No. 692,278. Patented Feb. 4, 1902.

G. HAMBERGER & G. A. STELZER.

LIFE PRESERVER.

(Application filed Oct. 17, 1900.)

(No Model.)

Fig. 1.

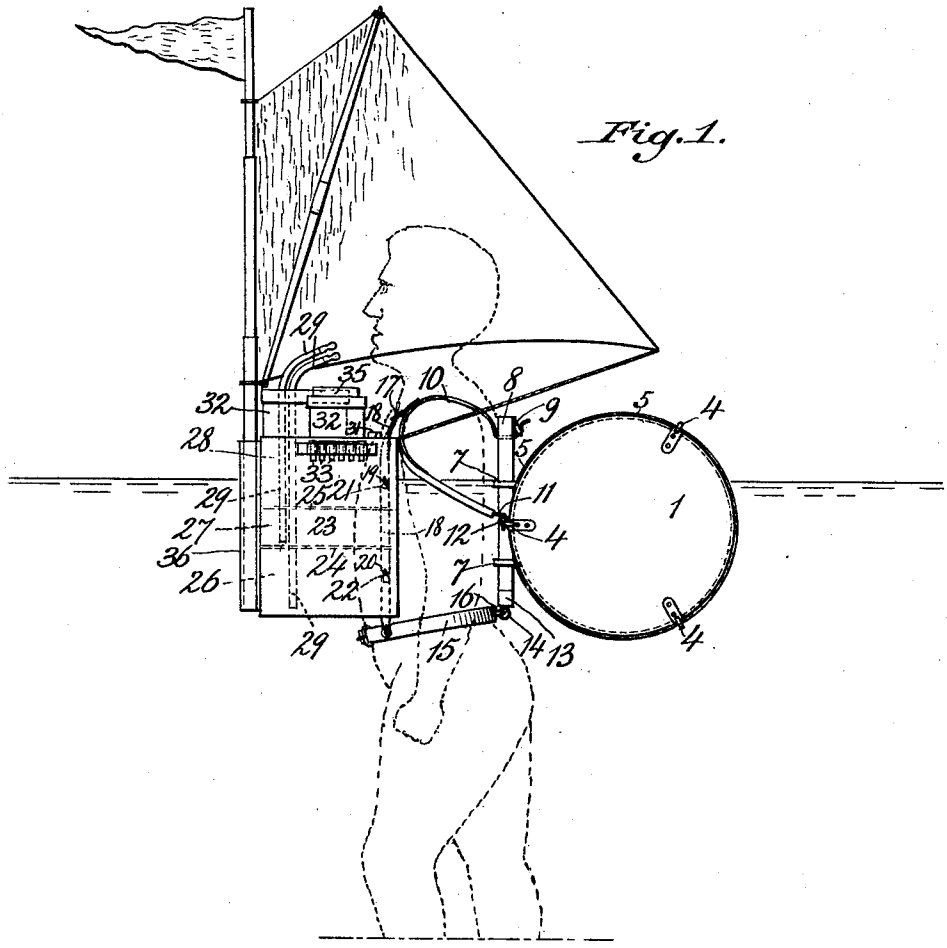
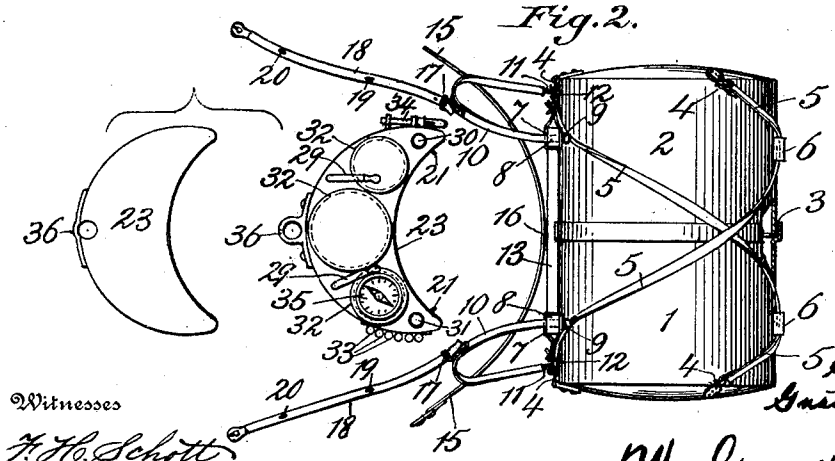


Fig. 2.



Witnesses
F. H. Schott
M. C. Massie.

Inventors:
George Hamberger
Gustav Adolf Stelzer,

By Munn & Co

Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE HAMBERGER AND GUSTAV ADOLF STELZER, OF BERNE, SWITZERLAND.

LIFE-PRESERVER.

SPECIFICATION forming part of Letters Patent No. 692,278, dated February 4, 1902.

Application filed October 17, 1900. Serial No. 33,387. (No model.)

