No. 860,136. PATENTED JULY 16, 1907.

T. F. HOYT.

LIFE SAVING GARMENT.

APPLICATION FILED DEC. 20, 1906.

FIG. 1

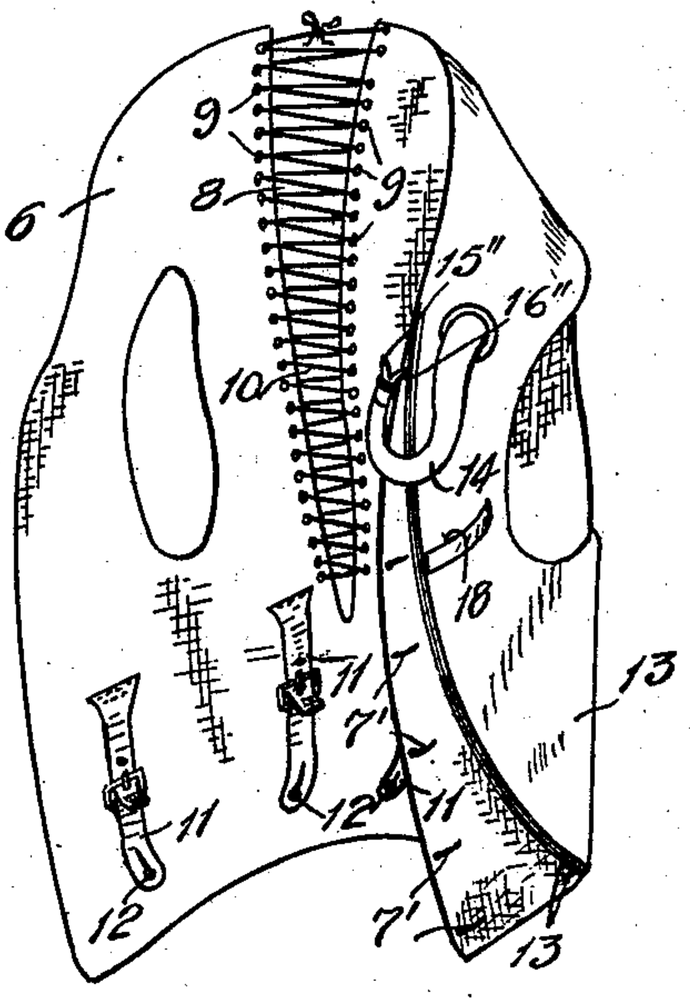


FIG. 5

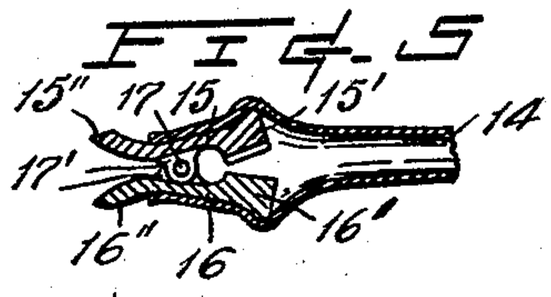


FIG. 4

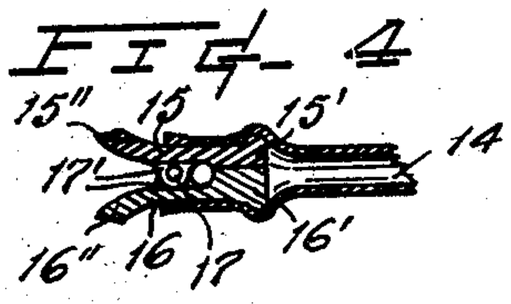


FIG. 2

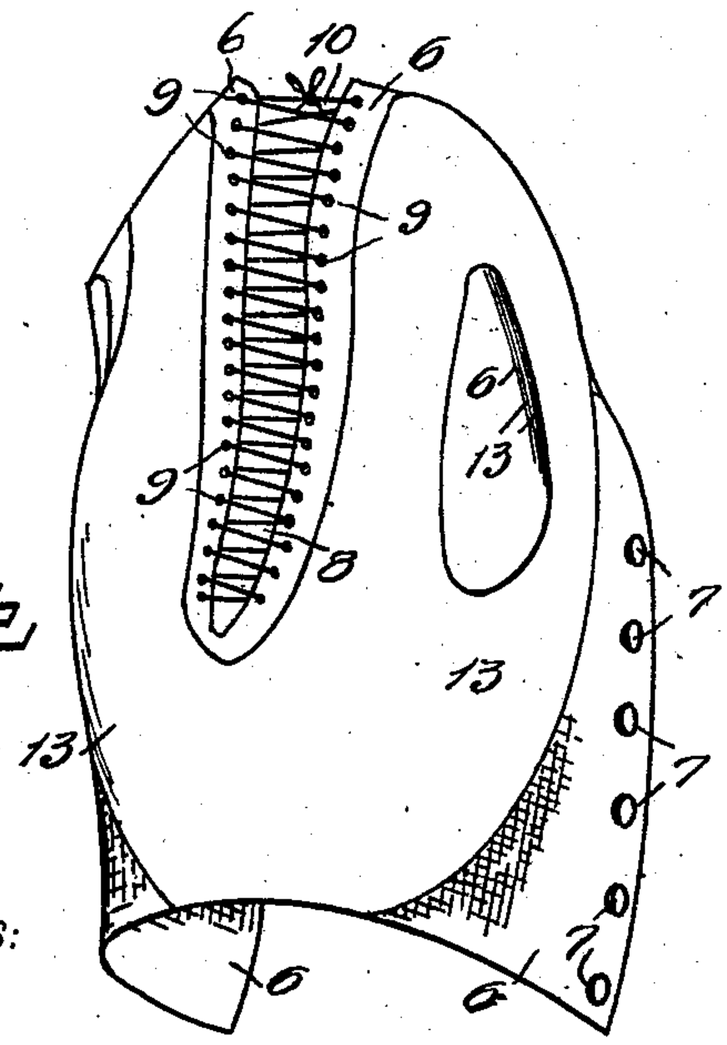
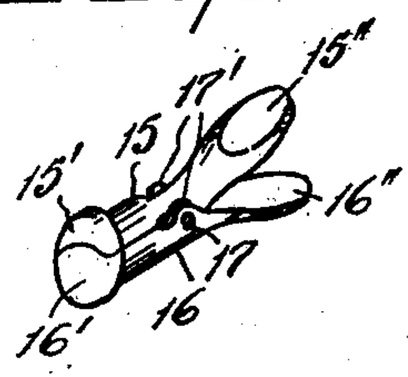


FIG. 3



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LIFE-SAVING GARMENT.

No. 860,136. Specification of Letters Patent. Patented July 16, 1907.

Application filed December 20, 1906. Serial No. 348,699.

To all whom it may concern:

Be it known that I, THOMAS F. HOYT, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Life-Saving Garments, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has for its object the provision of an article of wearing apparel suitable to be worn as a vest and upon occasion it may be quickly transformed to fulfil the purposes of a life-preserver to support the wearer while in the water.

With these and other ends in view the invention consists in the peculiar construction of a vest and the adaptation and combination of parts thereof, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a front perspective view of a garment embodying my invention; Fig. 2, a rear perspective view of the same; Fig. 3, a perspective view of the valve, shown detached; Figs. 4 and 5, longitudinal sectional views of the valve, respectively representing the same in the closed and opened positions, with a portion of the attached tube.

According to my invention, a vest is formed with an inner layer or ply of cloth fabric 6 which is provided along its front edges with buttons 7 and button-holes 7′, as common, and has in the back a V-shaped opening 8. Within said fabric and adjacent of the edges of such opening is a plurality of holes 9 through which lacing strings 10 are threaded to connect the opposite sides and, if desired, serve to make the garment conform more closely to the wearer's body. These lacing strings are preferably made either in whole or partially of some elastic material, such as rubber, so that the parts of the garment at each side of said opening will resiliently be drawn toward each other and readily accommodate the set of the garment to the body of the wearer in the various movements or positions taken by him. Fixedly connected to the inner side of said fabric portion of the vest are tabs 11, which are somewhat elastic, and provided with a button-hole 12 in each and so disposed as to be engageable with the buttons commonly employed upon men's trousers for the purpose of connecting the same to the suspenders, and can advantageously be used instead of the latter as in my invention the trousers are not only reliably supported but at the same time their weight is more equally distributed over a person's shoulders than is the case with the ordinary type of shoulder straps.

