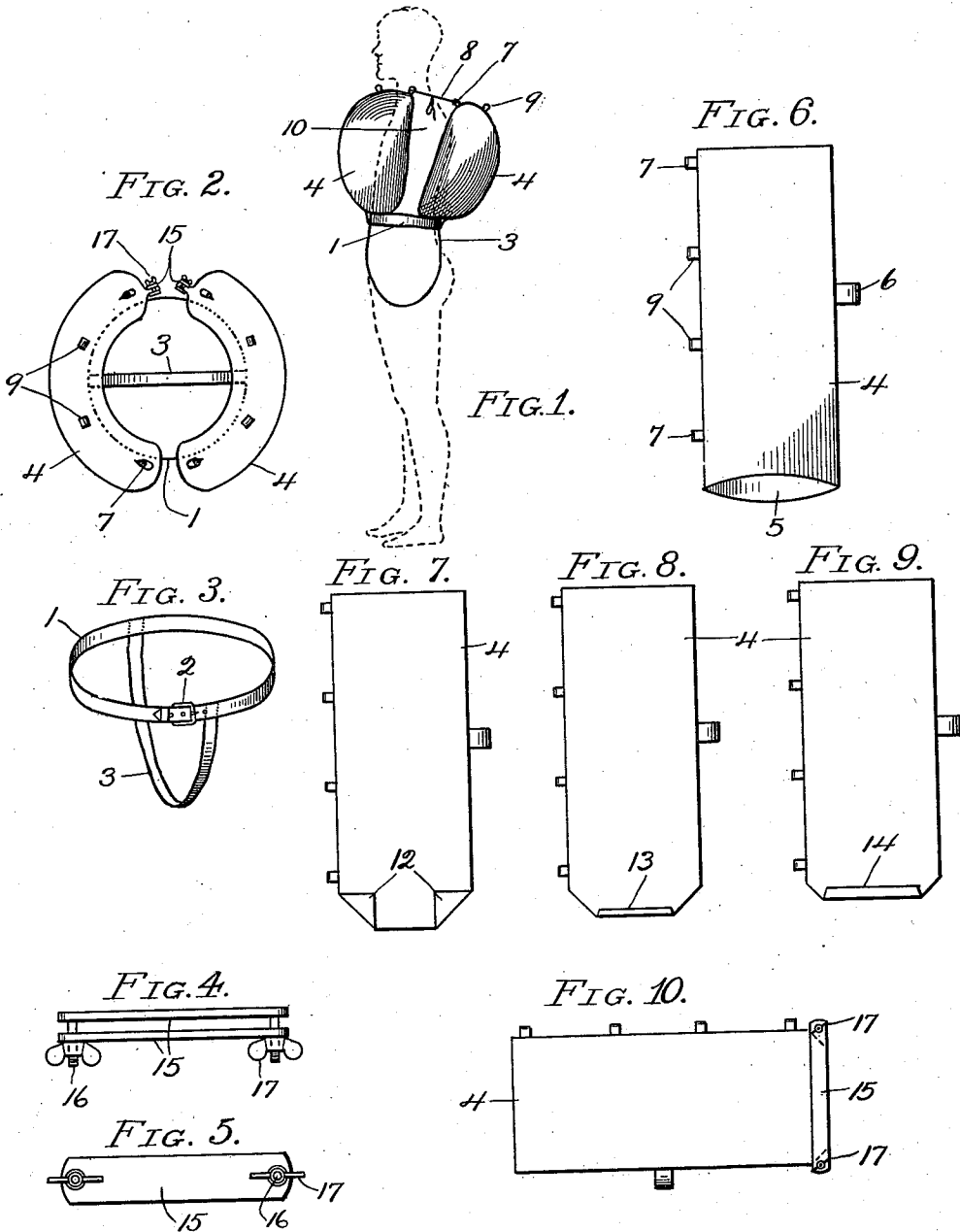


E. V. HENDERSON.  
AQUATIC LIFE PRESERVER.  
APPLICATION FILED AUG. 8, 1910.

1,023,380.

Patented Apr. 16, 1912.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

EUGENE V. HENDERSON, OF LEAVENWORTH, KANSAS.

AQUATIC LIFE-PRESERVER.

1,023,380.

Specification of Letters Patent.

Patented Apr. 16, 1912.

Application filed August 8, 1910. Serial No. 576,072.