To all whom it may concern:

Be it known that we, GEORGE HAMBERGER, a citizen of Switzerland, and GUSTAV ADOLF STELZER, a citizen of Germany, both residing at Berne, canton of Berne, Republic of Switzerland, have invented certain new and useful Improvements in Apparatus Designed to Save Life at Sea in Case of Shipwreck, (patents applied for in Switzerland March 18, 1900, and in France September 17, 1900;) and we 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.

Our invention relates to an apparatus designed to save life at sea in case of shipwreck.

In the accompanying drawings, Figure 1 is a side elevation of a life-saving apparatus, with equipments for saving shipwrecked persons, embodying our invention. Fig. 2 is a ground plan of the same invention.

Similar numerals of reference indicate corresponding parts.

The basis of the equipment is a float fastened to the back of a person before entering the water, while connected with it and fastened by straps to the chest is a divided compartment containing provisions and drink. The float consists of two separate cylinders 1 2, hermetically sealed, of which part 1 fits with a flange over part 2 when pushed together. To make a water-tight connection, a ring 3, preferably of rubber, is fitted over the flange. Connected with the bottom of each cylinder 1 2 are three hooks 4, lying loosely upon the outside covering of the cylinders, used to engage hooks or fastenings on the opposite side by means of four straps 5, which can be adjusted through slides 6 upon the float, and thereby secure safety to the hooks 4. This prevents accidental breaking apart. To the buckles of the two middle straps 5 are fastened straps 7, and through these are drawn two vertical pieces of wood 8, each ending with a buckle 9, into which the shoulder-straps 10 are fastened after being drawn through the end of each of the vertical pieces of wood 8. Each shoulder-strap 10 is provided at its lower end with a hook 11 to engage an eye 12 of the middle straps 5. The two vertical pieces of wood 8 are connected at their lower ends with a horizontal piece 13, upon which an eye 14 is fitted. Around the person is fastened a suitable waist-belt 15, provided with a hook 16, which by engaging eye 14 will carry the frame 8 13 and the float nearly immovable in a horizontal position upon his back. The shoulder-straps 10 are each provided with a buckle 17, into which the chest-straps 18 are hooked. The latter straps contain eyes 19 20 near the upper and lower ends to engage hooks 21 22, which are fastened to the provision and drink chamber 23. The lower end of the chest-strap 18 is suitably arranged to be fastened in a proper manner to waist-belt 15, as clearly shown in Fig. 1.

The provision and drink chamber 23 consists of an elongated reservoir resembling a sickle in the cross-cut. Its interior is divided horizontally by partitions 24 25 into three divisions 26 27 28. The lower division 26 serves to contain drinking-water, the middle one 27 an alcoholic stimulant, while the upper one 28—empty and water-tight—serves as an air-chamber for the weight of the reservoir 23 to keep it above water. Running out of the divided compartments 26 27 through the horizontal divisions of the reservoir 23 are tubes 29, coming within reach of the mouth of the wrecked person, enabling him to draw up the contents of chambers 26 27. These chambers are filled through openings 30 31 and then closed with a cork. Above the upper part of division 28 are three tins 32, containing condensed food. These tins have tight-fitting covers.

Fastened upon one side of the reservoir 23 are blank cartridges 33 and upon the opposite side a pistol 34, to be used to attract attention. A megaphone can be added, and a chain can be used to connect all loose articles to prevent their loss and fastened to the reservoir 23.

A compass 35 is fastened to the reservoir 23, to which may also be fastened a chart of the way the vessel was going. The latter is not shown in the drawings. Upon the front side of the reservoir 23 is a tube 36, suitable to receive a small mast, capped with a signal-flag and having a small sail fastened to it.

When the device is not in use, the reser-

voir and its attachments may be stored within the float. The sickle or crescent shape of the reservoir permits it to be readily inserted in the float and leaves space therein for the reception of the sails and other attachments, as well as for clothing and the like. It will be understood, of course, that the sections of the float are separated to permit the insertion of the reservoir and other articles and are then closed.

In order to protect the float against injury during transportation, it should be placed in a trunk or other suitable case; but such trunk or case is not absolutely necessary and is not shown.

In traveling at sea the appliance can be kept ready for use, and valuables or such articles as may be indispensable after an accident can be placed inside the float 1 2.

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

An apparatus for saving life in case of shipwreck, consisting of a float made of two parts to be taken apart, to be secured by means of shoulder-straps and in connection with hooks and eyes to a belt on the back of a person, and of a provision and food reservoir to be secured on the chest of the person by breast-straps, one end of these straps being fastened to the shoulder-straps of the float, the other end being connected with the belt, the provision and food reservoir being provided with the necessary air-space for its own buoyancy and capacity of bearing, and with sail and signal appliances, substantially as and for the purpose herein set forth.

In testimony whereof we have affixed our signatures in presence of two witnesses.

GEORGE HAMBERGER.
GUSTAV ADOLF STELZER.

Witnesses:
ED. v. WALDKIRCH,
ED. FEDERER.