M. BARON.

LIFE PRESERVER.

APPLICATION FILED JULY 9, 1917.

1,253,122. Patented Jan. 8, 1918.

FIG. 1.

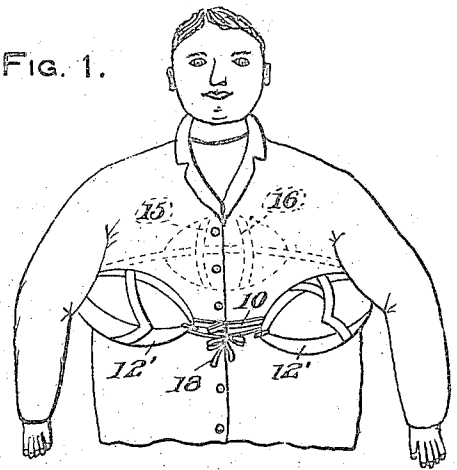


FIG. 2.

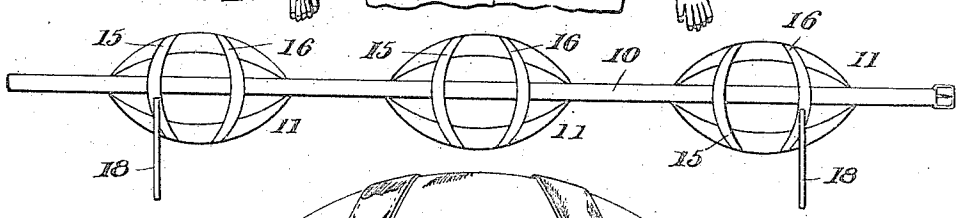


FIG. 3.

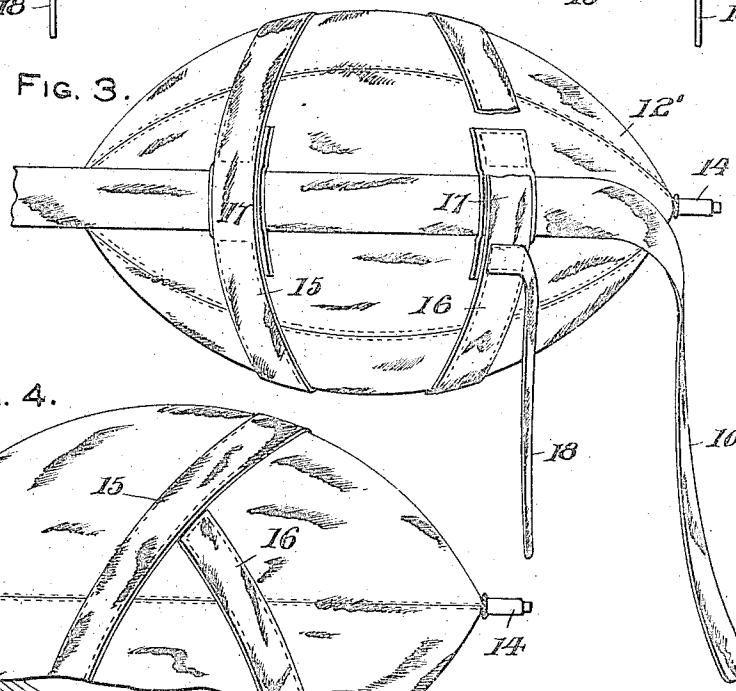


FIG. 4.

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LIFE-PRESERVER.

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Application filed July 9, 1917. Serial No. 179,371.

To all whom it may concern:

Be it known that I, MICHAEL BARON, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Life-Preservers, of which the following is a specification.

This invention relates to certain new and useful improvements in life preservers.

The primary object of the invention is to provide a life preserver that may be quickly and easily attached to a person for use, adjusted to conform to the body of the wearer, and then securely fastened in the adjusted position.

A further object of my invention is to provide a life preserver with adjustable air-bags so attached to their carrying-member that when inflated, a binding frictional engagement is afforded between the bag or bags and their carrying-member, holding them normally against free-movement on the carrying-member, yet permitting a sliding adjustment on the carrying-member to position the bags as desired.

Another object of the present invention is to provide in a life preserver an extremely durable air-bag, unpuncturable under all ordinary conditions and service, and readily capable of inflation.

With the above objects and others in view, as will appear hereinafter as the invention is more fully described, in detail, the invention resides in the novel construction, combination, and arrangement of parts as will be more fully described, and then claimed, and in describing the invention in detail, reference is had to the accompanying drawing forming a part of this specification, illustrating a preferred and practical embodiment of the invention, and in which like numerals will indicate like parts throughout the different views, in which:—

Figure 1 is a view in perspective showing a life preserver in accordance with my invention, attached in position upon the body of a person in use,

Fig. 2 is a detail plan view of a life preserver in accordance with my invention,

Fig. 3 is an enlarged view in plan or elevation of one of the air-bags also showing a portion of the securing belt or strap, and one of the tie-straps, the air-bag being shown in the inflated condition, and

Fig. 4 is a similar view of one of the air-bags, partially in longitudinal section.

