F. P. CUMMERFORD.

Head-Protector for the Use of Firemen, Ship-wrecked Persons, &c

No. 204,204. Patented May 28, 1878.

fig. 1.

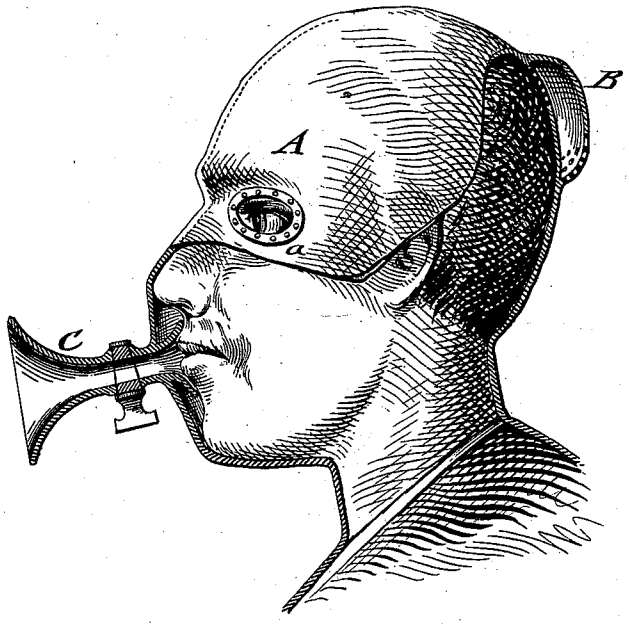


fig. 3.

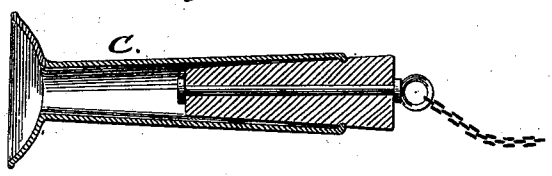
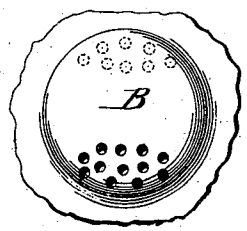


fig. 2.



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FRANCIS P. CUMMERFORD, OF WILMINGTON, DELAWARE.

IMPROVEMENT IN HEAD-PROTECTORS FOR THE USE OF FIREMEN, SHIPWRECKED PERSONS, &c.

Specification forming part of Letters Patent No. **204,204**, dated May 28, 1878; application filed February 18, 1878.

To all whom it may concern:

Be it known that I, FRANCIS P. CUMMERFORD, of Wilmington, in the county of New Castle and State of Delaware, have invented a new and Improved Head-Protector, of which the following is a specification:

This invention consists of a protecting-helmet, for the use of firemen, shipwrecked and other persons, made of rubber or other elastic material, that closes tightly to the neck, but fits loosely on the head, it being provided at the upper part with a ventilating device, and with a mouth-piece and closing device to admit of speaking.

In the accompanying drawing, Figure 1 represents a side view of my improved head-protecting helmet, being partly in section. Fig. 2 is a detailed view of the ventilating device; and Fig. 3, a vertical central section, on enlarged scale, showing one form of mouth-piece.

Similar letters of reference indicate corresponding parts.

A, in the drawing, represents my improved head-protecting helmet, which is made of rubber or other suitable material, of one continuous piece, or of several pieces cemented together. The lower part of the helmet is made narrow, so as to fit tightly around the neck and over the shoulders. The upper part fits loosely to the head, so as not to inconvenience the face, and allow the free circulation of air at the interior of the helmet.

At the upper part of the helmet is arranged a ventilating device, B, which has an air-compartment, formed of two layers of rubber, the lower layer being perforated at the uppermost portion, while the other raised or projecting layer is perforated at the lower portion, so that any water which gets into the air-compartment will naturally run out without entering to the interior of the helmet.

In place of the ventilating device described, two tubes, of which one is placed within the other, and which are perforated in corresponding manner at the upper and lower parts, may be used, the same operating in the same manner as the first ventilating device described.

The helmet is provided in front with eyes, the openings of which are closed by eye-pieces *a* of glass, and with a mouth-piece, C, that is made either of a rubber tube, closed by a plug connected in a suitable manner to the helmet, or it may be made of a short metal tube, the inner end of which conforms to the shape of the mouth, while the outer end is trumpet-shaped and provided with a stop-cock, so that it can be opened or closed at will, as shown in Fig. 1.

The mouth-piece is used in case it is necessary for the wearer to give orders or to communicate with his companions. The protector may be used also as a covering against rain, sleet, snow, and spray, when on the deck of a vessel in storms; or it may be used, when made of fire-proof material, by firemen, or, when made of lighter material for ladies' use, in bathing, as it will effectually protect the hair from salt water. The helmet is readily drawn over the head and easily adjusted, is of small compass, and is cheap and simple in construction.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A head-protector or helmet having a ventilator at the top part, and eyeglasses and a mouth-piece, with suitable closing device, substantially as and for the purpose described.

2. A head-protector made so as to fit tightly to the neck and loosely to the head, and being arranged with a ventilating device at the upper part that is made of inner and outer walls, perforated, respectively, at the upper and lower parts to admit the air but prevent the entrance of water, substantially as and for the purpose set forth.

FRANCIS P. CUMMERFORD.

Witnesses:

JOHN R. FLINN,

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