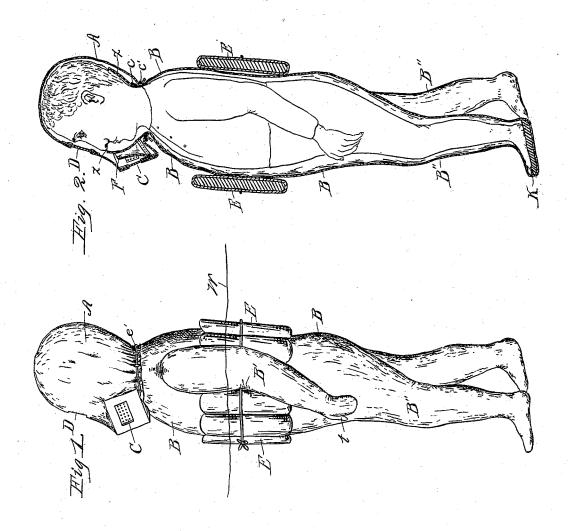
G. A. HILER.

LIFE SAVING GARMENT.

No. 382,306.

Patented May 8, 1888.



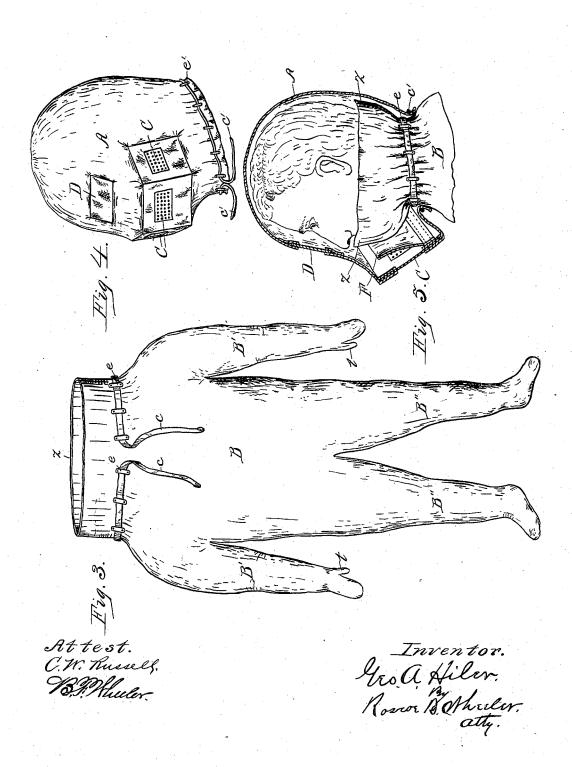
At test. C.M. Phresell. B.Mheeler. Inventor. Grand Hilar. Roscon Bothweler, atty.

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UNITED STATES PATENT OFFICE.

GEORGE A. HILER, OF GRAND HAVEN, MICHIGAN.

LIFE-SAVING GARMENT.

SPECIFICATION forming part of Letters Patent No. 382,306, dated May 8, 1888.

Application filed August 4, 1887. Serial No. 246,107. (No model.)

To all whom it may concern:

Be it known that I, George A. Hiler, a citizen of the United States, residing at Grand Haven, in the county of Ottawa and State of 5 Michigan, have invented certain new and useful Improvements in Life Saving Garments; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to a life-saving suit, to be worn over the body in connection with the ordinary life-preserver now in common use

on vessels and in marine service.

The invention consists of a two-part waterproof garment—viz., a body portion and a
hood or head-protector, which are so constructed and adapted as to inclose the body of
the wearer within an impervious covering, excluding water therefrom and preventing exposure of the body to the cold, while the lifepreserver attached thereto aids in keeping the
body afloat. The lower extremities or foot
portions of the body of the garment are provided with suitable weights, which serve to
keep the body balanced in an upright position
within the water, as will be hereinafter more
fully set forth, and the essential features of the
invention pointed out in the claim.

In the accompanying drawings, forming a part of the specification, Figure 1 is a side elevation of the complete suit as it appears when attached to the body, showing also the position of same when in the water, W representing the water-line. Fig. 2 is a vertical section of the garment and life-preserver, showing the position of the body within the same. Fig. 3 is a perspective of the body portion of the garment detached from the head-protector.

