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C. E. ERICKSON

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SPORTSMAN'S LIFE PRESERVER GARMENT

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Fig. 1.

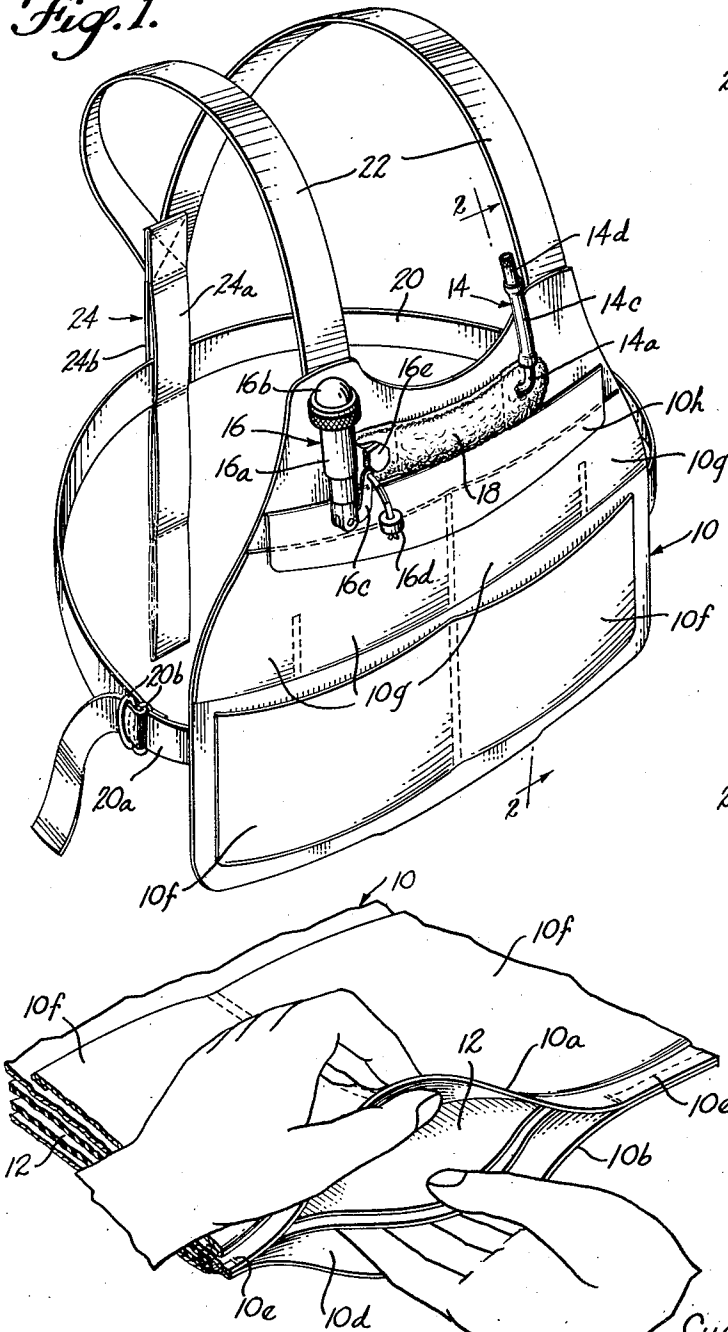


Fig. 2.

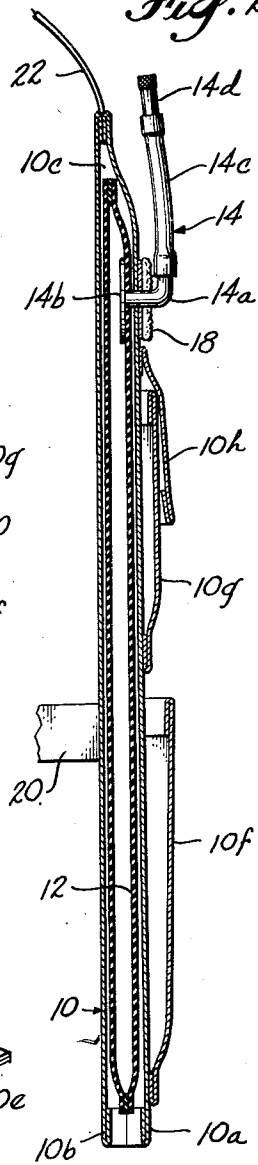
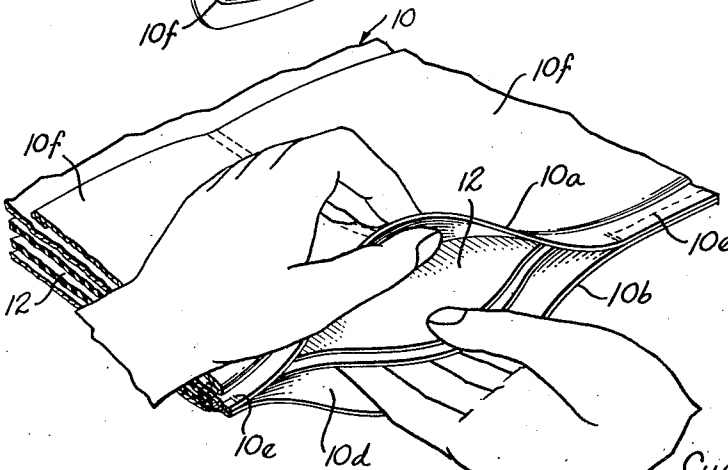


