

D. DEL RE.
LIFE PRESERVER HELMET.
APPLICATION FILED DEC. 21, 1918.

1,348,094.

Patented July 27, 1920.

Fig. 1.

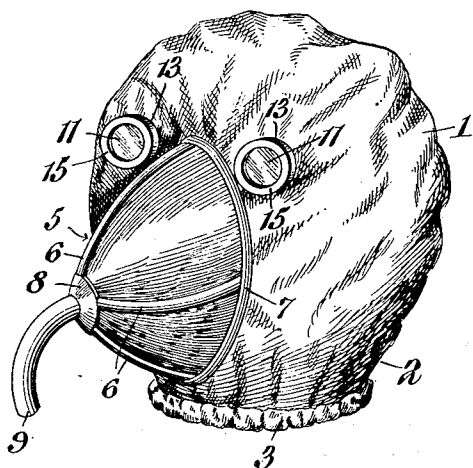


Fig. 2.

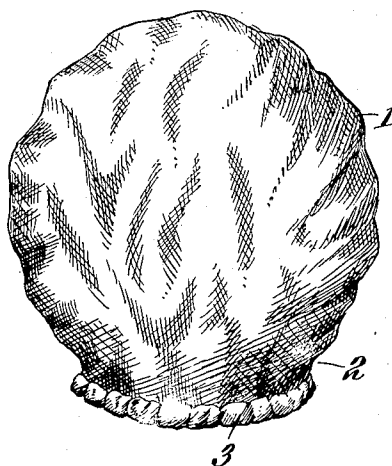


Fig. 3.

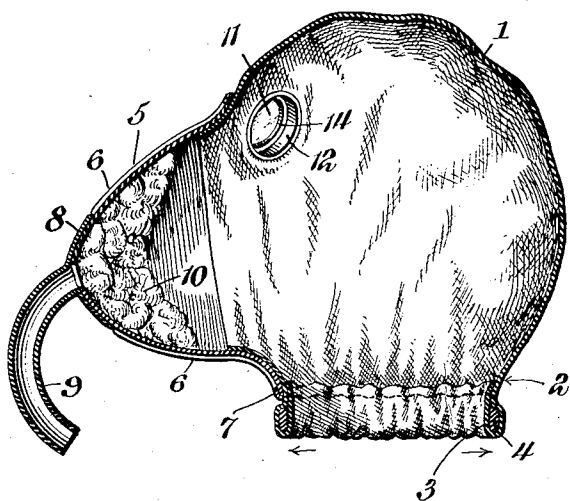
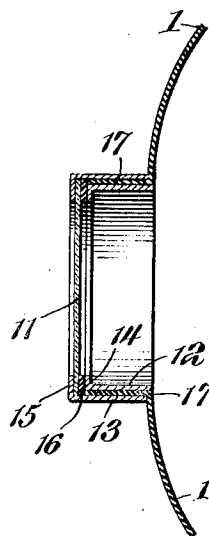


Fig. 4.



WITNESSES

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DOMENICO DEL RE, OF IRON RIVER, MICHIGAN.

LIFE-PRESERVER HELMET.

1,348,094.

Specification of Letters Patent.

Patented July 27, 1920.

Original application filed July 13, 1918, Serial No. 244,781. Divided and this application filed December 21, 1918. Serial No. 267,827.

To all whom it may concern:

Be it known that I, DOMENICO DEL RE, a subject of the King of Italy, residing at Iron River, in the county of Iron and State of Michigan, have invented a new and useful Life-Preserver Helmet, of which the following is a specification.

This invention has reference to life preserver helmets, and its object is to provide a helmet capable of so engaging the head of the person wearing the helmet as to protect the person against harmful effects of water in case the person is shipwrecked, or which will protect the person against noxious gases or fumes in the event that the person is compelled to work in such fumes.

In accordance with the invention the head is entirely inclosed in the helmet, which latter is provided with eye-pieces, an embracing neck portion, and a front projection, in the form of a snout, in which material may be located to absorb water or otherwise protect the person, and extending from the snout is a short tube of small dimensions through which water will not readily enter.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming part of this specification, with the understanding, however, that the invention is not confined to any strict conformity with the showing of the drawing, but may be changed and modified so long as such changes and modifications mark no material departure from the salient features of the invention as expressed in the appended claims.

In the drawing:—

Figure 1 is a perspective view of the helmet as seen from the front.

Fig. 2 is a rear view of the helmet.

Fig. 3 is a front to rear vertical section through the helmet.

Fig. 4 is a section through one of the eye-pieces on a larger scale than that of the other figures.

Referring to the drawing, there is shown a head piece 1 of a size to inclose the head of the wearer and which may be made of flexible water proof material, or, where the helmet is to protect against gases or fumes, the body of the helmet may be made of some material suitable for the purpose. The head piece 1 of the helmet is provided with a contractible neck portion 2 having a normal

tendency to hug the neck of the wearer closely without, however, exerting such pressure as to be uncomfortable or harmful. The neck portion 2 is provided with a hem 3 inclosing a band or ring 4, which may be of elastic material such as rubber, and the hem portion 3 is of sufficient size to permit stretching the rubber band 4 to an extent allowing the neck portion to be slipped over the head of the wearer. When released from the expanding force the rubber band 4 will tend to pucker the neck portion 2 so that leakage of water or gases into the helmet through the neck portion is prevented.