Fig. 4 is a like view of the head-protector or hood detached. Fig. 5 is a vertical section of the hood or head-protector, showing relative position of the parts when attached to the body portion of the suit.

With reference to the accompanying draw-50 ings, A represents the head-protector of the suit, which consists of a hood constructed from any suitable water-proof material, and is provided with a cord or shirr-string, e', which passes through loops e' around the opening of said hood for the purpose of securely girdling 55 or closing the same about the neck of the occurrent (See Fig. 4)

cupant. (See Fig. 4.)

D represents a glass or transparent plate secured in the upper central portion of said hood for the purpose of affording the occu-60 pant thereof a range of vision, while C shows a series of perforated plates which are secured in panels a slight distance below the transparent plate D, and are for the admission of air to the occupant of the suit, as clearly shown in 65 Figs. 1 and 4.

F shows an apron of flexible impervious material, which is located directly back of the series of perforated plates, being attached at its lower edge to the hood A at a slight distance 70 below the perforations and extending some distance above said perforations, the upper end or edge of said apron remaining free, whereby said apron forms a gate or cut-off, preventing the surf or water from splashing 75 through the perforations into the face of the occupant, but allowing the air to freely pass within the perforations and over the upper edge of the apron. (See Figs. 2 and 5.)

B represents the body portion of the gar-8c

B represents the body portion of the garment, which is also constructed from water-proof or impervious material, having formed integral therewith the sleeves B' B' and leg portions B" B", for the reception of the arms

and legs of the occupant.

The opening or neck portion Z, through which the body of the operator passes in applying the garment, is provided around its mouth with a series of loops, e, through which passes a cord or shirr-string, e, for girdling or 9c drawing said opening close about the neck of the occupant of the garment. (See Fig. 2.) The free end of the gathered in portion Z encircles the lower portion of the head of the wearer, as shown in Figs. 2 and 5.

It will be observed that the hand portions

of the sleeves of the garment are provided with thumbs t, so as to enable the operator to readily handle the shirr-strings in applying the garment, and to handle or grasp objects 100

while in the water.

In Fig. 2, K represents a weight of suitable

proportions, one of which is placed or secured in each of the foot portions of the garment, which act as ballast to hold the body in an upright or erect position while floating in the water.

E shows an ordinary life-preserver, which is secured about the waist of the occupant of the suit for the purpose of aiding the same to keep afloat until rescue or assistance is rendered.

The manipulation required in applying the garment in case of accident or when desired is as follows: The operator, after first procuring the garment, steps within the opening Z, and draws the garment up sufficiently (at the 15 same time passing a leg into each leg of the garment) to allow his arms to enter the sleeves of said garment, when it will be in position to grasp the shirr-string and draw the opening close about the neck, securing the same in such 20 position. The hood or head-protector is then readily placed over the head of the operator and its shirr-string secured in a like manner about the neck, but overlapping the neck portion Z of the body of the garment. The lifepreserver is then secured to the waist of the operator over the garment by means of the string provided therefor, when the outfit will be completed.

It will be observed that when equipped with the foregoing devices the occupant will be enabled, if cast into the water, to survive a much longer period than would be possible were the body exposed to the cold and water, as is the case where only the ordinary life-

35 preserver is employed.

The advantages of this garment over others

patented of this class are, first, simplicity of construction; second, the body part of the garment extends from the feet to the neck of the wearer, there being no openings or joints below 4c the neckband, preventing leakage. The upper portion consists simply of a head-covering, which extends down to and surrounds the neck portion of the garment, thereby giving to the garment a double thickness about the neck of the wearer or occupant. The garment is secured to the body by means of cords passing about the neck of the joining parts of the garment at a convenient point for manipulation.

Having thus fully set forth my invention, 50 what I claim as new, and desire to secure by

Letters Patent, is-

A life saving garment consisting of the body portion made of impervious material, and having legs, arms, and neckband formed integral 55 therewith, and a gathering-cord for said neckband, in combination with the head part or protector having the transparent plate D, the series of perforated plates, the apron F, located back of said perforated plates, having 60 its lower edge only attached to said protector, and the gathering-cord c', located at the lower end of said protector, whereby the lower end of the protector is bound to the upper end of the body portion, substantially as and for the 65 purposes specified.

In testimony whereof I affix my signature in

presence of two witnesses.

GEORGE A. HILER.

Witnesses: JACOB BAAR, HENRY BAAR.