Oct. 24, 1939. J. B. REED 2,177,442

LIFE PRESERVER

Filed May 14, 1938

Fig. 1.

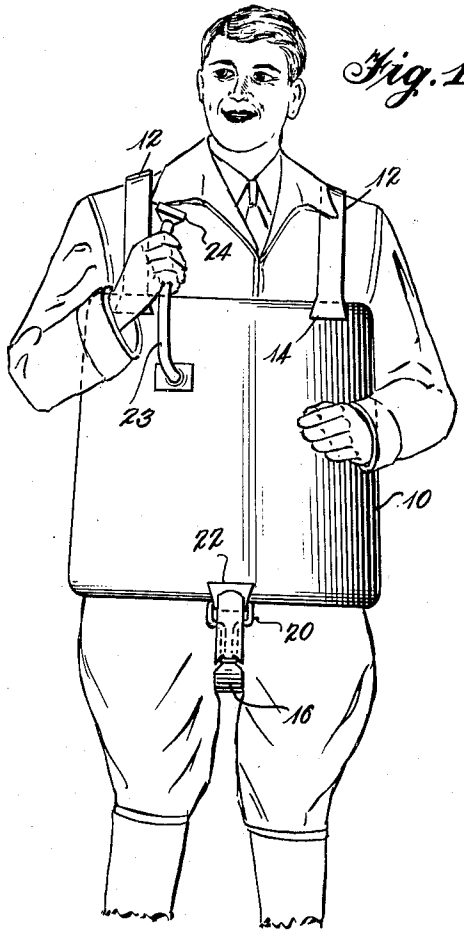


Fig. 2.

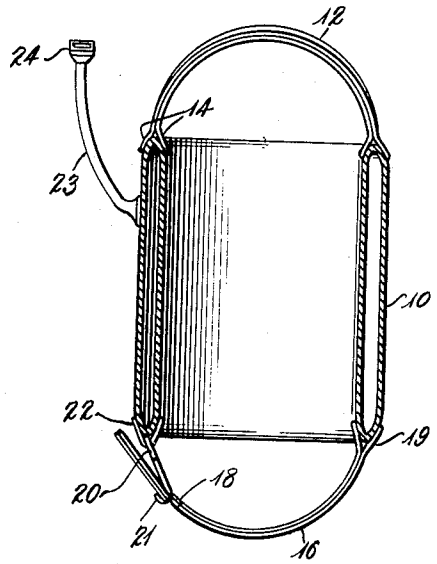


Fig. 6.

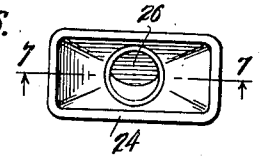


Fig. 7.

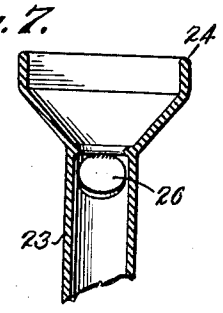


Fig. 3.

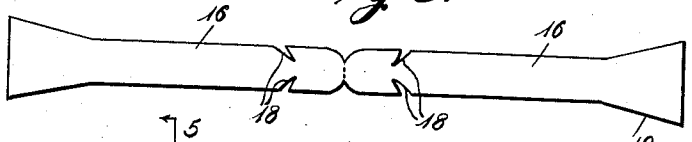


Fig. 4.

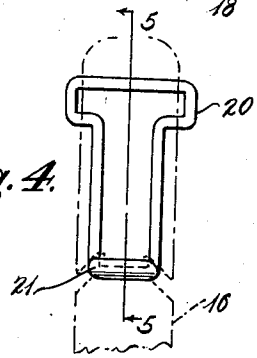


Fig. 5.



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LIFE PRESERVER

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Application May 14, 1938, Serial No. 208,047

2 Claims. (Cl. 9—17)

This invention relates to improvements in life preservers and relates more particularly to the type of device adapted to be inflated whereby its buoyancy will maintain the wearer's head above the water.

It is an object of the invention to provide a life preserver which may be applied and adjusted to the body of the wearer with minimum effort and utmost expediency.

Another object is to provide a device which is simple in construction and very light in weight but extremely durable in operation.

A further object is to provide a device which may be compactly folded when not in use whereby the same may occupy but a minimum of storage space.

Other and further objects of the invention will be apparent from the following detailed description taken in conjunction with the accompanying drawing wherein a preferred embodiment of the principles of the invention has been selected for exemplification.

Figure 1 is a side elevational view of a life preserver as comprehended by the invention positioned upon the body of the wearer.

Fig. 2 is a vertical section of the device illustrated in Fig. 1.