To put my invention into practice, I provide a securing belt or strap 10 of a suitable length to encircle the body of a person around the waist, the ends being adapted to have fastening means of any desired character so that the belt or strap may be secured firmly to the person.

On this securing belt or strap I mount a plurality of inflatable air-bags of a specific construction as will be described in detail. As shown herein, three of these air-bags are carried on the belt or strap, and tests of the device have demonstrated that this will be the preferred construction of the device, as such an arrangement provides for the positioning of an air-bag at the back of the person, and one at each side, toward the front, such an arrangement having been found to provide a construction which enables the wearer to maintain an upright position in the water practically without effort. I do not wish however, to be understood by this showing and description to limit myself to this number of air-bags, as obviously a greater or less number may be employed without departing from the principle herein involved.

The air bags are designated generally by the numeral 11, and are preferably oblong in form. Each bag consists of the sack 12 composed of rubber or other inflatable material impervious to air, and which is inflated by means such as the valve 14 illustrated. Preferably, I employ a type of balloon-valve, (well known in the trade) which can be opened and closed by the operator, by a turning of the same in one direction to open, and in the opposite direction to close.

The inflatable sack 12, is covered by a protective layer of canvas, leather, or other pliable material 12′ to protect the same against accidental puncture, this protective sheath being of good strong material which will withstand the strains to which same is subjected.

To this covering material is firmly attached, by stitching, or otherwise, the two straps 15 and 16, the strap 15 being of a length which will pass around the air-bag transversely thereof and at an acute angle, while the strap 16 is of shorter length, and has its ends meeting with the strap 15. This arrangement brings the middle portion of the straps on one side of the air-bag spaced away from the central transverse line as

clearly seen in Figs. 3 and 4, and at these two points, the straps are unattached to the protective covering to provide keepers 17 for the belt 10. As here shown, each strap is formed in two pieces and the ends overlapped and left unattached to form the keepers, being stitched to the covering on each side of the keeper. This is done to provide double ply of material for the keepers, the point where the greatest strain is delivered. Due to this construction, when the air-bag or bags are inflated, a binding action is provided between the air-bags and the straps so that the air-bags are held normally fixed in the positions in which they have been placed upon the belt, but may be readily shifted by the wearer by force against either end of the bags, so as to position them as desired with respect to the body.

After the bags have been desirably positioned, the two front bags are preferably tied together by tie-strings 18 as shown in Fig. 1, which are preferably attached to one of the straps 15 or 16, herein shown as attached to the straps 16. This tying tends to hold the two front bags from any slipping action independently, that might be caused by buffeting of the waves. The air-bag that rests against the back of the wearer is so anchored by its binding action upon the belt as to remain positioned where pressed against the body.

I wish to call particular attention to the securing of the air-bags upon the belt in such manner as to hold them positioned, yet allow the operator to readily adjust the same to the desired position in order that upright balance of the body may be maintained in the water without effort, and when once positioned, the tying of the two bags together holds them firmly against the body and prevents the same from slipping.

While I have described in detail a preferred embodiment of the invention constructed in accordance with the manner in which same has been used in practice, yet I would have it understood that the construction may be varied in details, without departing from the spirit and scope of the invention as claimed.

What I claim as new is:—

1. A life preserver, including an inflatable receptacle, a body attaching belt for said inflatable receptacle, and straps encompassing and secured to said inflatable receptacle, the ends of one strap being secured to the other strap, said straps being each in two parts with their ends overlapped, and unattached to the inflatable receptacle at predetermined points to form keepers receiving said body attaching belt.

2. A life preserver, including a plurality of inflatable receptacles, a body attaching belt for said plurality of inflatable receptacles, and straps encompassing and secured to each of said receptacles, the ends of one strap of each of the latter being secured to the other strap, said straps being each in two parts, with their ends overlapped, and unattached to the inflatable receptacles at predetermined points to form keepers receiving said body attaching belt.

3. A life preserver, including a plurality of oblong or oval buoyant members having secured transversely therearound looped or keeper-forming members having their loops or keepers adapted to be presented next to the body of the user of the device, and a body encompassing member rove through said loops or keepers in the direction of the longitudinal plane or axes of said buoyant members, whereby the latter are adapted to be applied for use in such longitudinal or axial planes transversely to the user's body, also positioned at the arm-pits and at the back, providing for the advantageous distribution of the buoyancy with respect to the body.

In testimony whereof I affix my signature.

MICHAEL BARON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."