

No. 680,452.

Patented Aug. 13, 1901.

G. C. BUNSEN.
LIFE PRESERVER.

(Application filed Nov. 21, 1900.)

(No Model.)

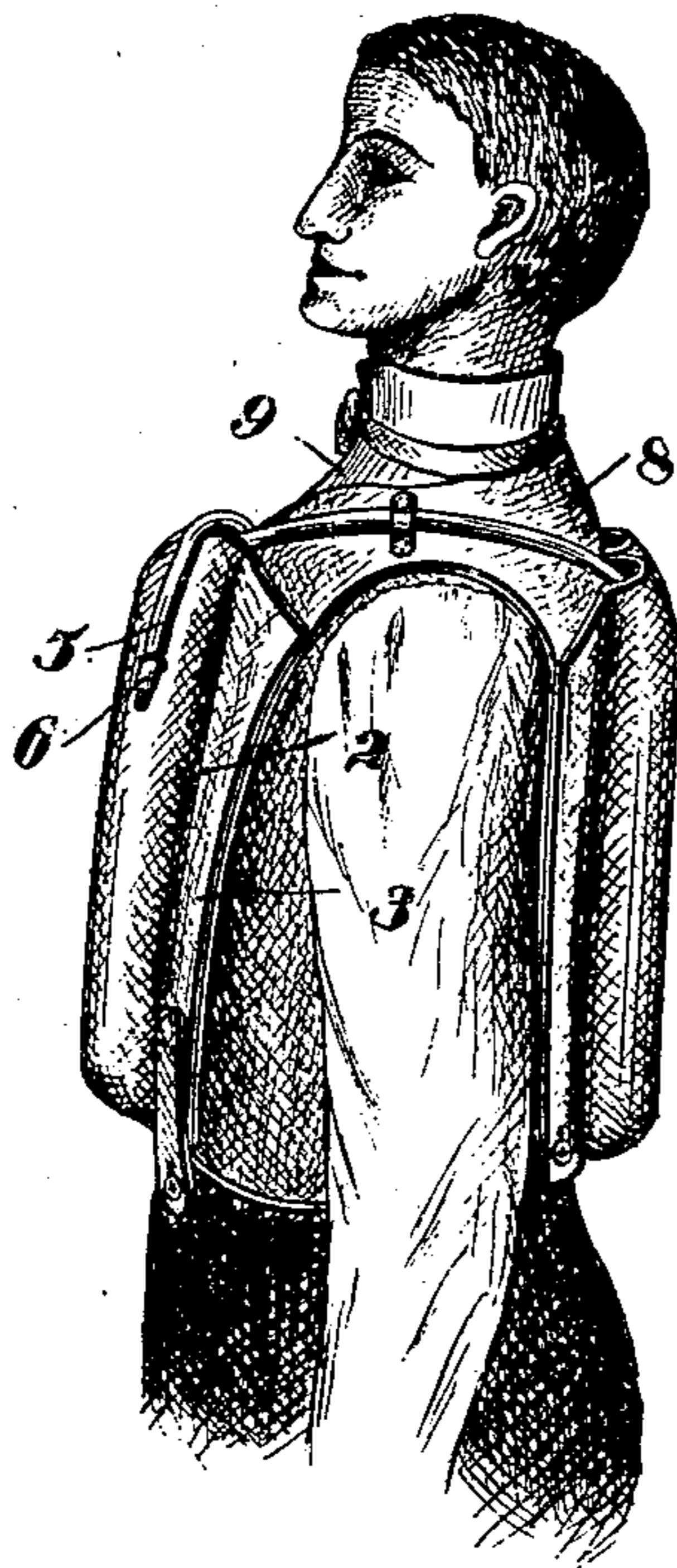


Fig. 1.

