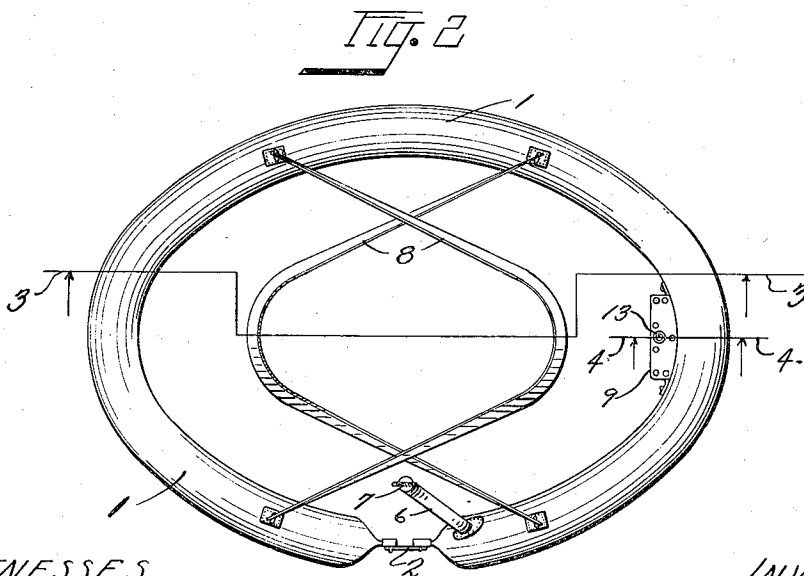
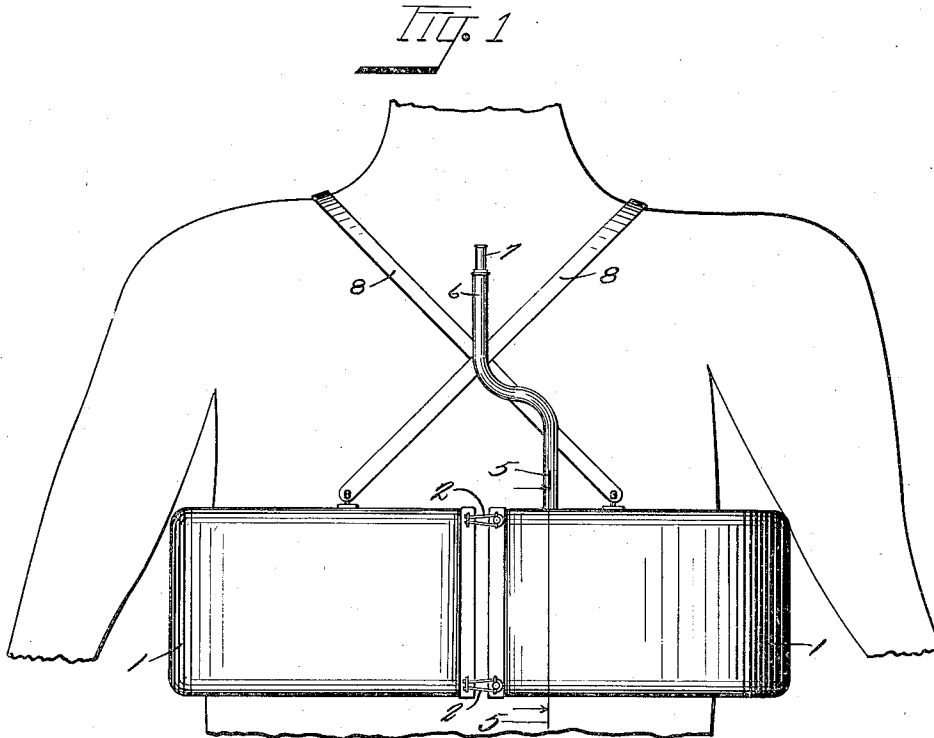


I. FRAKI & W. A. MERILA.
LIFE SAVING AND SWIMMING BELT.
APPLICATION FILED FEB. 11, 1915.

1,200,933.

