quickly donned either in the water or out of it and which will have the necessary buoyant qualities for keeping a wearer afloat during a prolonged period.

A still further object of the invention is the provision of a life jacket characterized by the above enumerated advantages and conveniences and having in addition the property for cushioning the impact incidental to a user falling or jumping into the water. The hazard incidental to jumping from the deck of a ship into the sea with a cork life preserver on is well known.

Another object is to provide a device of the character stated which is self-adjusting to fit all users which will be comfortable in use, simple, practical and strong in construction and which will occupy a comparatively small amount of storage space.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings,

Figure 1 is a perspective view illustrating the manner of use of my improved life preserver and indicating approximately the position in which an unconscious person is supported in the water.

Figure 2 is a perspective view of the jacket.

Figure 3 is a side elevational view thereof.

Figure 4 is a plan view of the same.

Figures 5, 6, and 7 are detail sectional views on the lines 5—5, 6—6, and 7—7 respectively of Figure 4.

Referring with particularity to the drawings, I have used the reference numeral 1 to indicate the entire body encircling jacket.

This jacket is formed with the usual arm holes 2 and a buoyant collar 3 is flexibly attached to the upper edge or shoulder line of the jacket by a relatively narrow connecting strip 4. A rectangular pad 5 stuffed with suitable buoyant material such as kapok extends between the arm holes and is adapted to overlie the shoulders of a wearer.

It is evident from the drawings that the jacket is reversible and opens down the front. The front of the preserver is buoyantly reinforced adjacent the meeting edges thereof by pairs of superimposed pads or cushions designated by the reference numeral 6. These cushions taper from the forward meeting edges rearwardly, as seen most clearly in Figures 5 and 6 of the drawings, and in addition to their transverse taper are of proportionately decreasing thickness from their upper to their lower ends. One pair of cushions is provided on each side of the front of the jacket and each pair are sewed or otherwise secured together in superimposed relationship throughout the major portion of their width. The forward or adjacent edges of the pairs of pillows, however, are under connected so that pairs of pillow ends 7 are presented toward each other at each side of the front opening.

In sewing the pillows or cushions together, interstices or openings 9 are left in the lines of stitching. Draw tapes 10 for circumferentially contrating the jacket and holding the same in place are attached at their intermediate portions to the rear med an line of the garment. The draw tapes are laced through conveniently arranged grommets 11 in the rear of the garment and through the openings 9 between the cushions 6. The ends of these tapes extend between and be-

yond the cushions a considerable distance, so that the tapes may be readily grasped and tied.

It will be apparent from the foregoing description that by virtue of the peculiar shape and arrangements of the pads or cushions 6 a longitudinally extending forwardly extending preponderance of buoyant material is provided adjacent the front median line of the preserver. The collar 3 is preferably although not necessarily of increased size adjacent its ends so that most of the buoyant padding of the collar is disposed at the front thereof when the tapes 12 connected to the ends of the collar are tied together under a wearer's chin.

In use, the wearer puts his arms through the arm holes and ties the draw tapes 10 and 12, pulling them tight. It will be noticed (Figure 2) that tightening the draw tapes serves to overlap those pillow ends which lie adjacent the body and to bulge them outwardly. This bulging or bunching tends to spread the other two pillow ends apart and present them forwardly so that they act as a pair of longitudinally extending buoyant fins. The greater part of the buoyant mass formed by the cushions is disposed well forward of the wearer's body; in fact, sufficiently far forward to quickly turn a man on his back who falls face down into the water. The fins are designed particularly for this purpose.

The collar 3 not only serves to prevent the head of an unconscious wearer from rolling to one side, but also absolutely prevents it from falling forwardly. It is to be understood that the collar is a convenience rather than a necessity since the pads 6 may be extended sufficiently far to prevent dangerous forward movement of the head while the shoulder pad extending under the neck will limit backward movement of the head. The kapok with which the cushions are stuffed serves to cushion the fall when a user jumps from any considerable height into the sea.