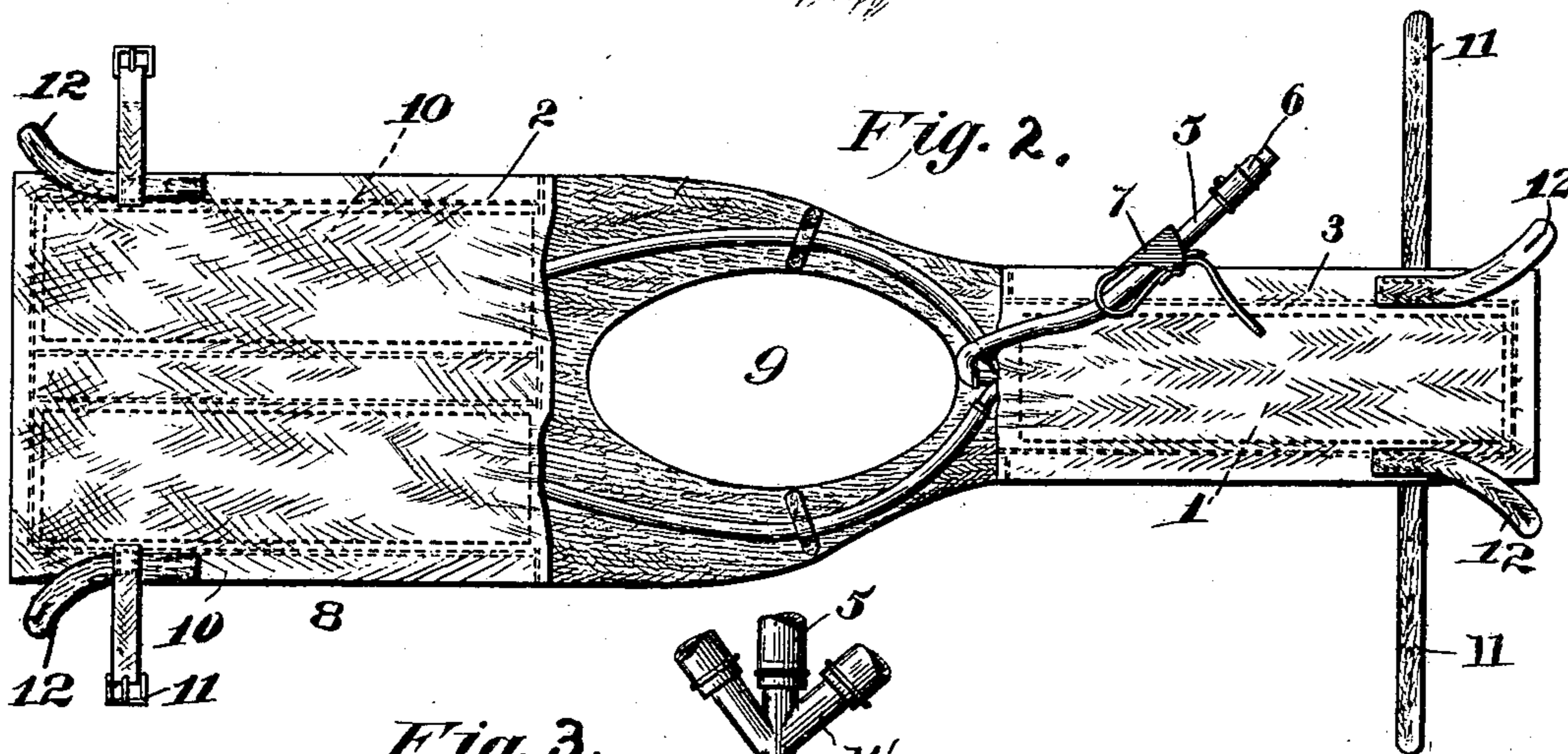