The front portion of the head piece 1 is cut away to an extent commensurate with the nose and mouth of the wearer, and applied to such cutaway portion is an extended snout 5 which may be of the same material as the body of the helmet. In order to retain the shape of the snout it is formed with an exterior cage 6 of sufficiently stiff material, such as wire, or reinforcing strips comprising additional thicknesses of material, the cage where applied to the head piece 1 of the helmet having a circumferential reinforcement 7 and at the end remote from the helmet terminating in a cap or plate 8, the snout tapering toward the cap which is applied at the outer end of the snout. The cap may be made of the same material as the reinforcing cage or may be formed of material like that of the head portion of the helmet, and projecting from the cap 8 is a short section 9 of small caliber tube or pipe having a downward curvature continued toward the body of the wearer.

Lodged in the snout 5 is a mass 10 of suitable material of more or less porous nature, such as cotton, sponge or similar material, capable of transmitting air but more or less resistant to the passage of water and which may also retain a neutralizing substance in case the helmet is to be used where noxious fumes are present.

At points in the helmet corresponding to the position of the eyes of the wearer are windows 11 which may be made of glass, celluloid, mica or other suitable light transmitting material. In order to prevent collapse of the windows there are provided inner and outer rings 12 and 13 respectively, which may be conveniently though not necessarily made of metal. The rings 12 and 13 have matching end flanges 14, 15 respec-

tively, clamping a gasket 16 between them, which gasket bears against the inner face of the window or pane 11 so as to render the latter fluid-tight, thereby preventing the entrance of water or gases as the case may be. In order to hold the windows 11 a ring-like extension 17 of the material of the body portion 1 of the helmet is clamped between the rings 12 and 13.

Wherever the parts are joined together they may be sewed and cemented, or cement alone may be employed to render the joints fluid-tight so that there can be no entrance into the helmet of anything but air, wherefore the user may breathe but be at the same time protected against the entrance of water into the helmet in case the wearer be overboard, or against the entrance of noxious fumes should the wearer be subjected to such conditions.

The natural contractibility or pucker of the neck permits the quick application of the helmet without the necessity of strings or other like fastening devices, and when used in water in connection with a life preserver, the helmet may be removed when the surface of the water is sufficiently calm.

When it becomes necessary to go overboard into a body of salt water the helmet is of material service, since in salt water there is great danger, especially with people not used to the water, of such people becoming strangled, with the result that, unless protected by the helmet, the person swallows considerable quantities of salt water. This oftentimes produces nausea which bringing about premature weakness not infrequently results in fatalities. In rough water the helmet is valuable to shipwrecked persons, since the swallowing of salt water may occur even when the person is floating on the surface, for waves will pass over the head of the person and the temporary immersion may cause the swallowing of water.

The smallness of the tube or pipe 9 prevents any material access of water to the absorbent material 10 and the downward and inward curvature of the pipe not only protects the pipe against the ingress of water but has a constant tendency to drain the pipe of any water which may find access thereto.

This application is a division of application #244,781, filed July 13, 1918.

What is claimed is:—

1. A life preserver helmet structure comprising a body member of a size to inclose the head, said helmet structure having a contractible neck receiving portion, and a

snout projecting from the front of the helmet and terminating in a short pipe extension of relatively small cross sectional area having a downward curvature toward the wearer, the snout containing a body of pervious absorbent material.

2. A life preserver helmet structure of a size to receive the head of a person and having a contractible and expansible neck portion and a head portion, said head portion having a projecting snout with a reinforcing cage to hold the snout projected, windows in the head portion corresponding in position to the eyes of the wearer, and a relatively short pipe of relatively small cross sectional area projecting forwardly and downwardly from the snout portion.

3. A life preserver helmet comprising a head portion of flexible material with a contractible neck, and a snout of material similar to the head portion and provided with a reinforcing cage for maintaining the snout in projecting relation to the head portion.

4. A life preserver helmet comprising a head portion of flexible material with a neck portion for embracing the neck of the wearer, said head portion having a forwardly projecting snout of material like that of the head portion, and an exterior stiffening cage for holding the snout in projected relation to the head portion, said snout having a relatively short pipe of small diameter leading from its outer end to the atmosphere, and a quantity of absorbent material secured in the snout over the inlet of said pipe.

5. A life preserver helmet comprising a body portion of flexible material having an expansible and contractible neck for embracing the neck of the wearer, windows located in positions corresponding to the eyes of the wearer, and a snout of material like that of the body portion, providing space for receiving absorbent material, said snout having a reinforcing cage for holding it in projected position with the cage and snout tapering toward the outer end and said cage being provided at the outer end with a relatively short pipe of small cross sectional area extending downwardly and forwardly from the snout.

In testimony that I claim the foregoing as my own I have hereto affixed my signature.

DOMENICO DEL RE.

Witnesses:

NICK J. FERZACCA,
P. O. RIEN.