

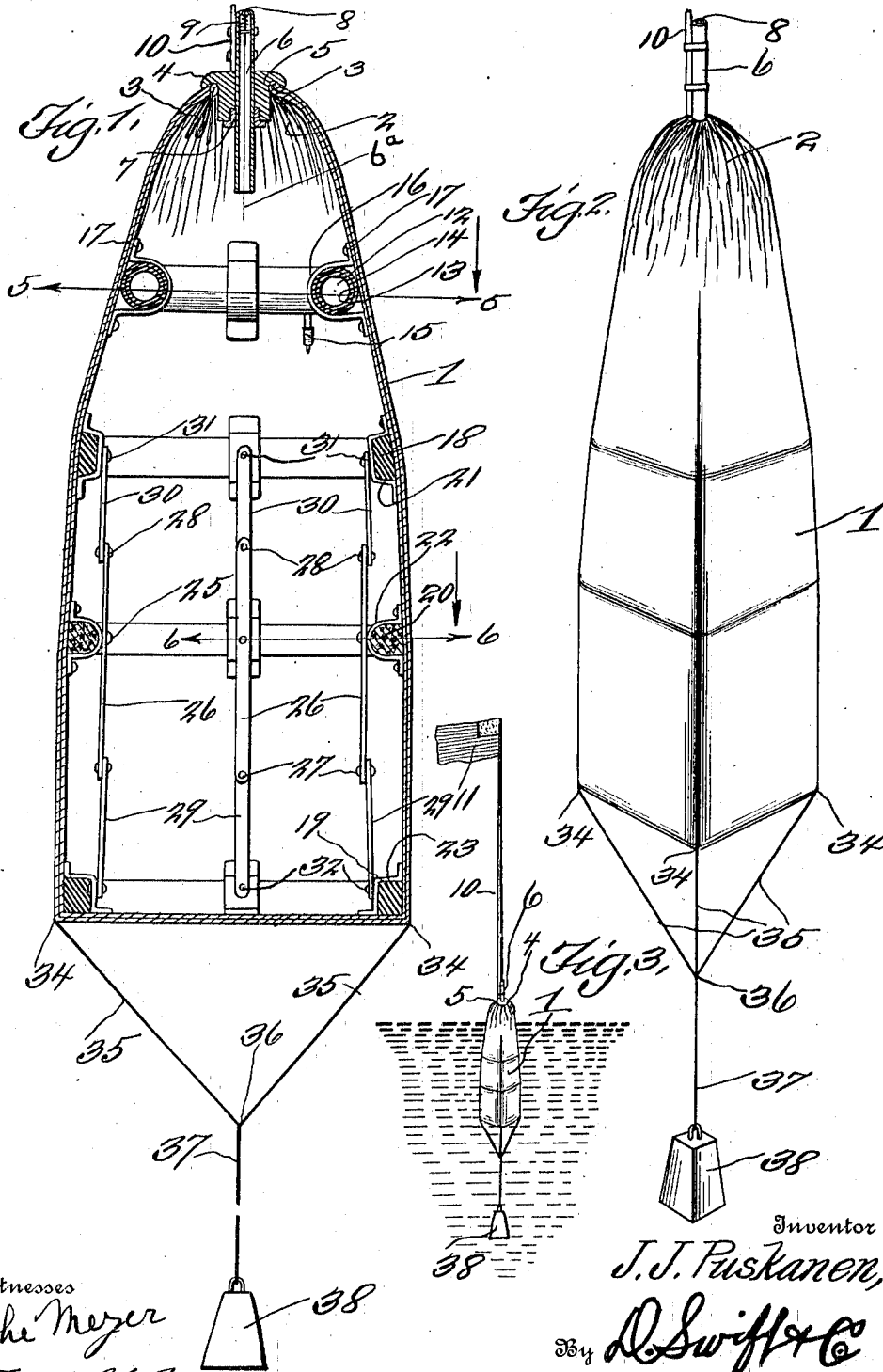
J. J. PUSKANEN.
LIFE PRESERVER.

APPLICATION FILED JULY 13, 1912.

Patented Apr. 22, 1913.

2 SHEETS-SHEET 1.

1,059,392.



Witnesses
Robt Meyer
Francis L. Boswell.

Inventor
J. J. Puskanen,
By *R. Swift & Co*
Attorneys

1,059,392.

J. J. PUSKANEN.
LIFE PRESERVER.
APPLICATION FILED JULY 13, 1912.

Patented Apr. 22, 1913.
2 SHEETS—SHEET 2.

Fig. 4.