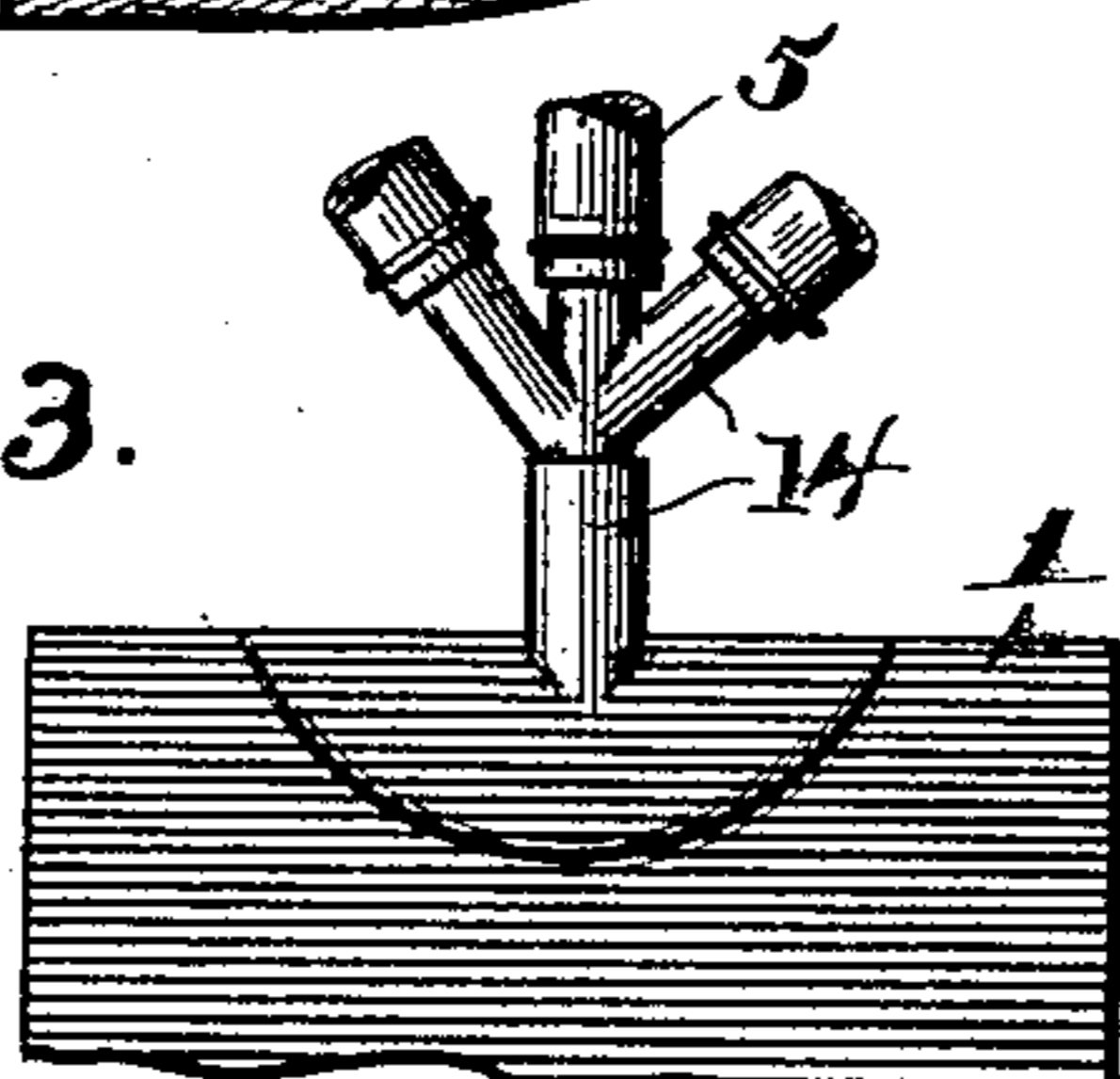


