Dec. 18, 1923. 1,478,351

L. J. O'SHAUGHNESSY

LIFE PRESERVER

Filed Feb. 23, 1923



Fig. 1

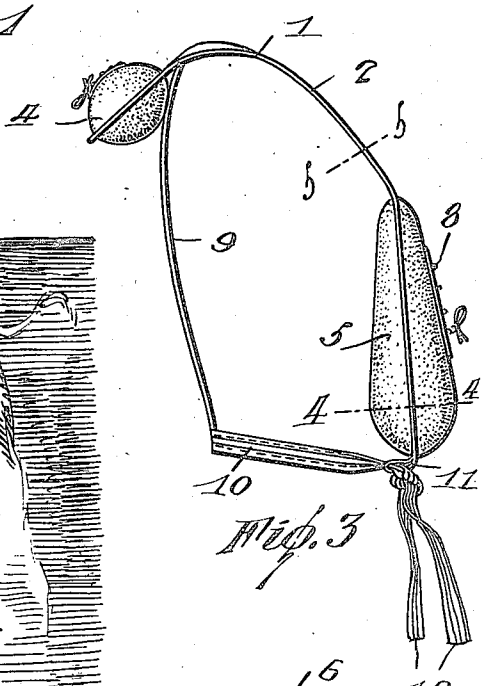


Fig. 3

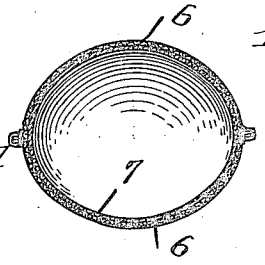


Fig. 4

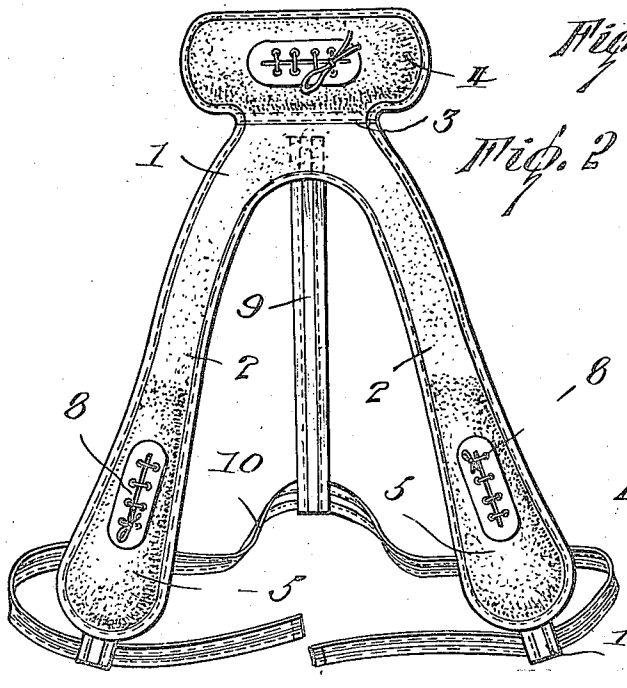


Fig. 2

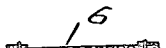


Fig. 5



Fig. 6

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UNITED STATES PATENT OFFICE.

LAUGHLIN JAMES O'SHAUGHNESSY, OF HALIFAX, NOVA SCOTIA, CANADA.

LIFE PRESERVER.

Application filed February 23, 1923. Serial No. 620,780.

To all whom it may concern:

Be it known that I, LAUGHLIN JAMES O'SHAUGHNESSY, a subject of the King of Great Britain, residing at Halifax, Province of Nova Scotia, Canada, have invented certain new and useful Improvements in Life Preservers; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to life preservers and pertains to improvements in my United States Patent No. 887,115 of May 12th, 1908, and my Canadian Patent No. 100627 of August 28th, 1906.

In the patent devices there is provided a float adapted to be positioned across the shoulders and back of the neck of the wearer. This float is tightly secured to the neck-band or collar. It has been found in practice that this neck-float is usually disposed below the neck of the wearer and maintained permanently in this position. It has been found that a person wearing such a life preserver in the water, is compelled to bend the head uncomfortably backward, in order to obtain the support of the neck-float. This position conduces to exhaustion; as the neck-float is not in position to support the head and hold it out of the water.

To overcome this difficulty the neck-float is connected to the neck-piece of the device in such a manner that it is free to swing, whereby it is normally held in engagement with the back of the neck of the wearer, by the repelling force of the water on a buoyant object. The patented device also includes a pair of body floats which extend from the neck-band to a body-band disposed intermediate between the shoulders and the hips.

