Dec. 22, 1942. L. R. TEMPLE 2,306,196

LIFE SAVING SUIT

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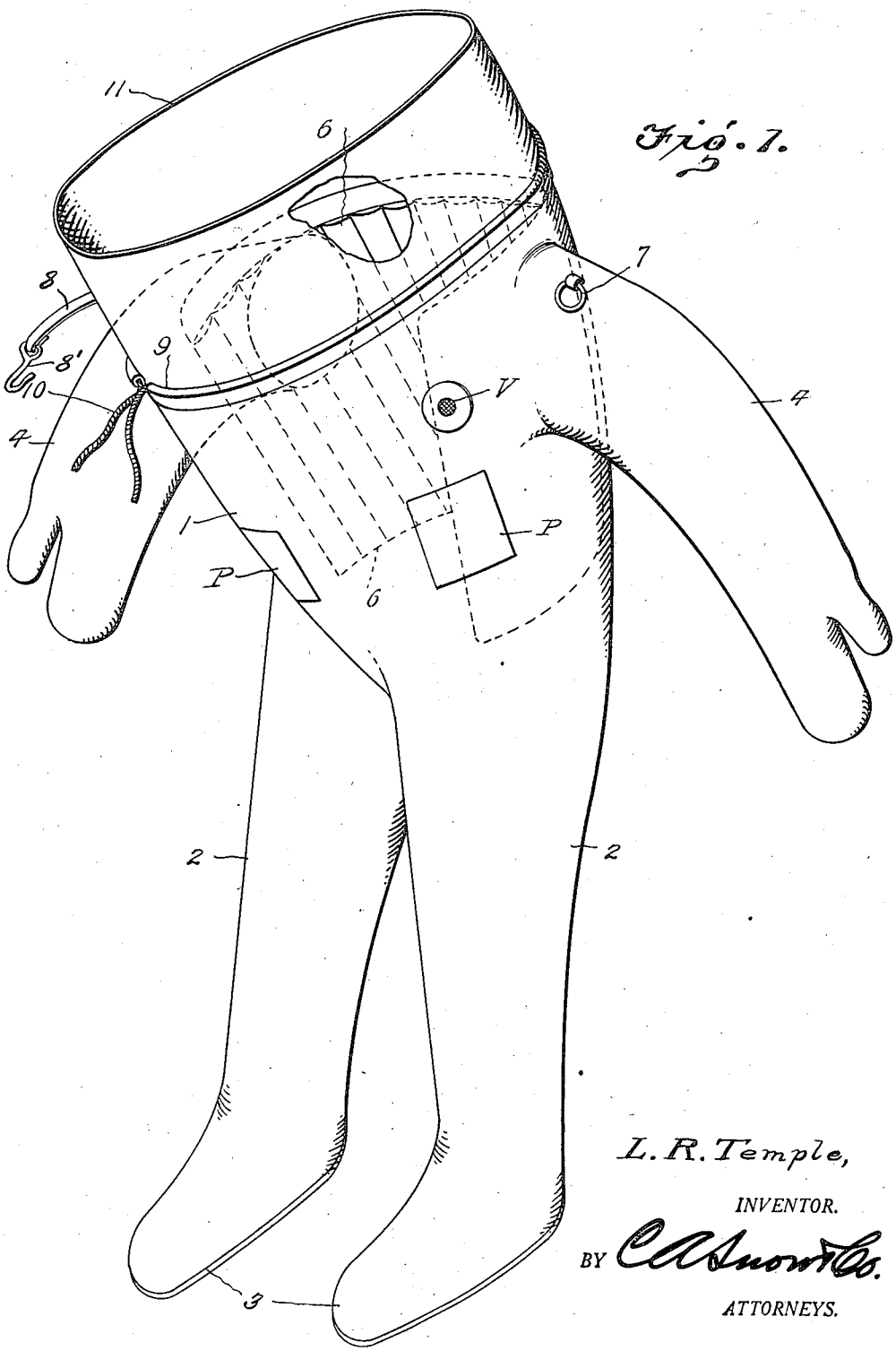


Fig. 1.

