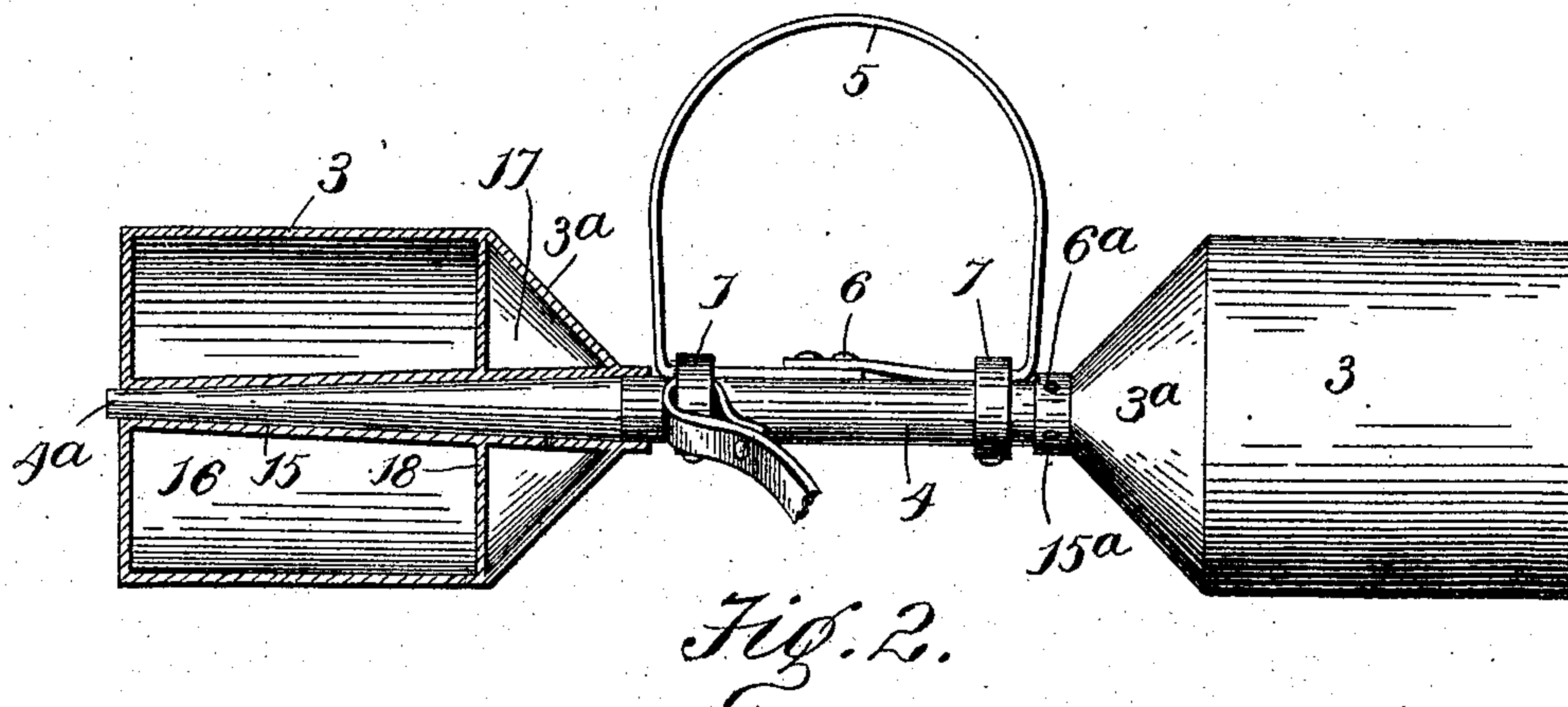
