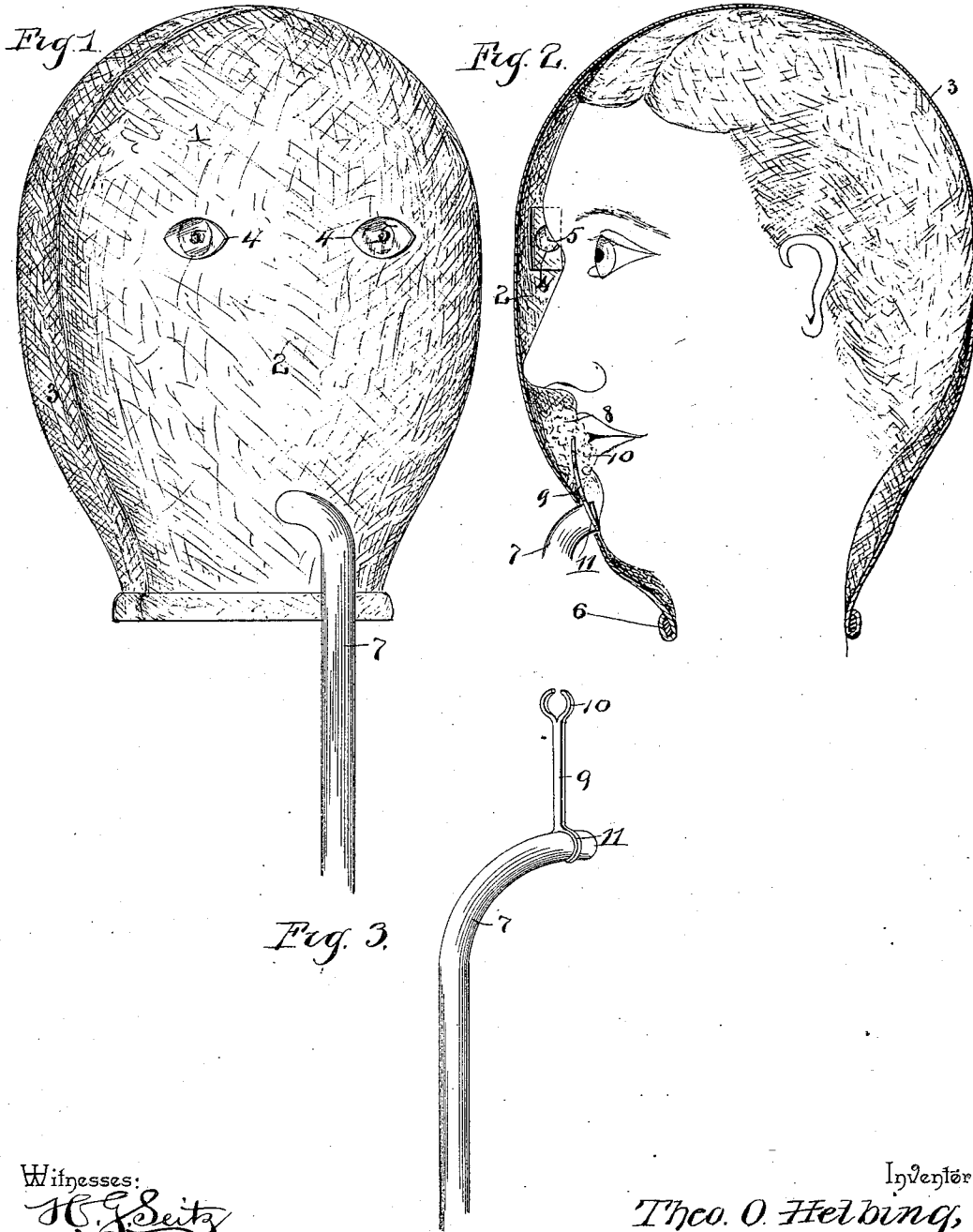


(No Model.)

T. O. HELBING.
FIREMAN'S RESPIRATOR.

No. 472,048.

Patented Apr. 5, 1892.



Witnesses:

W. G. Seitz

W. Sturwal

Inventor

Thco. O. Helbing,

By *his* Attorneys,

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UNITED STATES PATENT OFFICE.

THEODORE O. HELBING, OF CADILLAC, MICHIGAN, ASSIGNOR OF ONE-FOURTH
TO DENNIS ROACH, OF SAME PLACE.

FIREMAN'S RESPIRATOR.

SPECIFICATION forming part of Letters Patent No. 472,048, dated April 5, 1892.

Application filed June 4, 1891. Serial No. 395,098. (No model.)

To all whom it may concern:

Be it known that I, THEODORE O. HELBING, a citizen of the United States, residing at Cadillac, in the county of Wexford and State of Michigan, have invented a new and useful Protector for Firemen and Travelers, of which the following is a specification.

The objects of this invention are to provide a head-protector for firemen, and particularly to provide means for supporting a sponge or other air-purifying medium directly in front of the mouth and nostrils of the firemen.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claim.

Referring to the drawings, Figure 1 is a perspective of a protector constructed in accordance with my invention. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a detail in perspective of the sponge-support that is employed.

Like numerals of reference indicate like parts in all the figures of the drawings.

In practicing my invention I form a protecting bag or hood 1 by means of two sectional halves (designated as the front section 2 and rear section 3) formed of suitable fabric or other material. The section 2 is preferably formed of silk or similar material that is closely woven and more or less impervious to smoke, while the rear section 3 may be of almost any material, such as cotton, &c. The front section is provided with a pair of openings 4, which occur opposite the eyes of the wearer, which openings are covered by small panes 5 of mica or glass. The lower end of the hood thus formed is gathered and has run therethrough an elastic neck-encircling band 6.

In use it is simply necessary to stretch the lower end or mouth of the protector, expanding the elastic 6, which permits of the protector being introduced over the head of the fireman, and by means of said elastic band the neck of the fireman is embraced sufficiently close to prevent access of smoke.

From the lower front half of the hood or protector extends a small flexible rubber tube 7, which depends to a point near the floor and at its upper end communicates with the interior of the protector. By means of this

tube the air within the protector and breathed by the fireman is taken from a point near the floor, at which point, as is well known, the smoke is less dense, and the air consequently much purer and less liable to stifle and overcome the fireman.

A sponge 8 is supported over the mouth by the usual string or elastic band for the purpose of purifying the air breathed; but I have provided a simple device that may be used in connection with the tube 7, which I will now proceed to describe.

The sponge-holding device is formed of wire, and consists of a shank 9, that may be bent at any angle or degree. The upper end of the shank terminates in a pair of spring-arms 10 for engaging and holding the sponge 8, while the lower end terminates in a clasp 11, that may be introduced over the upper end of the tube 7 and be thus supported in position, whereby the sponge is brought directly over the mouth and nostrils of the user.

From the above description it will be seen that I provide a cheap and simple protector for firemen, the same being so constructed as to exclude smoke and impure air and heat, and which will protect the head and eyes of the user, thus enabling him to approach the seat of the fire or smoky rooms without danger of suffocation.

Having described my invention, what I claim is—

The herein-described protector, comprising a hood open at its lower end and provided with means for closing the opening, the air-tube communicating with the hood and adapted to depend therefrom to a point near the floor, and the wire sponge-support consisting of the shank 9, terminating at its upper ends in curved clamping spring-arms 10 for embracing the sponge and at its lower end in the clasp 11, the latter embracing the upper end of the tube, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

THEODORE O. HELBING.

Witnesses:

SAMUEL F. LONG,
DENNIS ROACH.