Upon the out side of the fabric is affixed, as by stitching, cement or otherwise, a double thickness of sheet rubber 13, or an equivalent material which is impervious to air, and these two layers are marginally connected so as to produce a non-leakable receptacle for air which upon being inflated, serves as the preserver proper. In order that said inflatable portion of the vest will best effect this function, that is sustain a person in the water and in unconstrained positions, the outer two plys forming the air receptacle are arranged to cover almost the entire surface of the back of the garment, and thence extend over the shoulders and down the front in diverging directions and under the arm-holes to join the back portion, thus leaving the cloth inner ply exposed at the lower portion of the front as represented in Figs. 1 and 2. Air to inflate said receptacle is introduced through a flexible tube 14 communicatively connected therewith, at one side of the front, and is provided at its outer end with an inserted valve which is normally closed by the resilience of the tube. This valve consists of two members 15, 16 which are intermediate of their length hinged together by a pin 17 extending through apertured ears 17′ of the respective parts. The inner end of the valve which is comprised of those portions 15′, 16′, which are exteriorly formed to engage and be protruded within the tube and on their inner faces are formed to interfit and normally present a tight-fitting plug closure for the tube. The outer ends 15″, 16″ of the respective valve members are flared to furnish arms adapted to be gripped between the teeth of the wearer for spreading the valve parts 15′, 16′ against the resistance to distention of the tube when the air is to be blown through the latter to inflate the receptacle therefor. The construction and operation of the valve will be best understood from an inspection of Figs. 3 and 4.

18 is a pocket provided to receive the free end of the tube when not in use.

The vest can be worn by a person at any time and is especially valuable as a warm, serviceable garment for sea travelers for whom, in addition to supplying such purposes and likewise serving as a support for trousers or skirts, it can be quickly manipulated to dependably fulfil the purposes of a life-preserver.

In the last named capacity the garment fits the wearer so as not to incommode his movements as the air receptacle is so formed and arranged that its buoyant power is distributed where it is most serviceable in keeping the wearer in equipoise and is prevented from becoming displaced when water-borne by reason of the action of the tabs which are attached to the trousers. Furthermore by the provision of a gore in the back and the rubber portion of the vest not covering the abdomen of the wearer, ventilation is furnished without sacrificing the utility of the invention.

A garment embodying my invention may be worn as an undergarment or as an ordinary vest when the front should be supplied with pockets, as ordinary, and in other ways finished to resemble in appearance the conventional article of men's wear which it would thus replace. The disposition of the inflatable por-

tion of the invention, by exposing the cloth at the front, lends itself to such illusionary effects.

Having described my invention, what I claim as new and desire to secure by Letters-Patents, is—

1. In combination with a life saving garment, a flexible tube communicating therewith, a valve composed of two parts hingedly connected, the inner ends of each of said parts being formed on their inner faces to form an air-tight joint therebetween and each being exteriorly formed to engage said tube, said tube normally sustaining said inner faces in contacting relation, the outer ends of said parts being flared outwardly to furnish arms to be gripped between the teeth of the user.

2. In combination with a life saving garment and a tube therefor, a valve comprising two parts hinged to one another, said parts on their inner faces contacting with one another to form an air-tight joint therebetween, the tube being received over the exteriors of the inner ends of said parts and normally sustaining the said inner faces in contacting relation, the outer ends of said parts being adapted for movement to spread the inner ends thereof apart.

3. In combination with a life saving garment and a flexible tube connected therewith, a valve inserted in said tube and comprising movable elements, said elements having their inner ends surrounded by and being normally retained in closed position against the egress of air by said flexible tube, portions of said elements extending without said tube to be received between the teeth of the user and be operated by the latter to open said elements against the pressure of said tube.

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

THOMAS F. HOYT.

Witnesses:
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S. B. YERION.