Fig. 3.



INVENTOR.
CHARLES E. ERICKSON
BY
Reynolds, Beach & Christensen
ATTORNEYS

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SPORTSMAN'S LIFE PRESERVER GARMENT

Charles E. Erickson, Seattle, Wash.

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5 Claims. (Cl. 9—20)

This invention relates to a novel life preserver garment in the nature of an inflatable utility apron. The invention is herein illustratively described by reference to the presently preferred form thereof; however, it will be evident to those skilled in the art that certain modifications and changes therein may be made without departing from the essential features involved.

An object of this invention is a reliably safe life preserver garment which will be comfortable and convenient to wear, hence will be worn at all times when needed and not set aside as so often are the bulky, cumbersome and heavily padded kapok and cork lined life preserver jackets of conventional types. In that regard, many men, especially sports fishermen, are frequently reluctant to be seen, or to be bothered, wearing a life preserver garment even when conditions are dangerous. With that in view it is a further important object of this invention to provide a life preserver garment which incorporates utility features, including carrying pockets characterizing the garment primarily as a utility garment of such a nature that its true primary function as a life preserver garment is not outwardly apparent.

A related object is such a life preserver garment of simple, rugged and durable construction provided with easily manipulated take-up adjustments in the novel harness means incorporated therein, so as to permit fitting the garment satisfactorily to persons of widely different sizes, including children and adults.

A related object is a life preserver garment having a pneumatically inflatable bladder which is securely mounted in a retaining pocket within the double-walled garment, and yet may be easily and quickly inspected or removed for repairs, if necessary, all without complicating the construction of the garment.

In accordance with this invention the novel life preserver garment is made in the form of a double-walled utility apron having front and rear panels secured together marginally to form a retaining pocket for a pneumatically inflatable bladder received therebetween, there being an opening between the two panels at the bottom of the garment for the insertion and removal of the bladder, and said bladder being held in position within the garment preferably by the connections for at least one pneumatic inflating device situated near the top of the apron for ready access by the wearer. Carrying pockets, and preferably also a securing pad for fishing hooks and flies are incorporated in the garment to give it special utility and an outward appearance characterizing it only secondarily as a life preserver garment so that it will be worn by sports fishermen and not set aside. A novel harness means is provided comprising a girth strap secured by one end to one side of the apron at waist level and secured at its opposite end to adjustable take-up means fastened to the opposite side of the apron, and a pair of shoulder straps terminating in a back strap having a plurality of loops arranged in succession along the length thereof which are selectively engageable by the girth strap to accommodate different size persons. By manu-

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facturing the garment in the form of an apron covering only the front of a person's body and wrapping only part way around the body even of the smallest wearer, and by providing the adjustable harness feature, the same garment may be worn satisfactorily by anyone regardless of physical size.

These and other features, objects and advantages of the invention will become more fully evident from the following description by reference to the accompanying drawings illustrating the invention in its presently preferred form.

Figure 1 is a perspective view of the improved garment.

Figure 2 is a longitudinal section taken on the vertical section line 2—2 in Figure 1.

Figure 3 is a fragmentary perspective view showing the provision of a bladder insertion and removal opening at the bottom of the apron and the convenience with which the bladder may be inspected and inserted or removed.

