Sept. 20, 1932. A. BELLONI 1,878,434

LIFE SAVING HOOD

Filed Feb. 8, 1930

Fig. 1.

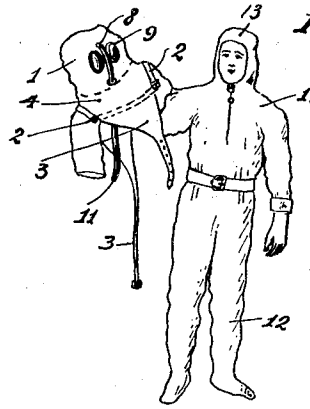


Fig. 2.

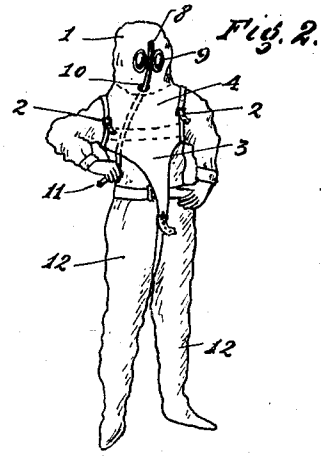


Fig. 3.

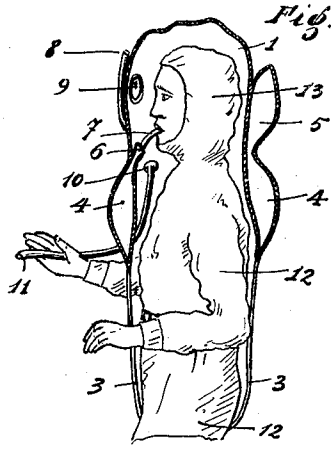


Fig. 4.

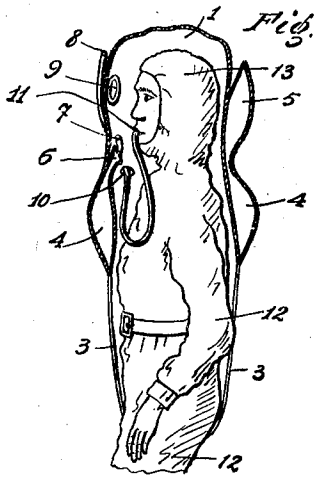


Fig. 5.

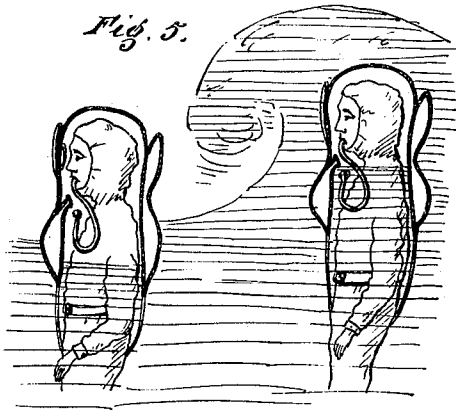
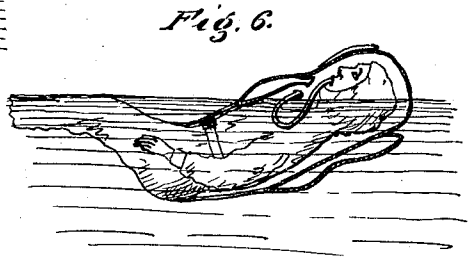


Fig. 6.



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UNITED STATES PATENT OFFICE

ANGELO BELLONI, OF PORTOVENERE, ITALY

LIFE-SAVING HOOD

Application filed February 8, 1930, Serial No. 426,954, and in Italy January 4, 1930.

The purpose of the present invention is to provide a life saving device, which truly and practically answers the different requirements of sea rescuing purposes, namely;

1. To keep the ship-wrecked swimmer afloat by means of a very strong reserve buoyancy, independently of the swelling of any air-bags or belts.

2. To prevent him from being drowned, while floating, due to the effect of waves and sea-breaking.

3. To prevent him from getting benumbed with cold, and by preventing every part of his body from getting wet, in any kind of sea.

4. To allow him to get food, while floating during many hours.

The figures of the accompanying drawing show only a special form of the application, by way of example, the said form including a hood extending to the arm pits and fitted with a collar air-bag, a full rubber dress provided with a cap, and a valveless and corkless inhaling tube. Obviously, many more forms of the application of my invention will suggest themselves to constructors while remaining within the scope of the appended claims.

