

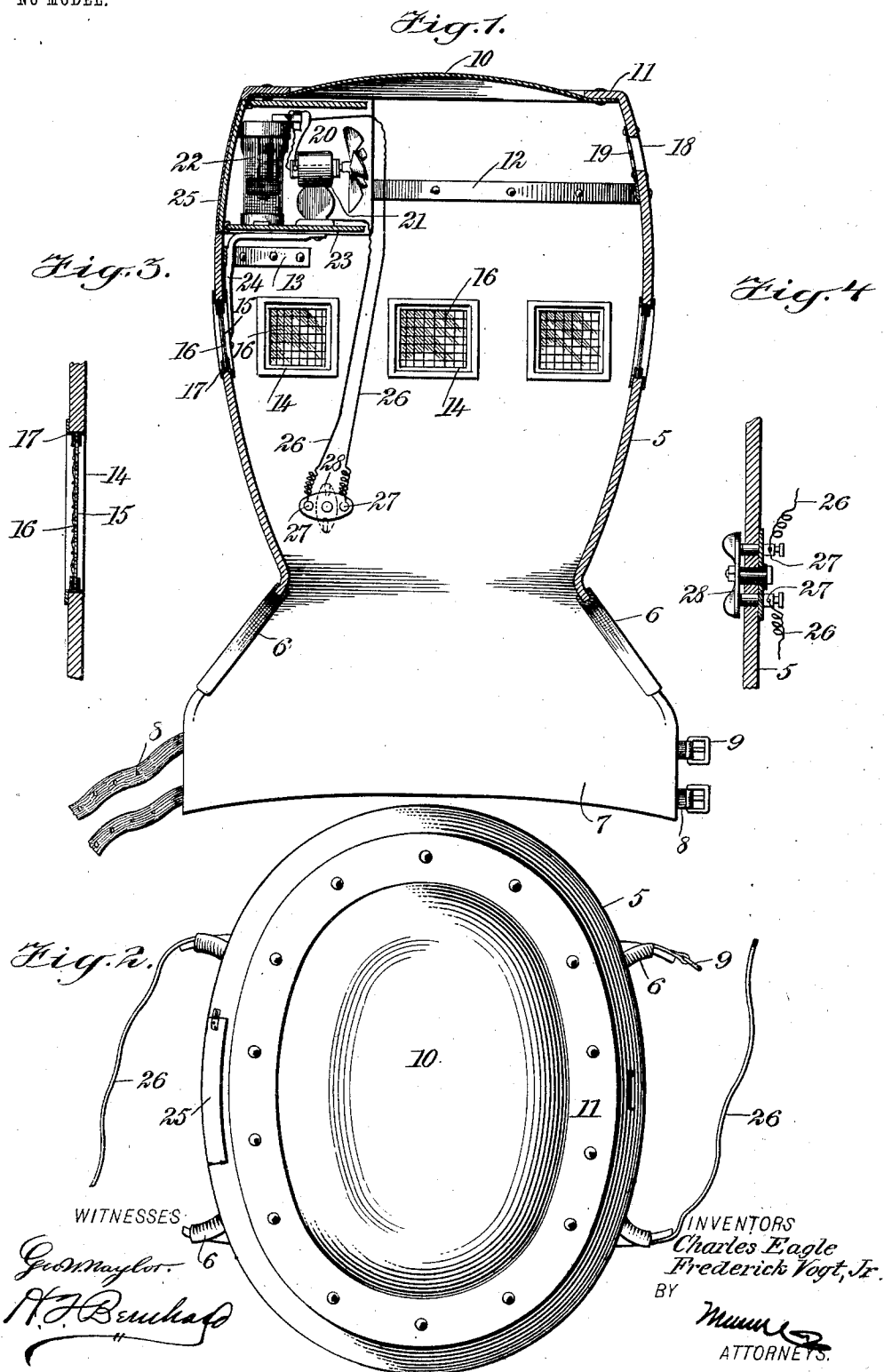
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PATENTED AUG. 25, 1903.

C. EAGLE & F. VOGT, JR.
FIREMAN'S HELMET.

APPLICATION FILED MAY 14, 1903.

NO MODEL.



UNITED STATES PATENT OFFICE.

CHARLES EAGLE AND FREDERICK VOGT, JR., OF NEW YORK, N. Y.

FIREMAN'S HELMET.

SPECIFICATION forming part of Letters Patent No. 737,373, dated August 25, 1903.

Application filed May 14, 1903. Serial No. 157,096. (No model.)

To all whom it may concern:

Be it known that we, CHARLES EAGLE, a resident of the city of New York, (Long Island city, borough of Queens,) in the county of Queens, and FREDERICK VOGT, Jr., a resident of the city of New York, borough of Manhattan, in the county of New York, State of New York, citizens of the United States, have invented a new and Improved Fireman's Helmet, of which the following is a full, clear, and exact description.

