(No Model.)

## W. C. MACDONALD.

LIFE PRESERVER.

No. 335,599.

Patented Feb. 9, 1886.

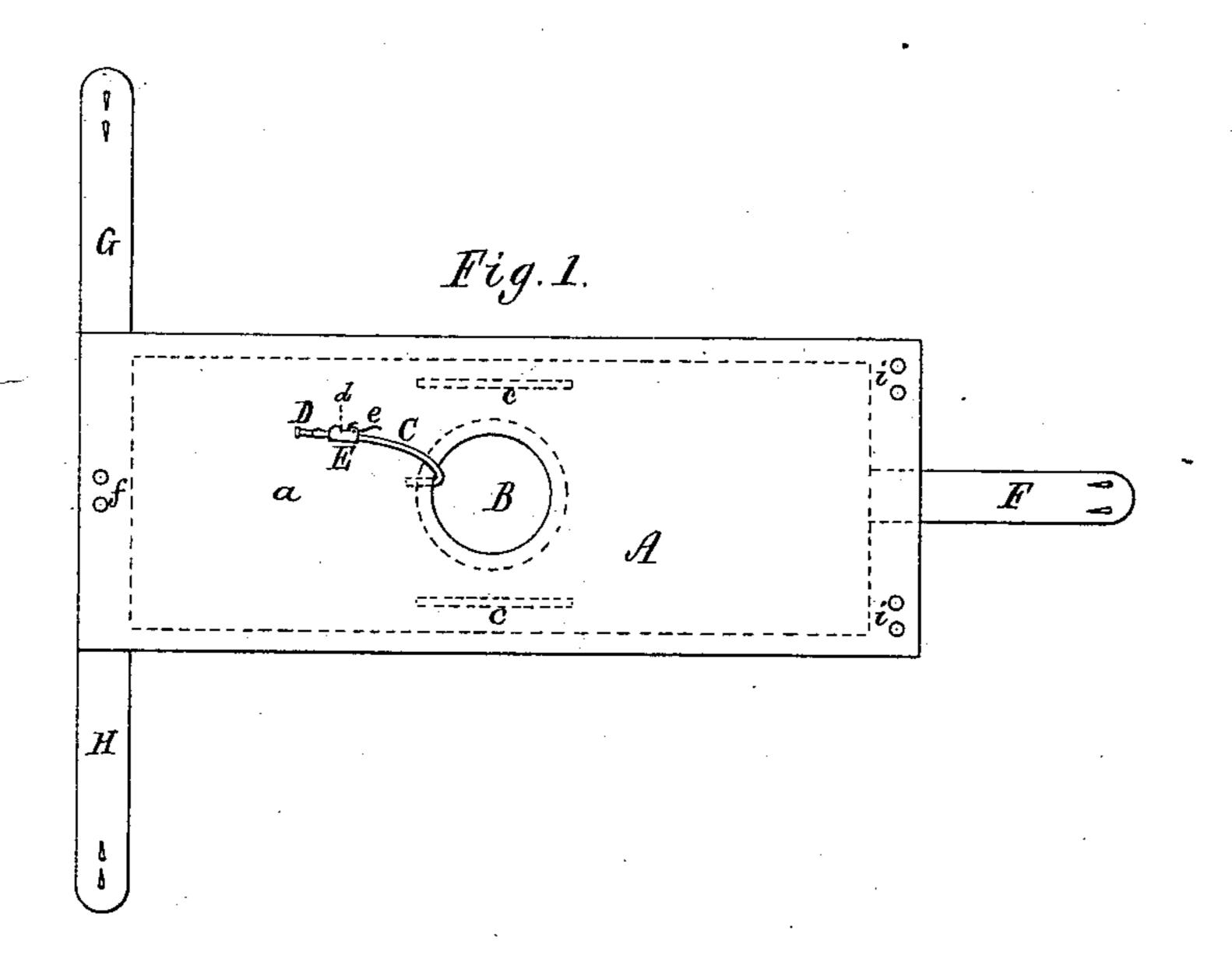
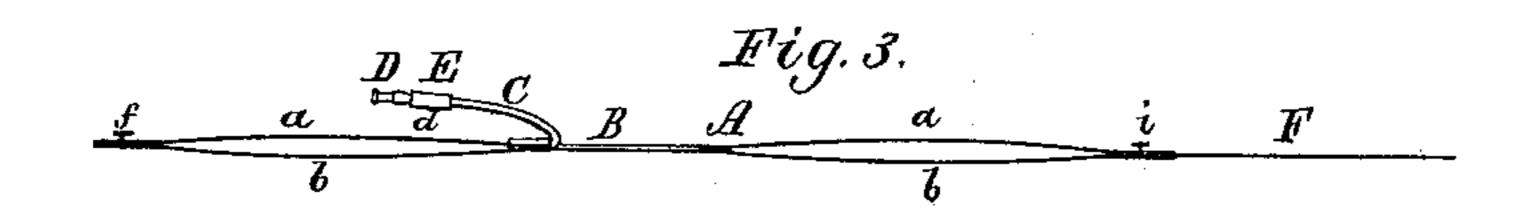