Obviously, tightening of the draw string tapes will adjust the jacket to fit all users, ample material being provided in the unpadded rear portion of the same for accomplishing this purpose.

I have illustrated one of the preferred embodiments of the invention, but it is to be understood that various slight changes and alterations might be made in the general form of the parts described without departing from the invention, and hence I do not wish to limit myself to the details set forth, but shall consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of the appended claims.

I claim:

1. A jacket life preserver opening down the front and buoyantly reinforced adjacent its meeting edges and means for circumferentially contracting the jacket and bulging said buoyant material outwardly from the body of the wearer.

2. A jacket life preserver opening down the front and buoyantly reinforced adjacent its meeting edges and means for circumferentially contracting the jacket whereby to bunch said buoyant material adjacent the front median line of the jacket.

3. A life preserver including a body encircling element, the portion adapted to overlie the front of a wearer's body being buoyantly reinforced and including a centrally and longitudinally extending forwardly presented buoyant fin and a buoyant collar.

4. A jacket life preserver opening down the front and buoyantly reinforced adjacent its meeting edges and means for circumferentially contracting the jacket and bulging said buoyant material outwardly from the body of the wearer, and a buoyant collar flexibly connected to said jacket.

5. A jacket life preserver opening down the front and buoyantly reinforced adjacent its meeting edges and means for circumferentially contracting the jacket whereby to bunch said buoyant material adjacent the front median line of the jacket, and a buoyant collar flexibly connected to said jacket.

6. A life preserver having such a preponderance of forwardly extending buoyant material that the metacenter of the preserver and wearer will lie below the center of gravity when the wearer is in face downward position.

7. A jacket life preserver opening down the front, pairs of superimposed buoyant pads secured at opposite sides of the front opening, and means for circumferentially contracting the jacket to overlap the ends of said pads and bulge the same outwardly.

8. A jacket life preserver opening down the front, pairs of longitudinally tapered superimposed buoyant pads secured at opposite sides of the front opening and means for circumferentially contracting the jacket to overlap the ends of said pads and bulge the same outwardly.

9. A jacket life preserver opening down the front, pairs of superimposed transversely tapered buoyant pads secured at opposite sides of the front opening, and means for circumferentially contracting the jacket to overlap the ends of said pads and bulge the same outwardly.

10. A jacket life preserver opening down the front, pairs of superimposed longitudinally and transversely tapered buoyant pads secured at opposite sides of the front opening, and means for circumferentially contracting the jacket to overlap the ends of said pads and provide a preponderance of buoyant material at the front of the jacket.

11. A jacket life preserver opening down the front, buoyant pads secured in superimposed relationship at opposite sides of the front opening of said jacket, said pads being transversely tapered and arranged to provide pairs of separate pillow ends at the meeting edges of the jacket.

12. A jacket life preserver opening down the front, buoyant pads secured in superimposed relationship at opposite sides of the front opening of said jacket, said pads being transversely tapered and arranged to provide pairs of separate pillow ends at the meeting edges of the jacket, and means for circumferentially contracting the jacket to overlap the inner pillow ends and spread the outer pillow ends apart.

13. A jacket life preserver opening down the front, buoyant pads secured in superimposed relationship at opposite sides of the front opening of said jacket, said pads being transversely tapered and arranged to provide pairs of separate pillow ends at the meeting edges of the jacket, and means for circumferentially contracting the jacket to overlap the inner pillow ends and spread the outer pillow ends apart, whereby to provide a pair of longitudinally extending buoyant fins.

14. A jacket life preserver opening down the front, buoyant pads secured in superimposed relationship at opposite sides of the front opening of said jacket, said pads being transversely tapered and arranged to provide pairs of separate pillow ends at the meeting edges of the jacket, and draw tapes secured to the rear median line of the jacket and extending betwen the pads.

15. A life preserver adapted to maintain an unconscious wearer face upward in the water and including means operable when the wearer is in face downward position to prevent the metacenter from vertically aligning with the center of gravity.

THOMAS IRVING POTTER.