Our invention relates to improvements in appliances to be worn by firemen in invading rooms or apartments filled with smoke; and the object that we have in view is the provision of an improved helmet designed to minimize the danger of suffocation to the fireman in extinguishing a fire.

Further objects and advantages of the invention will appear in the course of the subjoined description, and the novelty will be defined by the annexed claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical sectional elevation through a fireman's helmet embodying our invention. Fig. 2 is a plan view thereof. Figs. 3 and 4 are detail sectional views of parts to be hereinafter described.

5 designates the hood or body portion of our improved helmet, which is made of such size and shape as to readily fit over the head of a fireman. This hood or body portion may be made of leather, metal, or any other suitable material, and at its lower part said body portion is provided with cushions 6 and flaps 7, said flaps having any suitable means for fastening the same detachably around the shoulders or body of the wearer, such as the straps 8, having buckles 9. The cushions 6 of the hood 5 are arranged to rest on the shoulders of the wearer, while the flaps and their fastening means serve as convenient devices for securely fastening the helmet around the body or shoulders of the fireman in a way to prevent the entrance of smoke into the helmet at the lower portion thereof. This helmet is closed at its top by means of a crown-plate 10, preferably made of metal, and riveted or otherwise fastened solidly to

a flange 11 at the top of the body, said crown-plate 10 being made of metal or other material which is sufficiently stiff and strong to prevent crushing of the helmet in case an object falls thereon. When making the hood or body portion 5 of leather, we prefer to employ the internal bands or strips 12 13 in order to reinforce or strengthen the outer part of the helmet.

The helmet is provided with a series of observation-openings 14, which are covered by panes or lights of mica 15, although other heat-resisting transparent material may be employed. These mica panes or lights are covered on the outside by layers of wire fabric or other material, as indicated at 16, said wire-fabric layers being attached to suitable metallic frames or bindings 17, which may be fastened to the helmet around the observation-openings 14, or said frames or bindings may be hinged to the helmet. If desired, the mica panes 15 may be secured in the metallic frames 17 along with the wire-fabric covers.

Our improved helmet is equipped with means for forcing a current of air through the upper part thereof in order to ventilate the helmet and to prevent the entrance of smoke into the same. An air-exit opening 18 is provided in the upper part of the helmet, at one side thereof, and this opening may be protected by a perforated metallic plate 19, secured in a suitable way to the body portion 5 and extending across the opening 18. The helmet is also equipped with a rotary fan or blower 20 of compact construction, said fan being driven by a motor 21, which is energized by a current of electrical energy from a suitable kind of battery 22. The fan-motor and the battery for driving the same are attached to a shelf or receptacle 23, which is secured in a suitable way in the upper part of the helmet, preferably at a point above the observation-windows 14 and directly opposite to the vent 18. The shelf or receptacle 23 may be supported in the helmet by a bracket or brackets 24, and access to the motor and the battery is obtained by means of a door 25, which may be hinged or otherwise attached to the upper part of the helmet. The electric circuit from the battery to the fan-motor includes the conductors 26, which lead to the circuit-terminals 27, and

these terminals are disposed in close relation, so as to be engaged by a reversible switch 28, the latter being disposed on the outside of the body portion 5 and at a point within convenient reach of the operator's hands. The switch may be of any suitable construction and adapted to open the circuit by clearing the terminals 27, thus throwing the fan-motor out of service; but, if desired, the switch may be adjusted into engagement with the circuit-terminals in order to close the circuit and make the battery energize the fan-motor. The motor is thus driven at the required speed, and it is arranged in a position to direct the current of air toward the vent 18, whereby the air prevents smoke from entering the helmet, and the air is caused to circulate through the helmet for the purpose of ventilating the same.

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

1. A fireman's helmet, comprising a hood, an air-circulating fan supported within the upper part of said hood, and means for driving and controlling the fan.

2. A fireman's helmet, comprising a hood having an observation-window, suitable fastening means for said hood, and a motor-

driven fan supported within the upper part of the hood.

3. A fireman's helmet comprising a body portion having a vent in its upper part, and a motor-driven fan disposed within said body portion to direct a current of air toward said vent.

4. A fireman's helmet comprising a body portion having a vent in its upper part, a motor-driven fan disposed opposite to said vent, and an electric circuit including a switch and a suitable source of energy.

5. A fireman's helmet comprising a body portion having observation-windows, and means for fastening the same around the body of a wearer, a vent above the observation-windows, a motor-driven fan supported in the upper portion of the body opposite to said vent, and means for energizing and controlling said fan.

In testimony whereof we have each signed our names to this specification in the presence of two subscribing witnesses.

CHARLES EAGLE.
FREDERICK VOGT, JR.

Witnesses:

EDWARD BRAHM,
GEORGE ENDRES, Jr.