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Fig. 4.

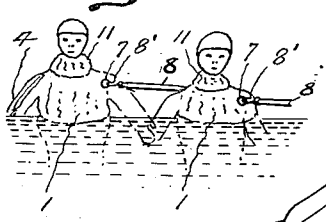
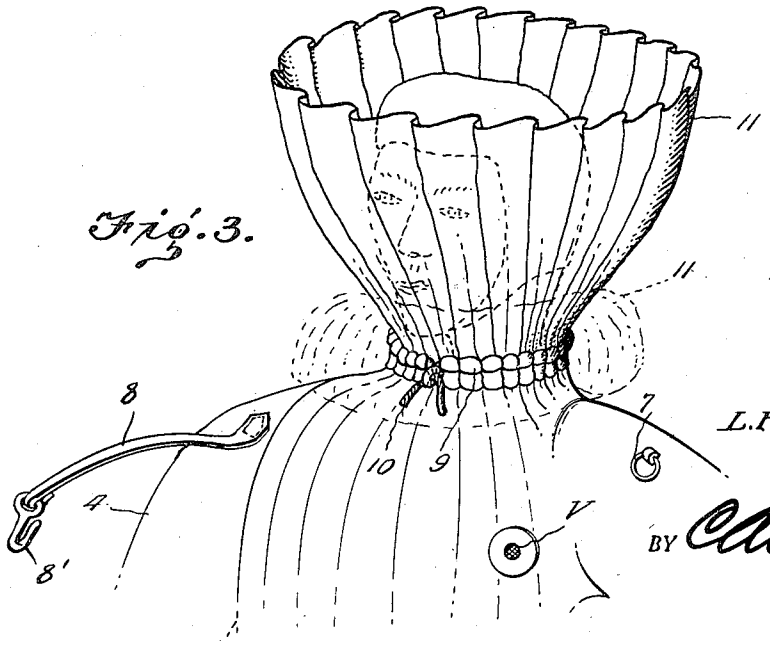


Fig. 2.

Fig. 3.



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2,306,196

LIFESAVING SUIT

Leonard Ray Temple, Richmond, Va.

Application March 14, 1941, Serial No. 383,411

2 Claims. (Cl. 9—20)

This invention relates to a suit designed primarily for life saving purposes, an object of the invention being to provide a suit of light, water-proof material, proportioned to receive the entire body of the user, with the exception of the head and having means whereby it can be put on quickly and thereafter quickly and tightly secured.

A further object is to provide a suit which, when fastened in place, contains a considerable volume of air whereby the buoyancy of the garment is increased when the wearer enters a body of water and the depth to which the wearer descends, when jumping into the water, is reduced materially.

A still further object is to provide a light vest within the garment sufficiently buoyant to support the wearer even though all air should be discharged from within the garment.

A still further object is to provide the garment with a neck apron designed to protect the exposed head of the user from excessive jar and also from a sudden inflow of water at the mouth as the wearer drops below the surface of the water, the action of the apron being, first, to crumple around the neck of the wearer, thereby forming small pockets of trapped air and furnishing a cushion which will relieve the chin and other lower portions of the head from shock which might otherwise be transmitted thereto by the up-rush of air within the garment as it enters the water and, second, by spreading out and rising in the form of an inverted parachute, thereby to shield the head from the inrush of water momentarily.

A further object is to provide the garment with a means whereby two or more persons wearing similar garments, can form a chain whereby they are tied together for mutual assistance.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:

Figure 1 is a perspective view of the garment open ready to receive a user, a portion being broken away to show the interior buoyant vest.

Figure 2 is a perspective view of a portion of the garment in position on the user prior to entering the water.

Figure 3 is a similar view showing, by broken lines, the position of the protective apron when it first reaches the level of a body of water into which the user is falling and, by full lines, a position assumed by the apron as the head of the user passes into the body of water.

Figure 4 is a view on a reduced scale illustrating the manner in which two or more persons can be connected to form a chain.