In the drawing:

Figure 1 shows the wearer dressed with the full rubber dress and cap, before putting on the hood;

Figure 2 shows the wearer dressed with the full dress and hood;

Figure 3 is a vertical section of the dress, with the wearer, with the hood on, blowing the bag (out of the water, as well as while floating);

Figure 4 is a similar view, showing the wearer while inhaling fresh air from outside;

Figure 5 shows, in a vertical section, the wearer floating upright, in two different positions; the first with the water level reaching his breast, and the second with the wave, outside of the hood, passing over his head; and,

Figure 6 is a vertical section, showing the wearer floating on his back, in a calm sea.

The hood 1 is of the general type with the water level and the air escape at the arm pits. (In this manner, the volume, weight and cost of the hood are kept low.) It is usually provided with the half sleeves and buckles 2, breast pieces 3, having depending bands in front as well as in the back and to which the air-bag 4 is connected, the rear of the air-bag 4 is extended into an air cushion 5 and air is supplied to the bag through the air valve 6, of a well known type, on which the rubber pipe 7 is fitted as a mouth-piece. Another rubber tube 8 is externally fitted between glasses 9, so as to always be above water level, when the wearer is floating in leaning position, and its extremity is shaped like a siphon and is provided with a small float valve of a known type, to prevent the inrush of water, without obstructing the entrance of air. This rubber tube enters the hood through the rubber flange 10 and ends with a mouth piece 11. To this mouth piece 11 may be added a flange, shaped so that it may be held in the mouth between the lips, closing entrance of water in the mouth, so that the wearer is forced to exhale through the nose. Breathing while sleeping will also be possible. By means of this tube, with no lip flange, exhaling will commonly take place freely through the open lips and the nose, within the hood. The dress 12 is made of rubber and is water tight, closing up around the neck by means of a bellows lacing. It includes heavy rubber soles for the feet, and a cap 13, which allows ears and face to be kept dry, when the man is in a leaning position in the water.

Having thus particularly described a special form of my invention, I will now explain its operation. When it becomes necessary for a person to jump out into the sea, he dresses himself with the full rubber dress 12 and takes care to close the rubber cloth bellows, which is necessary to allow the body of the man getting inside the dress. He also adjusts very tightly the cap 13 around his face and neck. It is not necessary (and common experience with many more dresses of this kind, built for this purpose, shows that it is not even practically possible) to insure water tightness about the face and neck; it is enough that the edge of the closed collar be higher, all

around, than the water level inside the hood when the man is floating upright (Figure 5); and that the edge of the cap be higher than the water level when the man is leaning on the surface (Figure 6). In the first of these two cases, the hood will act as an "air-lock"; namely, it will keep the water level under the chin, by intermittent compression, even with the waves, outside of the hood itself, passing over the head (Figure 5). In the second case, on the contrary, the inside of the hood communicates freely with the outside; but, as this position is much less fatiguing for the man, it will be more convenient, when the sea conditions allow it.

What I claim is:

1. A life saving garment comprising a hood forming an air bell to prevent entry of water therein, attaching means to fasten the hood under the armpits and about the chest of the wearer, so that he can throw it back on his head when the sea is smooth, an inflatable bag attached to the hood, a conduit within said hood for supplying air to said bag, and another conduit extending from the inside to the outside of the top of the hood, whereby the wearer may receive free air either in an upright or in a reclining position, whether the sea be rough or smooth.

2. A life saving garment as set forth in claim 1, wherein the second mentioned conduit is provided with means preventing the entry of water within said conduit.

3. A life saving garment as set forth in claim 1, wherein the inflatable bag comprises a portion extending behind the head of the wearer and providing a cushion therefor.

4. A life saving garment comprising a suit and a hood forming an air bell to prevent entry of water therein, attaching means to fasten the hood under the armpits and about the chest of the wearer, so that he can throw it back on his head when the sea is smooth, an inflatable bag attached to the hood, a conduit within said hood for supplying air to said bag, and another conduit extending from the inside to the outside of the top of the hood, whereby the wearer may receive free air either in an upright or in a reclining position, whether the sea be rough or smooth.

In testimony whereof I affix my signature.

ANGELO BELLONI.