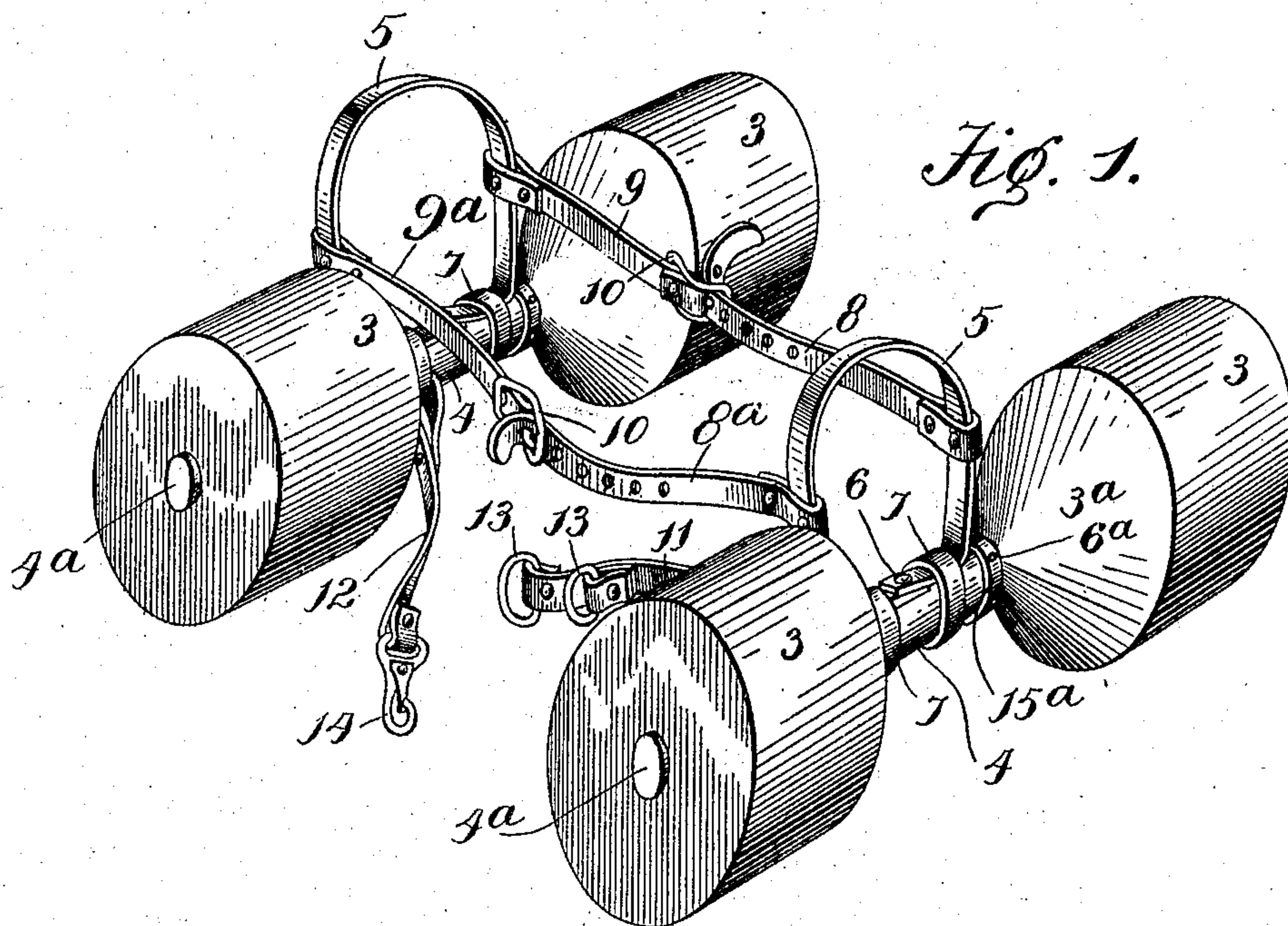