*To all whom it may concern:*

Be it known that I, EUGENE V. HENDERSON, a citizen of the United States, residing at Leavenworth, in the county of Leavenworth and State of Kansas, have invented certain new and useful Improvements in Aquatic Life-Preservers, of which the following is a specification.

This invention relates broadly to aquatic life preservers, and has for its object to provide a buoyant device that shall be adapted for the use of troops, surveyors, or other bodies of men in folding streams.

The requisites of such a device are that it should be very light, not costly, easily applied, and should occupy a minimum space when not in use. These requisites are attained by the device herein described, the novelty being pointed out in the appended claim.

In order that the invention may be fully understood, reference will now be made to the accompanying drawings, in which:

Figure 1 represents a side elevation of a preferred style of the device as worn and ready for use; the figure of the wearer being shown in dotted lines. Fig. 2 is a diagrammatic, top plan view of the device with the bags inflated. Fig. 3 is a perspective view of the belt and crotch strap. Figs. 4 and 5 are detail views of one of the bag sealing clamps. Fig. 6 represents one of the bags as ready to be inflated. Figs. 7, 8, 9, and 10 illustrate successive steps of the preferred mode of sealing the bag; the bag being shown in deflated condition.

Referring first to Fig. 3, 1 designates a belt, made of suitable material and provided with a buckle 2, by which its ends are connected. 3 designates a looped strap which depends from the belt, the strap ends being secured or attached to the belt in any desirable manner. This belt is placed upon the wearer's body as shown in Fig. 1, the crotch strap 3 being passed between the legs and serving to prevent the belt from working upward.

4 designates two air-bags, which are made preferably of woven fabric rendered impervious to water. For the sake of economy in cost, these bags are made with an open end extending the full width thereof, as shown at 5. These open ends require no reinforcement except such as will be provided by sealing devices. Before describing the lat-

ter, the manner of attaching the bags to the wearer will be described.

Each bag is provided near one of its seams with a loop 6 which may be of the same material as the bag, and is located between the ends thereof. Upon the opposite seam or edge of the bag, near the corners, are two loops 7. Each bag extends almost half-way around the upper portion of the body when inflated. After each bag is inflated, the belt 1 is passed through the bag loop 6; then the belt is placed on the body, rather high in the waist. The bags are positioned at the front and back of the body, respectively, and their upper ends are fastened in place by means of cords or tapes 8, passed through the corner loops 7, and tied. The belt loops 6 prevent the bags from working upward when the wearer is in the water, and the cords 8 hold the bags sufficiently against lateral movement.

Extra loops, as 9, may be provided on each bag, for attachment of articles being carried. Between the bags arm spaces 10 will be left so that the wearer's freedom of arm movement will not be curtailed.

The method of inflating and sealing the bags as contemplated by me is as follows: The bag is spread open, and inflated by swinging it rapidly with its open end foremost. It is then sealed by submerging its open end in water, and when said open end is thus submerged the manipulator folds back the corners 12 (Fig. 7) makes a transverse fold 13, (Fig. 8) and a final transverse fold 14. (Fig. 9.) A clamp is then applied, the same consisting of a pair of light bars 15, one of which is provided with bolts 16 passing loosely through holes in the other. On the bolts are wing-nuts 17. The fold 14 is placed between the bars 15 and the nuts 17 are tightened, thereby sealing the air within the bag, Fig. 10. The bags are then ready to be attached to the belt.

When the wearer is in the water the air filled bags buoy him up, and drowning is impossible.

This device may be used by persons learning to swim, as well as by swimmers.

It will be seen that the device is simple, light, inexpensive, and easy to apply.

Having thus described my invention, what I claim is:—

An apparatus of the character described, comprising two air-bags having open ends

extending the full width thereof and adapted to be inflated by submerging said open ends, each bag being of such length when inflated as to extend almost half-way around the upper portion of the body, a space being left between the bags to allow free movement of the arms of the wearer, means for sealing the open ends of the bags after the same have been inflated, a plurality of loops at the upper sides of the bags, cords connecting the loops of one bag to the loops of the companion bag, a loop at the underside of each bag, a body-belt extending through the last-mentioned loops, and a crotch strap secured to said belt, substantially as shown and described. 15

In testimony whereof I affix my signature, in the presence of two witnesses.

EUGENE V. HENDERSON.

Witnesses:

M. WHEELER,

C. P. OLUND.

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

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