In the present case, the body-floats are applied at a lower level on the wearer, in other words, they extend downwardly to a waist-band. As a result of this arrangement the wearer on sinking, is more readily thrown backward, the head then resting on the neck-float which rises to its support.

The invention further includes a yoke, the arch of which passes around the back of the neck and the sides down the forward portion of the body. This yoke may be reinforced with aluminum or other light sheet metal whereby it is maintained rigid. The addition of a more or less rigid yoke dispenses with a neck fastening, prevents the possibility of the body-floats slipping off over the shoulders; and produces a life preserver with but one fastening.

The invention is fully disclosed in the following description and in the accompanying drawings in which:

Figure 1 is a perspective view of the device;

Figure 2 is a front elevation thereof;

Figure 3 is a side elevation;

Figure 4 is a section on the line 4—4 of Figure 3;

Figure 5 is a section on the line 5—5 of Figure 3; and,

Figure 6 is a section corresponding to Figure 5 showing the yoke reinforced with sheet metal.

As stated above, the device includes a yoke which consists of a neck piece 1 and a pair of arms or branches 2. The neck piece is adapted for application to the back of the neck and has stitched to the upper edge 3 thereof a float 4. It will be apparent that this float is free to swing with relation to the neck piece and is normally held against the back of the neck and head of the wearer by the repelling force of the water, as illustrated in Figure 1. The head of the wearer is thus always maintained out of the water and may rest against the neck-float in case of exhaustion. In the lower ends of the arms 2 are provided floats 5 which may be disposed between the plies 6 of the yoke, as shown in Figures 4 and 5. The floats 4 and 5 are preferably of the nature of rubber bladders or inflatable bodies 7 which may be filled with air through nipples (not shown) adapted to be passed through slots 8 in the outer coverings. This type of float is particularly useful in shipping, since it may be flattened when containing no air.

A back strip 9 extends from the back of the neck piece 1 downwardly to the waist line. A waist strap 10 is attached to the lower end thereof and passes through loops 11 provided at the lower ends of the arms 2.

The yoke may be reinforced with a similarly shaped piece of aluminum or other suitable metal 12 inserted between the plies 6 as illustrated in Figure 6. By means of this device, the yoke is always held rigidly, whereby it is certain that the user will apply it properly.

The yoke assumes this position aready de-

scribed while the strap 9 extends down the back from the neck to the waist line. The strap 10 is there tightened around the waist and its ends fastened, supporting the device in this position shown in Figure 1. The body floats 5 lie against the upper part of the abdomen in contrast with my previous devices in which they lie against the lower part of the thorax. The lower position of the enlarged ends of the body-floats, situated as they are over the less buoyant contents of the abdomen, more readily balance the body when swimming, and on sinking, exert an upward and forward action on the waist line, automatically throwing the shoulders and head backward, the head then resting on the neck-float, resulting in a position of comfort and safety.

While a specific embodiment of this invention has been illustrated and described, it is to be understood that various alterations in the details of construction may be made without departing from the spirit of the invention as indicated by the appended claims.

Having thus fully described the invention, what I claim as new and desire to protect by Letters Patent is:—

1. A life preserver comprising a neck-piece and a pair of arms extending therefrom, a float having one edge secured to said neck-piece, body floats provided at the lower ends of said arms, and means for stiffening said neck-piece and arms.

2. A life preserver comprising a neck-piece and a pair of arms extending therefrom, a float having one edge secured to said neck-piece, body floats provided at the lower ends of said arms, a back strip extending from said neck-piece between said arms, a waistband connected to said strip and to the lower ends of the body floats, and means for stiffening said neck-piece and arms.

3. A life preserver comprising a neck-piece and a pair of arms extending therefrom, a float having one edge secured to said neck piece and adapted to swing with relation thereto, body-floats provided at the lower ends of said arms, and means for stiffening said neck piece and arms.

4. A life preserver comprising a neck piece and a pair of arms extending therefrom, a float having one edge secured to said neck piece and adapted to swing with relation thereto, body-floats provided at the lower ends of said arms, a back strip extending from said neck piece between said arms, a waistband connected to said strip and to the lower ends of said body floats, and means for stiffening said neck piece and arms.

In witness whereof I have hereunto set my hand.

LAUGHLIN JAMES O'SHAUGHNESSY, M. D.