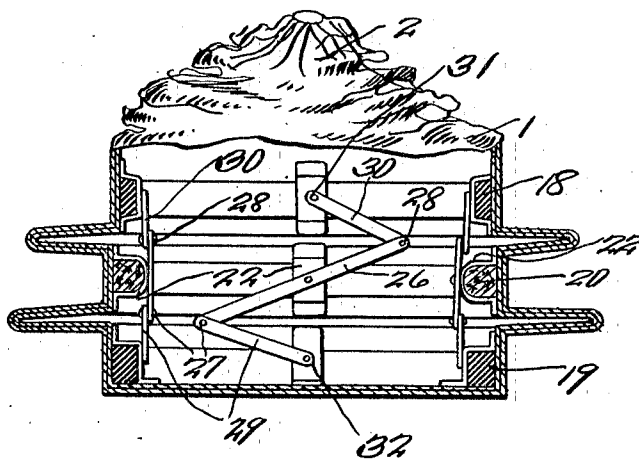
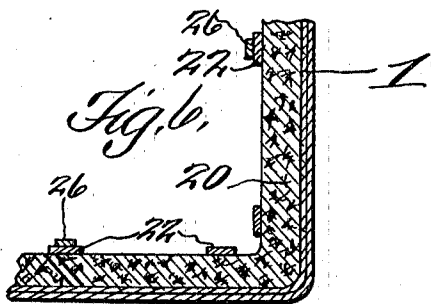
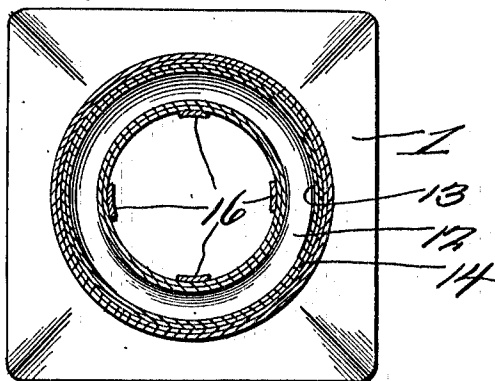


Fig. 5.



Witnesses

Rohe Meyer

Francis E. Powell.

Inventor

J. J. Puskanen,

By D. Swift & Co.

Attorneys

UNITED STATES PATENT OFFICE.

JOHN JACOB PUSKANEN, OF CHISHOLM, MINNESOTA.

LIFE-PRESERVER.

1,059,392.

Specification of Letters Patent.

Patented Apr. 22, 1913.

Application filed July 13, 1912. Serial No. 709,145.

To all whom it may concern:

Be it known that I, JOHN J. PUSKANEN, a citizen of the United States, residing at Chisholm, in the county of St. Louis and State of Minnesota, have invented a new and useful Life-Preserver; 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.

This invention relates to a new and useful life preserver.

As one of the objects of the invention it is the aim to provide a double waterproof cloth receptacle, the closure end of which may be shirred to close the same, and provided with means for holding the preserver substantially erect, regardless of the weather and the condition of the water.

Another object of the invention is to provide a water-tight closure end for the receptacle.

Another object of the invention is the provision of a life preserver that does not have to be submerged in water before used.

Another object of the invention is to economize on storage space.

A further object of the invention is the provision of an air tube having a valve, which is held closed when the life preserver is submerged under the water, when the person wearing the preserver first enters the water.

As a further object of the invention it is the aim to provide a collapsible life preserver having means for holding the same extended when worn by the person in the water, and one which has been found desirable and practical.

The invention comprises further features and combination of parts, as hereinafter set forth, shown in the drawings and claimed.

In the drawings:—Figure 1 is a vertical sectional view through the improved life preserver constructed in accordance with the invention. Fig. 2 is a view in perspective of the life preserver, showing the plug at the closure end in Fig. 1 omitted. Fig. 3 is a detail perspective view on a small scale of the life preserver, showing the same equipped with a flag that acts as a signal.

Fig. 4 is a view partly in section and partly in elevation, with the air tube omitted, showing the life preserver collapsed. Fig. 5 is a transverse sectional view on line 5—5 of Fig. 1. Fig. 6 is a detail sectional view on line 6—6 of Fig. 1.

Referring more particularly to the drawings 1 designates a receptacle or bag-like structure constructed of double waterproof cloth or material, or any other suitable fabric. The upper closure end of the receptacle is rather full, as shown by the folds 2, and is adapted to be shirred together by the cord or the like 3, in order to close the receptacle. In the drawings, excepting Fig. 2, the full closure end of the receptacle is shirred below an overhanging shoulder 4 of the plug 5, through which the air tube 6 extends. This air tube 6 is secured in the plug by the threaded bushing 7, and is provided with a valve 8, held normally closed by the spring 9, especially when the life preserver becomes submerged in the water. A cord or rope 6^a is provided connected to the stem of the valve, whereby upon pulling upon the same, the valve 8 may be opened downwardly. In Fig. 2, however, the closure end of the receptacle is shirred about the air tube 6. Secured to the air tube, as shown clearly in Fig. 3 is a flag staff 10 having a flag 11, which constitutes signaling means.