Referring to the drawings, the apron 10 having front and rear panels 10a and 10b of poplin or other suitable, preferably fabric material, is designed to cover only the front and to wrap part way around the sides of the wearer's body for reasons previously explained. The precise shape of the panels is not critical; however, it is desirable in order to simplify manufacture of the apron and of the bladder 12 retained between the front and rear panels, that the panels be of relatively simple configuration. The front and rear panels are sewn or otherwise secured together around substantially the entire periphery thereof to form the retaining pocket 10c receiving the pneumatically inflatable bladder 12. A bladder insertion and removal opening 10d is provided centrally in the lower edge of the apron 10 and is preferably of a length such that a person's hand may be conveniently inserted into the pocket 10c in order to facilitate the insertion and securement of the bladder, and its removal when necessary. However, the opening 10d is made no longer than necessary for that purpose since the bladder is supported against sagging or displacement in its uninflated condition by the stitching 10e or other means of securement holding together the side portions and the lower edges of the two panels.

Except for the opening 10d the panels are preferably secured together around substantially their entire periphery. Preferably, the only means of securement of the bladder within the retaining pocket 10c comprise the one or more inflating devices used. In the example, two inflating devices are incorporated in the garment, one comprising the oral inflating device 14 and the other, the carbon dioxide cartridge type inflating device 16. Both inflating devices are mounted near the upper edge of the apron, not only for ready operational accessibility with the garment being worn, but also for purposes of suspending the bladder in its correct position within the retaining pocket 10c when the bladder is uninflated. When the bladder is inflated, of course, it tends to hold itself in the correct position because of its general conformity with the interior configuration of the retaining pocket.

The oral inflating device 14 comprises the upwardly-turned pipe elbow 14a, retained in the bladder 12 by a backing flange 14b received within the bladder and cemented to the inside of the front wall thereof around the aperture through which the pipe 14a passes. The pipe 14a passes through an aperture in the front panel 10a and through an aligned aperture in the sheepskin strip 18, which is sewn horizontally on the front face of the panel 10a to serve as a combined carrying pocket and securing pad for fishing flies, hooks, etc. The sheepskin pad is preferably sewn to the panel 10a around the aperture of the inflation pipe 14a so as to prevent unraveling of the fabric of the panel 10a around such aperture. A flexible

rubber extension tube 14c is pressed on the end of the elbow 14a and projects upwardly therefrom to a height at which the wearer may reach the combined valve and inflation nozzle 14d on the upper end thereof with his or her mouth when the garment is being worn. The stiffness of tube 14c maintains it in this position.

The inflation device 16 comprises a conventional carbon dioxide-filled cartridge (not shown) contained within the tubular shell 16a having the sealing cap 16d threaded thereon so as to form a sealed compartment within the shell. A perforating pin (not shown) actuated by a lever 16c with a pull cord and handle 16d punctures the lower end of the carbon dioxide cartridge when the handle is pulled and produces the necessary inflation of the bladder through an inflation tube (not shown) mounted similarly to the tube 14a except for the provision of the removable securing screw 16e which holds the device 16 in place on the front of the garment and connected to the bladder through the sheepskin strip 18 and the front panel 10a. The details of the carbon dioxide inflation device 16 are of incidental interest and do not constitute a part of the present invention. The two alternatively usable inflation devices mounted on the front and near the top of the apron 10 serve as the sole support for the bladder within the pocket 10c. By removing the bolt 16e, the inflation device 16 may be detached and the bladder may be removed from the apron through the opening 10d at the bottom. For that purpose the inflation device 14 and the connecting tube (not shown) for the device 16 simply retract back through their retaining apertures in the front panel 10a and the sheepskin pad 18 when the bladder is being withdrawn through opening 10d.

As mentioned above, the sheepskin pad 18 serves as a securing pad for fishing flies and also as a carrying pocket, the upper edge of the pad being unattached to the front panel 10a whereas the lower edge of such pad and the side edges thereof are sewn to the panel or otherwise secured thereto. Additional carrying pockets provided on the apron include the two lower pockets 10f and the several upper pockets 10g, covered by the flap 10h. The garment is thus highly useful for carrying the various accoutrements used in sports fishing, hunting or in other outdoor sports or other activities in connection with which a life preserver type garment is desirable.

In order to hold the utility apron-like life preserver garment firmly in correct position on the wearer, a novel harness arrangement is provided. A harness girth strap 20 is secured by one end to one side of the apron 10 at waist level and extends around the person's body for adjustable securement to a tab 20a fastened to the opposite side of the apron at the same level. In this case the take-up adjustment of the girth strap is accomplished by passing the free end of the strap through a set of two rings 20b fastened to the tab 20a, and constituting a conventional type of one-way sliding adjustment of a fabric strap. Obviously other types of securing devices for adjustable take-up of the girth strap may be provided, to the same ends. The harness additionally comprises a pair of shoulder straps 22 secured to the top of the apron at respectively opposite sides thereof and extending rearwardly over the wearer's shoulders, converging at the back of the wearer and being connected to the upper end of the back strap 24 as shown. The back strap is doubled, that is, comprises two coextending straps 24a and 24b which are sewn or otherwise secured together at intervals along the length thereof to provide a series of retaining loops or the like for the girth strap 20 at successive locations along the length of the back strap. In the example, three such retaining loops are provided in the back strap, and thereby permit three different size adjustments to be made in the harness. Obviously, however, any number of retaining loops in the back strap may be provided in order to permit the making of closer or more extensive size adjustments.