Patented Oct. 10, 1916.

2 SHEETS—SHEET 1.



WITNESSES
Otto Melchior
Paul A. Nielsen

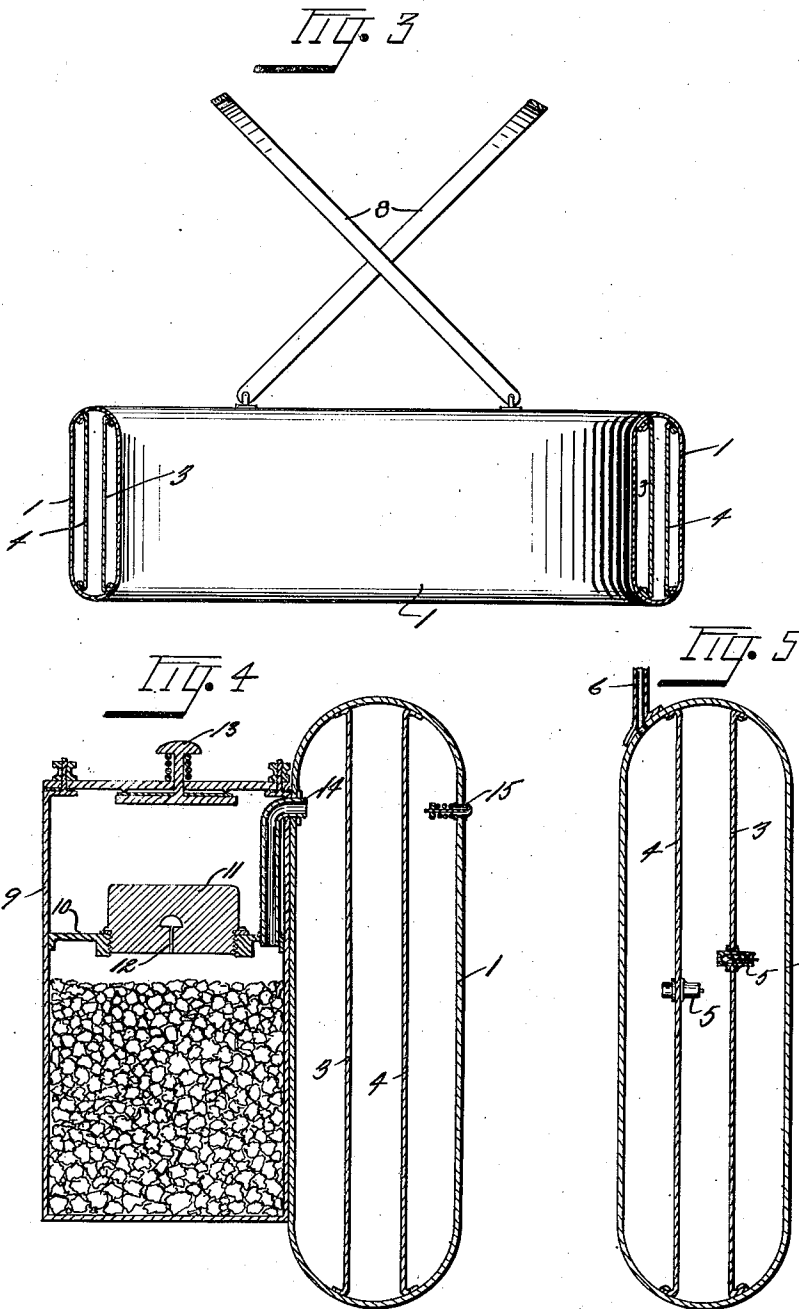
INVENTORS
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UNITED STATES PATENT OFFICE.

ISAAC FRAKI AND WILHELM AUGUST MERILA, OF HANCOCK, MICHIGAN.