The garment is made of a light, water-proof fabric, such as rubberized cloth and includes a body-receiving portion 1, leg portions 2 which can be provided with weights 3 at the bottoms thereof, and arm-receiving portions 4. Within the body portion is fastened a vest 6 of buoyant material. Both the arm and leg portions are completely closed except where they open into the body portion and on one shoulder portion of the body is secured a ring 7 while to the shoulder at the opposite side of the body may be fastened a strap 8. A small air vent V can be provided in the upper portion of the body of the garment through which air can seep gradually after the occupant has entered a body of water.

The top edge of the garment is provided with a fold or hem 9 the ends of which are open and in close proximity to each other, and in this fold is located a draw cord 10 the ends of which are exposed where they can be reached readily for the purpose of contracting the folded end or hemmed portion firmly about the neck of the user. From this folded or hemmed portion is extended a tubular apron 11 formed of material similar to that of the rest of the garment and constituting, in effect, a continuation of the garment.

It is to be understood that the garment is so proportioned that a person desirous of using the same can step into the open end thereof so that both legs will enter the leg portions 2 while the arms can be inserted into and be completely housed within the arm portions 4. The ends of the cord are then grasped and pulled so that the upper end portion of the body will thus be gathered about the neck of the user whereupon the apron portion 11 will spread out over the shoulders and on the front and back of the body as shown particularly in Figure 2. The occupant of the garment is then ready to jump into the body of water and as the water is entered, the air contained therein is forced upwardly within the body toward the vent V and within the shoulder portions. The sudden upthrust of this air,

supplemented by the resistance offered by the water, ordinarily would subject the head of the occupant of the garment to a violent and sudden upthrust. For the purpose of avoiding this undesirable action, the apron 11 has been provided. As the occupant of the suit descends in the body of water the apron, in which is trapped a certain amount of air between the folds, will promptly crumple up between the shoulder and chest portions of the body and the lower portion of the head as indicated by broken lines in Figure 3, thus forming in effect a cushion for the purpose of protecting the lower portion of the head from a sudden jolt. Immediately thereafter, and as the user continues to descend into the water, the apron will unfold after the manner of an inverted parachute and extend around the head as shown by full lines in Figure 3. Thus a sudden inrush of water into the mouth and nostrils is prevented and the wearer of the garment, particularly if inexperienced, will have an opportunity to take in air for a longer period than would otherwise be possible. Furthermore the disconcerting effect of sudden envelopement of the head by water is to an extent avoided. Where two or more persons are suddenly deposited in the water, they can form a chain, each person placing the hook 8' on his strap 8 in the ring 7 of the next adjoining person as shown in Figure 4. Thus the persons may be of mutual assistance in the water and danger of separation is reduced greatly.

After the person has returned to the surface of the water the apron will settle from the position shown in Figure 3 and air will ultimately seep out of the vent V so that the person thus will be supported by the vest 7. Obviously, if desired, the vent V could be eliminated so that air could be retained as long as possible to assist in maintaining the buoyancy of the garment.

If desired pockets P can be located wherever deemed desirable for the purpose of holding supplies.

What is claimed is:

1. A life saving suit open at the top only and including a body, a tubular apron of water-proof fabric normally extending upwardly from and connected only to the open top of the body and of the same circumferential size as the top, leg and arm portions extending from the body and means for gathering the apron and the top portion of the body at the front, back and sides of the neck of the occupant, the length of the apron from top to bottom being greater than the maximum distance from the neck to the eyes of the user, said apron being reversible so as to rest against the body in overlapping relation, and a buoyant portion connected to the body.

2. A life saving suit open at the top only and including a body, a tubular apron of water-proof fabric normally extending upwardly from and connected only to the open top of the body and of the same circumferential size as the top, leg and arm portions extending from the body and means for gathering the apron and the top portion of the body at the front, back and sides of the neck of the occupant, the length of the apron from top to bottom being greater than the maximum distance from the neck to the eyes of the user, said apron being reversible so as to rest against the body in overlapping relation, a buoyant portion connected to the body, a strap secured at one end to the suit adjacent to the apron, a hook on the other end of the strap, and a ring also secured to the suit and adjacent to the apron opposite to the strap.

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