Since the apron-like garment 10 is not required to fit

the body of the wearer in any particular way, but only to overlie the front of the torso, and since the requisite size adjustments may be made solely with the novel harness means employed in the garment, it is apparent that considerable savings may be effected in the cost of manufacturing such a life preserver garment, as against the cost of manufacturing conventional garments which are required to be of different sizes in order to fit different size persons. The costs of tooling up to manufacture a device in but one size will obviously be considerably less than those in tooling up to manufacture a garment which must be manufactured in different sizes in order to satisfy the market requirements. Nevertheless the operational efficiency of the garment as a life preserver and its utility as a carrying apron are not materially affected by size differences of persons wearing the same.

It will further be obvious that the provision of carrying pockets and other utility features in such a garment lend considerably to its appeal to sportsmen. The fact that it does not encase the wearer's body but covers primarily only the chest and the upper part of the abdomen also adds to its appeal especially in warm weather and under conditions when the arms and shoulders must be free in order to handle fishing poles, guns and other sports equipment. The device may also be worn by workers, such as loggers and others who must work on and about docks, boats, and other marine equipment and installations.

I claim as my invention:

1. A life preserver garment comprising a double-walled apron-like garment having front and rear panels secured together marginally to form a bottom-opening bladder-retaining pocket, a pneumatically inflatable bladder retained loosely in said pocket and conforming generally in shape to the interior thereof, said bladder being removable through the bottom pocket opening in said garment, said bladder having an inflation element on the front and near the top thereof, said garment front panel having an opening therein through which said inflation element projects forwardly for access in front of said garment, thereby to suspend said bladder in said pocket by said forwardly projecting inflation element, said inflation element being retractable through said projection opening, and harness means comprising a pair of shoulder straps connected to the upper portion of said garment on respectively opposite sides thereof to pass rearwardly therefrom over the wearer's shoulders and downwardly along the wearer's back, and girth strap means connected to said shoulder straps and adapted to extend around the wearer's waist for holding the garment in place.

2. The life preserver garment defined in claim 1, wherein the inflation element comprises an oral inflation tube means projecting forwardly through the front panel of said garment and upwardly a sufficient distance to be reachable by the wearer's mouth for inflation of said bladder, and valve means operable to hold air in said bladder.

3. The life preserver garment defined in claim 2, wherein the first-mentioned inflation element is located on one side of center of the garment, and a second inflation element located on the opposite side of center of the garment, said second inflation element comprising a tube projecting through a second opening in the front wall of the garment, and a normally actuatable compressed gas cartridge means connected to said second tube for emergency inflations of said bladder, said first and second inflation elements supporting said bladder suspended evenly therefrom in said garment pocket.

4. The life preserver garment defined in claim 1, wherein the shoulder strap means further comprises a back strap interconnecting the rearward ends of the shoulder straps to extend downwardly therefrom, said back strap having retaining loop elements successively arranged along the length thereof, said girth strap being of a size and shape to extend selectively through any of said loop elements

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to establish the required length of back strap to fit the wearer.

5. A sportsman's life preserver utility garment comprising a double-walled apron-like garment having front and rear panels secured together marginally along the top and sides thereof to form a bottom-opening bladder-retaining pocket, means forming carrying pockets on the front of said garment, a pneumatically inflatable bladder retained between said front and rear panels and having an inflation element accessibly located on said garment to permit inflation of said bladder by the wearer with the garment being worn, said inflation element projecting outwardly through the front wall of said garment near the top thereof, said pocket-forming means including a strip of sheepskin sewn to the front panel near the top thereof to form a reinforcement for said front panel around the

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inflation element projecting therethrough, the sides and bottom of said strip being sewn to the front panel to form a carrying pocket, and the outer side of said strip having the sheep's hair thereon forming a securing pad for fishing hooks and flies.

References Cited in the file of this patent

UNITED STATES PATENTS

262,577	Day	Aug. 15, 1882
727,444	Recordon	May 5, 1903
977,065	Berry	Nov. 29, 1910
1,291,448	Edmonds	Jan. 14, 1919

FOREIGN PATENTS

546,082	Great Britain	June 26, 1942
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