

A. ENGSTRÖM.
LIFE PRESERVER.

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1,005,624.

Patented Oct. 10, 1911.

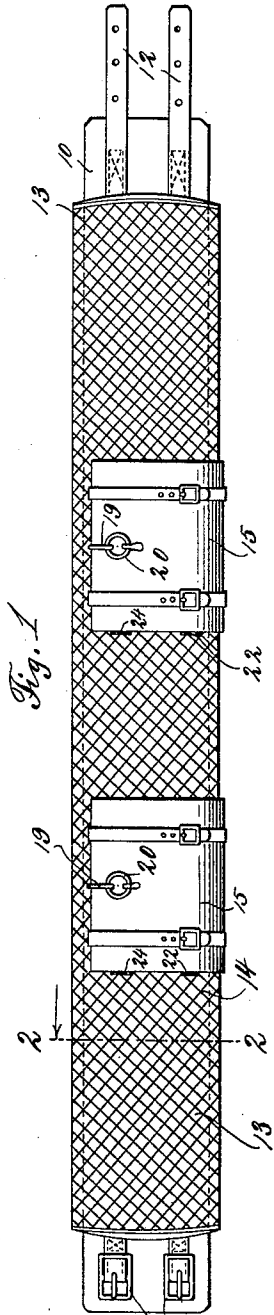


Fig. 1

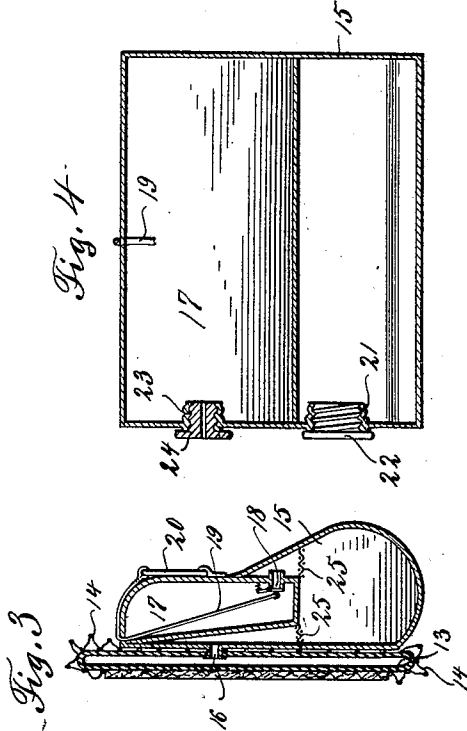


Fig. 3

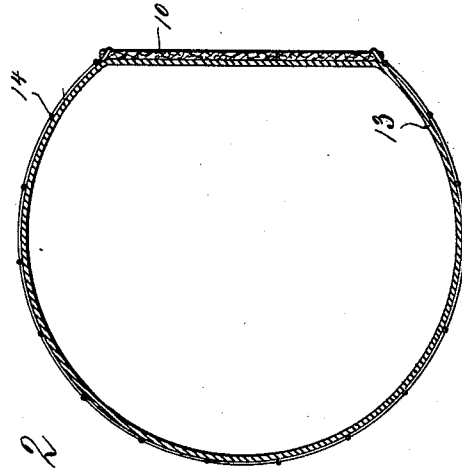


Fig. 2

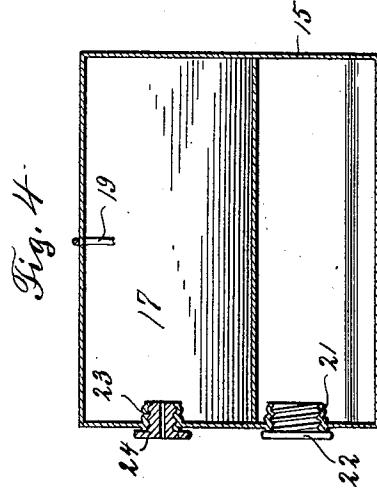


Fig. 4

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LIFE-PRESERVER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ANDERS ENGSTRÖM, a native and subject of the King of Sweden, residing at Topeka, in the county of Shawnee and State of Kansas, have invented certain new and useful Improvements in Life-Preservers, of which the following is a specification.

This invention relates to life preservers, and is designed to provide a life preserver which will normally be collapsed, but which may be inflated by gas generating tanks carried by the preserver.

With the above and other objects in view, this invention consists in the construction, combination, and arrangement of parts, all as hereinafter more fully described, claimed, and illustrated in the accompanying drawings, wherein—

Figure 1 is an elevation of a life preserver constructed in accordance with the present invention; Fig. 2 is a transverse section taken along line 2—2 of Fig. 1, illustrating the life preserver extended; Fig. 3 is a transverse section taken through the life preserver and one of the gas generating tanks, illustrating the life preserver collapsed; Fig. 4 is a central vertical section of the gas generating tank.

Reference being had to the drawings, 10 indicates a flexible belt having at the terminals thereof any suitable buckles or straps 11 and 12 respectively. An elastic bag 13 is mounted on the belt 10, and is surrounded by the mesh 14 which forms a protection for the bag 13. The bag 13 normally tends to assume the position shown in Fig. 3, and does not form a cumbersome structure.

A pair of tanks 15 is carried on the outer side of the bag 13, and has connected to the interior thereof a conduit or duct 16. This tank is provided with an inner tank 17 which is connected to the main tank 15 by a spring pressed valve 18 which is normally retained closed. The valve 18 is operated

by a cord or other flexible operating member 19 extending to the exterior of the tank 15 and secured to a ring 20 on the forward side of said tank. The inner tank 17 is adapted to contain water while the main tank 15 contains a carbid. Thus when the valve 18 is opened and water enters the tank 15, a gas will be formed which will enter the bag 13 through the port or duct 16, thereby inflating the same. The tank 15 is provided with an opening 21 in one extremity thereof which is closed by a threaded plug 22, thus permitting the carbid to be placed in the tank 15. The inner tank 17 has an opening 23 at one extremity thereof which is closed by an orificed plug 24. Thus when a person is in the water the tank 17 is constantly filled with water. A screen 25 is disposed on each side of the lower terminal of the reservoir 17 and prevents the passage of dirt from the reservoir 17 to the carbid chamber 15, and also prevents the passage of dirt from the carbid chamber 15 to the pneumatic belt 13.

Having thus described my invention, what is claimed as new is:—

A life preserver comprising a belt, an elastic bag secured thereto, a main tank carried by said bag and having communication therewith, an inner tank mounted on said main tank and projecting thereinto to form passage ways on each side of said inner tank, foraminous material covering said passage ways, means whereby said inner tank may be normally filled with water when in an operative position, and a flexible operating member passing through the top of said inner tank for opening communication between the latter and said main tank for the purposes herein set forth.

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

ANDERS ENGSTRÖM.

Witnesses:

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