In order to keep the life preserver afloat, and to offer buoyancy therefor, a pneumatic substantially annular tube 12 is provided, which is constructed of two thicknesses of material, the inner one of which being a composition of canvas and rubber, while the outer one is of cork. The inner material is denoted by the numeral 13, while the outer one is marked 14. This pneumatic tube may be inflated by attaching a tube connection (not shown) of a pump (not shown) to the check valve extension 15 of the pneumatic. The pneumatic is secured to the inner face of the receptacle by the straps 16, which are constructed of a composition of canvas and rubber. The straps 16 may be vulcanized or otherwise secured as at 17 to the inner face of the receptacle. The pneumatic also lends stability to the receptacle.

The receptacle below the pneumatic ter-

minates in a contour substantially rectangular in cross section, and in order to lend further stability to the life preserver, brace members 18, 19 and 20 are secured to the inner face of the receptacle, by means of the straps 21, 22 and 23. These straps 21, 22 and 23 are constructed of composition rubber and canvas, and are vulcanized or otherwise secured to the material of the receptacle. The upper and lower brace members 18 and 19 are constructed of a composition rubber and canvas or the like, while the intermediate brace member 20 may be constructed of cork or the like.

Secured to the straps 22 at 25 are bars 26, the ends of which are pivoted at 27 and 28 to the bars 29 and 30, which are in turn pivoted at 31 and 32 to the straps 21 and 23. These bars 26, 29 and 30 are constructed of substantially hard composition of canvas and rubber, or any other suitable material, just so long as a sufficient amount of rigidity and stability is offered. However, these bars should be more or less flexible, in order that awkwardness will be avoided when collapsing the life preserver. The connections 25, 31 and 32, as well as 28 and 27, should be substantially stiff, in order to hold the receptacle properly expanded.

Secured in any suitable manner at 34 to the lower portion of the receptacle are four stout cords or rope 35, which are connected at one junction 36, as shown in the drawings. Also connected at the junction 36 is a stout cord, rope or strong chain 37, from the lower end of which a balance weight 38 is suspended. This balance weight 38 is provided for the purpose of balancing and holding the life preserver substantially erect or perpendicular, and particularly so because of the embodiment of the pneumatic and the cork brace member 20.

From the foregoing it will be observed there has been devised a novel and simple life preserver having means for holding the same substantially erect or perpendicular, and one which has been found practical.

In the drawings there has been disclosed certain structural features, which in practical fields may necessitate alterations, to which the patentee is entitled provided the alterations are comprehended within the scope of what is claimed.

The invention having been set forth, what is claimed as new and useful is:—

1. In a life preserver, a receptacle constructed of double waterproof material and provided with a full closure end adapted to be shirred for closing the receptacle, a plug having an overhanging shoulder under which the closure end is shirred, an air tube provided with an automatically closing valve protruding through the plug, means for opening the valve, a pneumatic tube se-

cured on the interior of the receptacle adjacent the closure end thereof, brace members secured on the interior of the receptacle below the pneumatic tube, pivoted fiber bars connecting between the brace members for holding the receptacle expanded, the pivoted bars constituting means to permit the receptacle to be collapsed.

2. In a life preserver, a receptacle constructed of double water-proof material and provided with a shirred closure end adapted to be shirred for closing the receptacle, an air tube provided with an automatically closing valve protruding through the closure end, means for automatically closing the valve, means for opening said valve, a pneumatic tube secured on the interior of the receptacle adjacent but below the closure end, three tiers of brace members on the interior of the receptacle, the upper and lower brace member being constructed of a composition of rubber and canvas, while the intermediate brace member is constructed of cork or the like, straps constructed of a composition of rubber and canvas vulcanized or otherwise secured to the interior of the receptacle for holding the brace members in place, pivotally joined bars pivoted to said straps and forming connections between the three tiers of brace members, said pivotally joined bars having stability and rigidity in order to constitute means to hold the receptacle distended, said pivotally joined bars adapted to collapse when the receptacle collapses, and a weight member suspended from the lower end of the receptacle, to maintain the equilibrium of the receptacle.

3. In a life preserver, a receptacle constructed of double water-proof material and provided with a gathered closure end adapted to be shirred for closing the receptacle, a plug having an overhanging shoulder, under which the closure end is shirred, an air tube provided with an automatically closing valve protruding through the plug, a bushing threaded into the plug to hold the air tube in place, means for opening the valve, a pneumatic tube secured on the interior of the receptacle adjacent but below the closure end, three tiers of brace members on the interior of the receptacle, the upper and lower brace member being constructed of a composition of rubber and canvas, while the intermediate brace member is constructed of cork or the like, straps constructed of a composition of rubber and canvas vulcanized or otherwise secured to the interior of the receptacle for holding the brace members in place, pivotally joined bars pivoted to said straps and forming connections between the three tiers of brace members, said pivotally joined bars having stability and rigidity in order to constitute

means to hold the receptacle distended, said
pivotaly joined bars adapted to collapse
when the receptacle collapses, and a weight
member suspended from the lower end of
5 the receptacle, to maintain the equilibrium
of the receptacle.

In testimony whereof I have signed my

name to this specification in the presence of
two subscribing witnesses.

JOHN JACOB PUSKANEN.

Witnesses:

E. E. LECKINEN,

G. L. TRAIN.

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