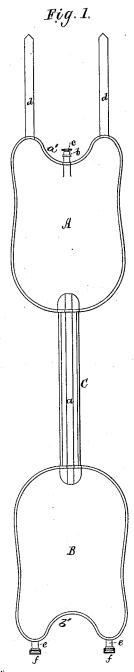
## W. C. McDONALD.

LIFE PRESERVER.

No. 346,599.

Patented Aug. 3, 1886.



<u>Witnesses</u> S. N. Piper Ro. B. Torrey.



Inventor.
Wm.C. McDonald.
by RUELL atty

## United States Patent Office.

WILLIAM CHARLES McDONALD, OF READING, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO SAID WILLIAM C. McDONALD AND AUGUSTUS F. PIERCE, OF SAME PLACE.

## LIFE-PRESERVER.

SPECIFICATION forming part of Letters Patent No. 346,599, dated August 3, 1886.

Application filed January 25, 1886. Serial No. 189,572. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CHARLES MC-DONALD, of Reading, in the county of Middle-sex, of the Commonwealth of Massachusetts,

5 have invented a new and useful Improvement in Life-Preservers; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a side view, and Fig. 2 a longitudinal section, of a life-preserver of my improved kind in an unfolded state, the nature of my invention being defined in the claims

hereinafter presented.

In such drawings, A and B are two air tight flexible bags, having the recessed curves a' and b', and connected by a band, C, extending from one to the other of them between their bottoms, and having within it a passage or flexible tube, a, which at its ends opens into both bags. One of such bags at its top is provided with a nozzle, b, for inflating it, such nozzle having a screw-cap, c, for closing it. Such bag at its top is also furnished with two straps, dd, arranged, as shown, to engage with buckles, ff, projecting from the top of the other bag, or applied to straps ee, extending therefrom.

When the said life-preserver is in use, the band C is to go between the legs of the person or wearer, and one bag is to be in front and the other in rear of his body, the recessed curves a' and b' fitting the neck in front and back, the straps of one bag being carried over his shouls ders and buckled to the other bag, or the straps thereof provided with buckles. The stiff flexible tube going through or applied to the band C lengthwise thereof and opening into the two bags serves to convey air from one bag into the other, especially when a person is in the water and in the act of inflating the bags, with his mouth applied to the induction tube or nozzle of one of them.

Were the bag tubular, it would be liable, under the pressure of the water or the action of the legs of the person upon it, to be contracted or collapsed, so as to prevent or hinder the air from passing from one bag into the other while a person may have the life-preserver on him and be in the act of inflating it by means of his lungs. By having within or

along the band a flexible tube opening at its ends into both bags, and sufficiently flexible lengthwise and stiff endwise to prevent it from collapsing under external pressure of the water 55 or the legs of the wearer of the life-preserver, air can be caused to pass readily from one bag to the other while the life-preserver may be in use and being inflated and the person having it on may be immersed in water.

I do not herein claim a life-preserver constructed as described in a patent the application for which was filed by me on October 14, 1885, and allowed on January 7, 1886, which life-preserver had its flexible tubes to extend 65

across the shoulders of the wearer.

I am aware of United States Patent No. 282,627, wherein is shown a jacket provided with two air-bags connected by a tube, one bag having an induction-nozzle, and the jacket 70 provided with straps and buckles. This jacket is worn by the arms passing through straps and the air-bags resting under the arms along the sides of the body, and there is no strain on the bags or their connecting tube, the jacket 75 taking all said strain. My device is used totally different from this. One bag is worn on the back, the other on the breast, and the strap goes between the legs of the wearer; consequently I do not and cannot use a jacket. The 80 two bags are simply connected by a strong band narrow enough so as not to chafe the wearer, and in this band is secured the tube, so that there is no strain on the latter.

Having described my invention, what I claim 85

is—

1. The air-bag A, having the nozzle b and straps dd, and the air-bag B, having the buckles ff, in combination with the strap C and the tube a, such strap being narrow and containg the tube a, which connects the interior of the bags, as set forth.

2. The air bag A, having the nozzle b and straps dd, and the air bag B, having the buckles ff, in combination with the strap C and the 95 tube a, connecting the two bags A and B, the said bags having the recessed neck-curves a' and b', as and for the purpose set forth.

WILLIAM CHARLES McDONALD.

Witnesses:

R. H. EDDY, R. B. TORREY.