No. 806,250.

PATENTED DEC. 5, 1905.

J. E. GAGNÉ.  
LIFE PRESERVER.  
APPLICATION FILED SEPT. 15, 1904.



Witnesses:  
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Attorneys



# UNITED STATES PATENT OFFICE.

JOSEPH ELZEAR GAGNÉ, OF AHUNTSIC, CANADA.

## LIFE-PRESERVER.

No. 806,250.

Specification of Letters Patent.

Patented Dec. 5, 1905.

Application filed September 15, 1904. Serial No. 224,486.

*To all whom it may concern:*

Be it known that I, JOSEPH ELZEAR GAGNÉ, a subject of the King of Great Britain, residing at Ahuntsic, county of Hochelaga, in the Province of Quebec, Canada, have invented certain new and useful Improvements in Life-Preservers; and I do hereby declare that the following is 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.

This invention relates to new and useful improvements in life-preservers; and it consists in certain features of novelty in the construction and arrangement thereof, all as hereinafter more fully described, and specifically pointed out in the claims.

The object of the invention is to provide a non-collapsible structure adapted for use as a life-preserver which may be quickly used and which will be effective as a life-preserver when secured upon the body of the person using the same or when held by such person in the water.

In the annexed drawings, in which similar numerals of reference indicate corresponding parts in both views, Figure 1 is a perspective view illustrating my improved life-preserver provided with its securing-straps, whereby it may be secured upon the person contemplating using the same; and Fig. 2 is a side elevational view, one-half of which is shown in section, illustrating details of construction of the floats.

Referring to the parts, 3 3 are floats, which are preferably formed of sheet metal, as shown, which floats are secured upon cross-connecting bars 4, as hereinafter described, while shoulder-straps 5 are connected with said cross-connecting bars in any desired manner, as by means of the pins 6, passing through said straps 5, being driven into the said bars 4, while loops 7 are provided in proximity to the floats 3 to secure said straps in proper position for quick adjustment to the person of the wearer.

Back-straps 8 and 9 are connected with the shoulder-straps, as shown in Fig. 1, and a connecting means, as the buckle 10, is provided for connecting the ends of said straps and rendering the same adjustable when desired.

Corresponding straps 8<sup>a</sup> and 9<sup>a</sup>, adapted to serve as breast-straps, are also provided with a buckle, as 10, while a third pair of straps

11 and 12 are provided, respectively, with the loops 13 and snap-hook 14 for securing the device in position.

The shoulder-straps and the other connecting-straps described may be of any desired form; but the arrangement shown is preferred, as means are thereby provided whereby the floats may be quickly secured in position by passing the arms through the loops formed by the shoulder-straps 5 and cross-bars 4, and the floats are held in position without other securing means, if desired.

The construction of the floats 3 is material, and such floats are provided with an inner seal consisting of the tubes 15, which extend from end to end of said floats, as best shown in the sectional portion of Fig. 2, whereby air-chambers 16 are provided within said floats.

To provide supplemental air-chambers 17 within the floats, diaphragms 18 are placed in position within said floats near the inner end thereof, as shown in Fig. 2, said diaphragms 18 extending from the tubes 15 to the shells of the floats, thereby forming the chambers 17 between said tubes, said diaphragms; and the inclined end walls 3<sup>a</sup> of the floats.

It will be obvious that the tubes 15 may be formed separately from the shells 3, and the diaphragms 18 and inclined walls 3<sup>a</sup> may comprise separate sheets of material properly secured in position to form parts of the floats.

It is preferred that the tubes 15 shall extend at the inner ends of the floats beyond the walls 3<sup>a</sup>, whereby collars 15<sup>a</sup> are provided, through which pins, as 6<sup>a</sup>, may pass into the material of the cross-bars 4 to secure the floats in position upon said cross-bars.

The tubes 15 are preferably tapering sleeves, as shown, of larger diameter at their inner ends—that is, the ends next the straps 5—and the cross-bars 4 are provided with approximately frusta-conical portions 4<sup>a</sup>, adapted to fit snugly within said tubes or sleeves.

While I have shown in the accompanying drawings the preferred form of my invention, it will be understood that I do not limit myself to the precise form shown, for many of the details may be changed in form or position without affecting the operativeness or utility of my invention, and I therefore reserve the right to make all such modifications as are included within the scope of the following claims or of mechanical equivalents to the structures set forth.

Having described my invention, what I



claim, and desire to secure by Letters Patent, is—

1. A life-preserver comprising the combination of a pair of floats, each comprising a  
5 pair of chambers, each chamber being formed with a central tapered sleeve, a cross-bar having tapered ends inserted in said sleeves and adapted to connect said chambers in pairs, a  
strap disposed on each cross-bar and having  
10 its ends secured at a central point thereon, movable collars disposed around said straps and cross-bar, whereby the straps may be adjusted, and members connecting said floats.
2. A life-preserver comprising the combination of a pair of floats, each comprising a  
15

pair of chambers, each chamber being formed with a central tapered sleeve terminating in the collar; a cross-bar having tapered ends inserted in said sleeves and adapted to connect said chambers in pairs, fastening means  
20 projecting from the collar on said sleeve and into the cross-bar, a strap disposed on each cross-bar, means for adjusting said strap, and members adjustably connecting said floats.

In witness whereof I have hereunto set my  
hand in the presence of two witnesses.

JOSEPH ELZEAR GAGNÉ.

Witnesses:

F. H. GIBBS,

J. R. E. PAINE.