S. P. BJERRE.

LIFE BELT.

APPLICATION FILED JULY 2, 1917.

1,275,647. Patented Aug. 13, 1918.

Fig. 1.

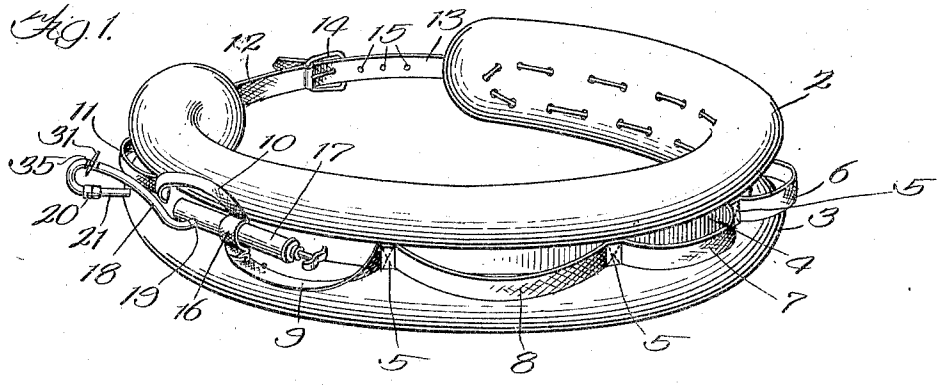


Fig. 3.

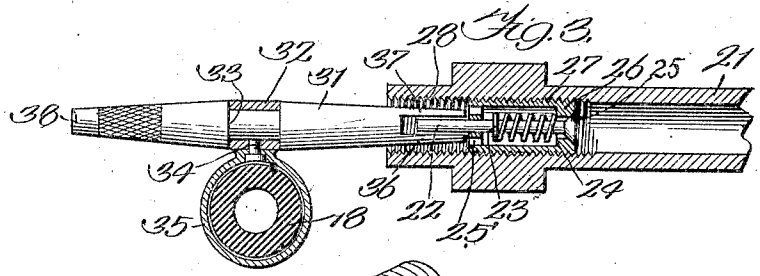


Fig. 4.

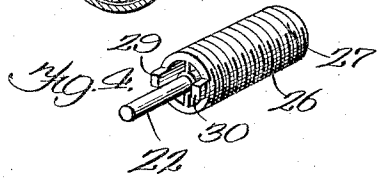


Fig. 5.

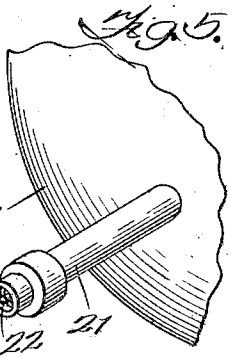


Fig. 2.

Witness.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

SWAN P. BJERRE, OF CHICAGO, ILLINOIS.

LIFE-BELT.

1,275,647. Specification of Letters Patent. Patented Aug. 13, 1918.

Application filed July 2, 1917. Serial No. 178,076.

To all whom it may concern:

Be it known that I, SWAN P. BJERRE, a subject of the King of Sweden, and resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Life-Belts, of which the following is a specification.

My invention relates to life belts and its object is to provide certain improvements well adapted to increase the serviceability of the type of belt having the carrying power and construction shown in my Patent No. 1,212,315, by providing auxiliary carrying means and convenient arrangements for inflating and deflating the belt and for adjusting or repairing its air-valve.

With the above-named objects in view my invention consists in the novel construction, combination and arrangement of parts hereinafter described in detail, illustrated in the accompanying drawing and more particularly pointed out in the appended claim.

In the drawing—

Figure 1 is a perspective view of my heretofore patented belt with the present improvements applied thereto.

Fig. 2 is an enlarged view of the ordinary air pump for such a purpose with my air valve operating device removably and adjustably mounted on the flexible tube for the pump.

Fig. 3 is an enlarged side view of said device with a longitudinal section of the air valve, partly broken away.

Fig. 4 is a perspective view of the air valve alone.

Fig. 5 is a perspective view of the air valve and a broken away portion of the life belt.

In the several views 2 and 3 represent the runs or layers of a life belt made with a doubled and incased air tube such as provided for pneumatic tires. That portion of the casing which forms a connecting web between the parts 2 and 3 is designated as 4. To this portion 4 I sew, or otherwise attach, at suitable intervals or spaced apart points, as at 5, 5, a stout canvas strip or plain belt, to provide a series of loops or hand-holds 6, 7, 8, 9, 10, and 11 for the convenience of other persons struggling in the water and who have no belts of their own, as the life belt can sustain. A moderate size belt of the indicated form of construction has approximately 600 square inches of air space, while only about 100 is necessary to float an ordinary person. The ends of the looped or auxiliary belt are merged with the ends of the life belt, or serve as the ends of the latter, and are designated by the numerals 12 and 13. On the part 12 is a buckle 14 which is engaged with a suitable hole 15 in the part 13. To the hand-hold strip 6—11 is removably attached with the aid of a loop 16 an ordinary hand pump 17 provided with a flexible tube 18 with coupling nipples 19 and 20. The coupling member 20 is engaged with a life belt valve-nipple 21. The valve and stem —22— is shown slidably guided in the usual spider 25′ and provided with the customary collar 23 against which bears a spring 24 that holds the valve seated against the shoulder or valve-seat 25 in the valve casing 26. External threads 27 on the latter are engaged with threads 28 in the nipple 21 and has lugs 29 and 30 to be engaged by a suitable turning instrument for the purpose of inserting or removing the valve casing 26. For emergency purposes I have provided a small instrument 31 the body of which is tapered from the middle toward both ends. The instrument 31 is revolubly mounted on a band 32 which is held in a recess 33 cut around the tool 31. The band 32 is swiveled on a pivot 34 to a ring 35 that slips over the tube 18 and is held against passing the ends of the tube by its attachments to the pump and air valve, respectively. One end of the tool 31 is formed with a pair of prongs 36 and 37 which straddle the stem 22 and are adapted to engage the lugs 29 and 30 to turn the valve casing on its threads. In the opposite end of the tool 31 is a slight depression 38 that may be engaged with the tip of the stem 22 to push the same in against the resistance of the spring 24 for the purpose of exhausting the air from the belt when it is to be folded up as when not in service. The specific details of valve and nipple construc-

tion are not involved in the present invention, all such valves being provided with threaded parts and an air-release stem.

I claim as my invention—

The combination with an air-buoyed life-belt consisting of a pair of layers with a depression or space therebetween, of an air-valve for said belt, a strip having a series of hand-holds thereon and secured in said depression, an air-pump removably mounted in said depression, a flexible connection between said air-pump and said air-valve, and a valve-adjusting instrument adjustably mounted on said flexible connection.

In testimony whereof I have hereunto signed my name.

SWAN P. BJERRE.

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