Fig.2.  $c \xrightarrow{a \quad B} \xrightarrow{a}$   $c \xrightarrow{b \quad A} \xrightarrow{b \quad c}$ 



Witnesses. S. P. Popus R. B. Joney

Inventor.

Wm. C. Macdonald.

by R.K Endy alty.

## United States Patent Office.

WILLIAM CHARLES MACDONALD, OF READING, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO HIMSELF AND AUGUSTUS FREDERIC PEIRCE, OF SAME PLACE.

## LIFE-PRESERVER.

SPECIFICATION forming part of Letters Patent No. 335,599, dated February 9, 1886.

Application filed October 14, 1885. Serial No. 179,839. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CHARLES MACDONALD, of Reading, in the county of Middlesex, of the Commonwealth of Massa-5 chusetts, have invented a new and useful Improvement in Life-Preservers or Devices for Keeping a Person Afloat in Water; and I do hereby declare the same to be described in the following specification and represented in the 10 accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a transverse section, and Fig. 3 a longitudinal section, of a

life-preserver of my improved kind.

It consists of a long water-proof flexile bag, 15 A, rectangular in shape, closed at its edges entirely around it, and having through it at its middle a circular or other proper shaped opening, B, the sides of the bag directly about the opening being cemented together or con-20 nected with a water-proof joining. The bag so made is to be supposed to be composed of two rectangular sheets, a and b, of water-proof cloth, of like size, laid flatwise one upon the other, and joined at their edges by a water-25 proof connection, each sheet having through it at its middle a hole, and such holes being alike in size, and having the two sheets united by a water-proof connection or joint at and around the peripheries of such holes.

Between the two sheets a and b at their middles, and fixed to them, are two flexile pipes, c c, which, on the head of a person having been inserted through the opening B, so as to cause the bag at its middle to rest on the shoulders 35 of such person, are to extend across the shoulders, in order to insure a free communication between the part of the bag that may hang down in front of the person with the part in

rear of him.

40 For inflating the bag with air, a flexile pipe, C, opens out of it at or near the opening B, and terminates with a nozzle, D, to be placed in the mouth of the person. This pipe is provided with a clasp, E, for contracting it 45 widthwise, so as to prevent air from escaping through it, such clamp consisting of a slide,

d, and a bent lever, e, fulcrumed to the slide, all being as represented. At one end of the bag is a strap, F, that projects from it at its middle, there being at the other end of the 50 bag a button or buttons, f, to engage with such strap. Besides such button or buttons, there are to the bag at such end two straps, G and H, that extend from it in opposite directions transversely of it, each near its outer end be- 55 ing provided with one or more button-holes.

When the life-preserver is on the body of a person, the straps G and H are to go about it and button upon buttons i i at the opposite end of the bag, the strap F being brought be- 60 tween the legs of the person and buttoned up-

on the button or buttons f.

From the above it will be seen that when the life-preserver is fixed upon the body of a person he can inflate it by applying his mouth 65 to the nozzle of the tube C, the clasp being first lowered upon the tube. Having inflated the bag sufficiently he is to set the clasp firmly on the tube, so as to prevent the escape of air from the bag.

The article thus constructed will not only be found to be an excellent life-preserver in case of shipwreck or a person being in the water, but will answer to keep a person afloat when he may be learning to swim or may be 75

bathing.

I claim—

The combination, with the life-preserver consisting of the water-proof bag open through its middle, and of the straps and buttons, in- 80 flation-tube, and its clamp, arranged as set forth, of the flexile tubes placed within the bag at the middle of it and arranged with its neck opening, so as when the life-preserver is in use to extend across the shoulders of the 8wearer, all being substantially as and for the purpose specified.

WILLIAM CHARLES MACDONALD.

Witnesses:

R. H. Eddy, S. N. PIPER.