LIFE-SAVING AND SWIMMING BELT.

1,200,933.

Specification of Letters Patent.

Patented Oct. 10, 1916.

Application filed February 11, 1915. Serial No. 7,609.

To all whom it may concern:

Be it known that we, ISAAC FRAKI and WILHELM AUGUST MERILA, citizens of the United States, residing at Hancock, in the county of Houghton and State of Michigan, have invented certain new and useful Improvements, jointly, in Life-Saving and Swimming Belts, of which the following is a specification.

This invention relates to improvements in life saving and swimming belts and its object is to produce a device of this class designed ordinarily to be inflated by air blown thereinto by the user who blows his breath through a mouth piece associated with the device. The belt is further provided with emergency inflation means whereby it may be automatically inflated with a gas should the user be physically unable to inflate it for any reason.

With the foregoing and other objects in view the invention consists in the combination and arrangement of parts to be hereinafter fully described in the following specification, pointed out in the claim and illustrated in the accompanying drawings which form a part of said specification and in which—

Figure 1 is a front view of our invention in position upon a person. Fig. 2 is a plan view of the device. Fig. 3 is a section taken on line 3—3 of Fig. 2. Fig. 4 is a section taken on line 4—4 of Fig. 2. Fig. 5 is a section taken on line 5—5 of Fig. 1.

Like reference characters indicates corresponding parts throughout the several views.

The reference character 1 designates the belt proper which consists of a rubber tube the ends of which are provided with suitable fastening means 2 by which they may be fastened together. The tube is provided with longitudinally extending interior partitions 3, 4 by which it is divided into three parallel compartments, which compartments are connected to each other by the pressure valves 5, 5, one of which is arranged in each partition and which will admit gas or air, at a certain pressure, into an adjoining compartment. The tube 1 is provided with an air pipe 6 provided with a mouth piece 7,

provided with a suitable check valve, through which the breath of the user may be forced to inflate the said tube. Straps 8 secured to the tube serve to pass over the shoulders of the user in the form of a brace to retain the device in operative position. To the tube 1 a casing 9 is secured in any suitable manner and the same is provided with an interior transverse partition 10 provided with a screw cap 11 having a drip valve 12 therein. The upper or smaller portion of the interior of the casing 9 being a water reservoir provided with a finger valve 13 which may be manually depressed to admit water from the sea and the lower portion of the interior of the casing being a reservoir for a carbid which, with the addition of water will generate a gas and pass out through the gas passage 14 that connects said carbid reservoir with the interior of the belt 1. The belt 1, moreover, is provided with a blow off valve 15 which will permit the escape of a portion of the gas therewithin at a certain pressure.

In operation the user straps the belt about his waist and then inflates it by blowing his breath through the mouth piece 7 until the three compartments are filled with air. He then enters the water and is safely floated therein by the device. Should he become weakened by exposure for a great period in the water during which time some of the air might escape by seepage the tube may be inflated again by merely depressing the valve 13 and admitting water to the water reservoir from which it will drop through the drip valve upon the carbid producing a gas which will again charge the interior of the tube and keep the same inflated almost indefinitely.

What is claimed is:—

In a life preserver comprising an inflatable tube provided with a blow off valve, a casing secured to one lateral face of said tube, a perforated transverse partition arranged in said casing and dividing the same into separate compartments, one compartment being formed with an opening; a screw cap fitted into the perforated portion of said partition, a drip valve arranged in said screw cap and connecting the compartments

of said casing, a gas passage having its terminals located in the said tube and in one compartment of said casing and a finger valve arranged in the other casing compartment for yieldingly closing the opening
5 therein.

In testimony that we claim the foregoing as our own we have hereto affixed our sig-

natures in the presence of two subscribing witnesses.

ISAAC FRAKI.

WILHELM AUGUST MERILA.

Witnesses:

JOHN KÜSKILA,

HENRY SINKMEN.