Fig. 3 is a plan view of an incompleted strap by means of which the device may be adjusted and secured to the body of the wearer.

Fig. 4 is an enlarged fragmentary side elevational view of the strap and buckle.

Fig. 5 is a vertical sectional view of the buckle illustrated in Fig. 4 taken along the line 5—5 thereof.

Fig. 6 is a view looking into the mouthpiece for inflating the device; and

Fig. 7 is a sectional view taken along line 7—7 of Fig. 6.

Referring more particularly to the drawing wherein like numerals refer to like parts, 10 represents the belt or body portion of the device which may be formed of heavy rubber tubing and devoid of seams if desired. Shoulder straps 12 may likewise be formed of rubber and preferably are constructed of a plurality of layers of rubber strips cemented or vulcanized together throughout the lengths thereof, except for the end portions, which may be spread apart and joined, such as by vulcanization, one to the underside and the other to the outside faces of the tubing 10 as indicated at 14.

The crotch strap 16 is provided at the bottom of the tubular belt or body portion 10 and may be joined thereto in a manner similar to the straps 12, as indicated at 19. As shown by the blank illustrated in Fig. 3, the strap 16 may be formed of a single strip of rubber folded upon itself to provide the necessary durability. The free end of strap 16 is provided with opposed angularly arranged notches 18 to cooperate with a buckle 20 secured to the belt 10 by means of a strap 22, which strap may be secured to opposed inside and outside faces of the belt 10, as best illustrated in Fig. 2. Although only one pair of notches 18 is illustrated, it is understood that a plurality of pairs may be provided to selectively cooperate with the buckle to effect the desired adjustability of the life preserver upon the body of the wearer.

It will be seen that the lower portion of the buckle 20 is of less width than the strap 16 except for the portions thereof extending between the inner extremities of opposed notches 18, and that the bottom 21 of the buckle is forwardly bent to facilitate insertion of the strap and to provide offset shoulders to receive the notched portions of the strap whereby to securely anchor the strap against disengagement.

The strap and buckle arrangement 16 and 20, which constitutes the sole fastening and/or adjusting means for the device and which displaces the awkward metallic buckles of prior devices, comprises an important feature of the invention and makes it possible for the wearer to quickly and surely secure the device in position.

Suitable means, indicated by the hose 23, mouthpiece 24 and check valve 26, may be secured to the tubular belt 10 in convenient position whereby the tubular portion 10 may be readily inflated by the wearer. The members 23, 24 and 26 may each be formed of rubber and the valve 26, which may be vulcanized to the hose 23, may be oblong in shape and slightly larger than the inside diameter of the hose whereby to automatically check the air when the belt or body portion 10 is inflated.

It will be seen that the device may be constructed entirely of rubber except for buckle 20, which may be formed of light weight metal, although hard rubber will serve as well, so that the device is water resistant and capable of being compactly folded and stored in but a minimum of space. Devices embodying my invention may be manufactured in different sizes and in this event it may not be necessary to provide for adjustability in the quick latch fastening means.

Operation and use of the device is believed readily apparent from the illustrations and description thereof. The tubular belt portion 10

may be passed over the head of the wearer and suspended from the shoulder by means of the straps 12 and then adjusted and secured to the body of the wearer by engaging opposed notches 18 of the crotch strap 16 with the portion 21 of the buckle 20. The device may be inflated either before or after its application to the body of the wearer and the disposition of the inflating tube 22 makes it possible for the wearer to re-inflate the device as often as might be necessary.

It is understood that the device herein illustrated and described is exemplary only of the principles of the invention and is capable of such modification as may be comprehended by the scope of the following claims.

I claim:

1. A life preserver comprising an enlarged inflatable belt portion adapted to embrace the body of the wearer, straps to suspend said belt portion from the shoulders of the wearer, said straps being laminated and said laminations being spaced apart at the longitudinal ends of the strap and secured to opposed inside and outside faces of the belt portion, a laminated crotch strap also secured to the inside and outside faces of the belt portion and provided with a pair of opposed edge notches adjacent its free end, and a buckle carried by the said belt portion and having its free end forwardly offset whereby to provide a seat for reception of the opposed notches of the crotch strap.

2. A life preserver comprising an enlarged inflatable belt portion adapted to embrace the body of the wearer, straps to suspend said belt portion from the shoulders of the wearer, said straps being laminated and said laminations being spaced apart at the longitudinal ends of the strap and secured to opposed inside and outside faces of the belt portion, a laminated crotch strap also secured to the inside and outside faces of the belt portion and provided with a pair of opposed edge notches adjacent its free end, and a buckle secured to the front lower part of said belt portion and adapted to receive opposed notches of the crotch strap.

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