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

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LIFE-PRESERVER.

SPECIFICATION forming part of Letters Patent No. 680,452, dated August 13, 1901.

Application filed November 21, 1900. Serial No. 37,278. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. BUNSEN, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Life-Preservers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a life-preserver designed to be worn, preferably, beneath the outer garment and at any and all times desired without causing inconvenience to the wearer and which will be ready for use at a moment's notice.

The object of my invention is the production of a life-preserver which will not in any way inconvenience the movements of a swimmer, but which will facilitate his progress while in the water, and which when in position on the body and when not in condition for actual use—that is, deflated—will not be perceptible and will not in any way inconvenience or discommode the wearer.

The invention consists in certain novel constructions, combinations, and arrangements of parts, as hereinafter fully described and specifically claimed.

In the accompanying drawings, Figure 1 is a perspective view showing my invention applied to a person. Fig. 2 is a plan view of the device. Fig. 3 is a detail view showing means for inflating all the bags simultaneously.

The numeral 8 in the accompanying drawings represents a suitable casing, which is provided with an aperture or opening 9, through which the head of the wearer is designed to be passed. This casing is provided with attaching edges 10, which may be provided with buttonholes or other fastening devices or with straps and buckles, as 11, and tab ends 12. This construction will be found very convenient and can be sold as an entirety as a life-preserver. Provided within this casing is a plurality of sacks or bags 2, preferably three in number, two of which are preferably worn on the back of the person and one in front, all of the sacks or bags being arranged within the casing 8. If de-

sired, one or more inflatable bags or sacks than is really required to support a person in the water may be employed, but which need not be inflated except in the case of an emergency—that is, in the event of one of the other bags not operating satisfactorily. The bags or sacks are air-tight and may be constructed of any suitable material—such as rubber, beef-gullet, and the like—and of any suitable dimensions. The bag or sack before it is inflated lies perfectly flat, and this is the condition in which it is worn when not in actual use, so that it does not in any way inconvenience the wearer nor mar his or her appearance, it being the intention to wear the bags beneath the outer garment, so as to be invisible and ready for use at a moment's notice.

The casing 8 is preferably constructed of dark cloth, which material and color of material are found preferable and most serviceable for protecting the bags. The casing 8 not only serves as a means for attaching the life-preserver to a garment, but also protects the bags and prevents them from being inflated to too great an extent, and thus prevents the same from being accidentally bursted. To allow for the proper inflation of the sack or bag, the casing is made slightly larger than the sack or bag when in a deflated condition and of such a size, as stated above, to prevent too great an inflation.

For inflating the sack or bag and for permitting the ready escape of air and for controlling the air in the sacks the same is preferably provided with a tube 5, which latter is provided with a suitable valve 6, of approved construction, which enables the sack or bag to be blown up and the valve to be closed without permitting the air to escape, or, if desired, the tube 5 may be provided with a clamp, such as 7, by means of which after the sack or bag has been inflated to the desired extent it can be operated to clamp the tube 5 and hold the air in the sack. If desired, both a valve, as 6, and a clamp, as 7, may be provided at the same time on the tube 5 as a precautionary means, so that in the event of one of the devices not operating the other in all probability would. This is rather important, for the reason that in the event of a shipwreck or other calamity at sea,

where a person is obliged to take to the water, it is of utmost importance that either the clamp or the valve should work perfectly.

In Fig. 2 of the drawings I have shown all 5 of the tubes 5, which are connected with the respective bags or sacks, coupled to a suitable nipple, as 14, (shown more clearly in Fig. 3,) and having a plurality of nipple ends, so that all of the bags or sacks may be 10 inflated simultaneously. This will greatly facilitate a person's preparation for entering the water.

By providing the construction shown in Fig. 2 with tab-loops 12 at and near both 15 ends of the device the same will serve as a pair of suspenders to support the garments of the wearer. It will also be observed that by covering the bags with cloth the disagreeable feeling which would be experienced in 20 having cold rubber come next to the undergarments or next to the skin is obviated.

While my invention may be found particularly useful for persons going to sea, yet it will also be found very convenient for use in 25 swimming-schools and at the seashore, where

persons desire to learn to swim without running the risk of being drowned.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A life-preserver designed to be worn beneath an outer garment, and comprising in its construction an outer protecting-casing of cloth or other suitable material provided with attaching edges or flanges, said casing being 30 also provided with an aperture through which the head of the wearer is adapted to be passed, a plurality of inflatable bags or sacks secured within the outer casing so as to be protected thereby, means for inflating the 35 bags without removing the same from the casing, and means located outside the casing for holding the bags in an inflated condition, substantially as described. 40

In testimony whereof I hereunto affix my 45 signature in presence of two witnesses.

GEORGE C. BUNSEN.

Witnesses:

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