

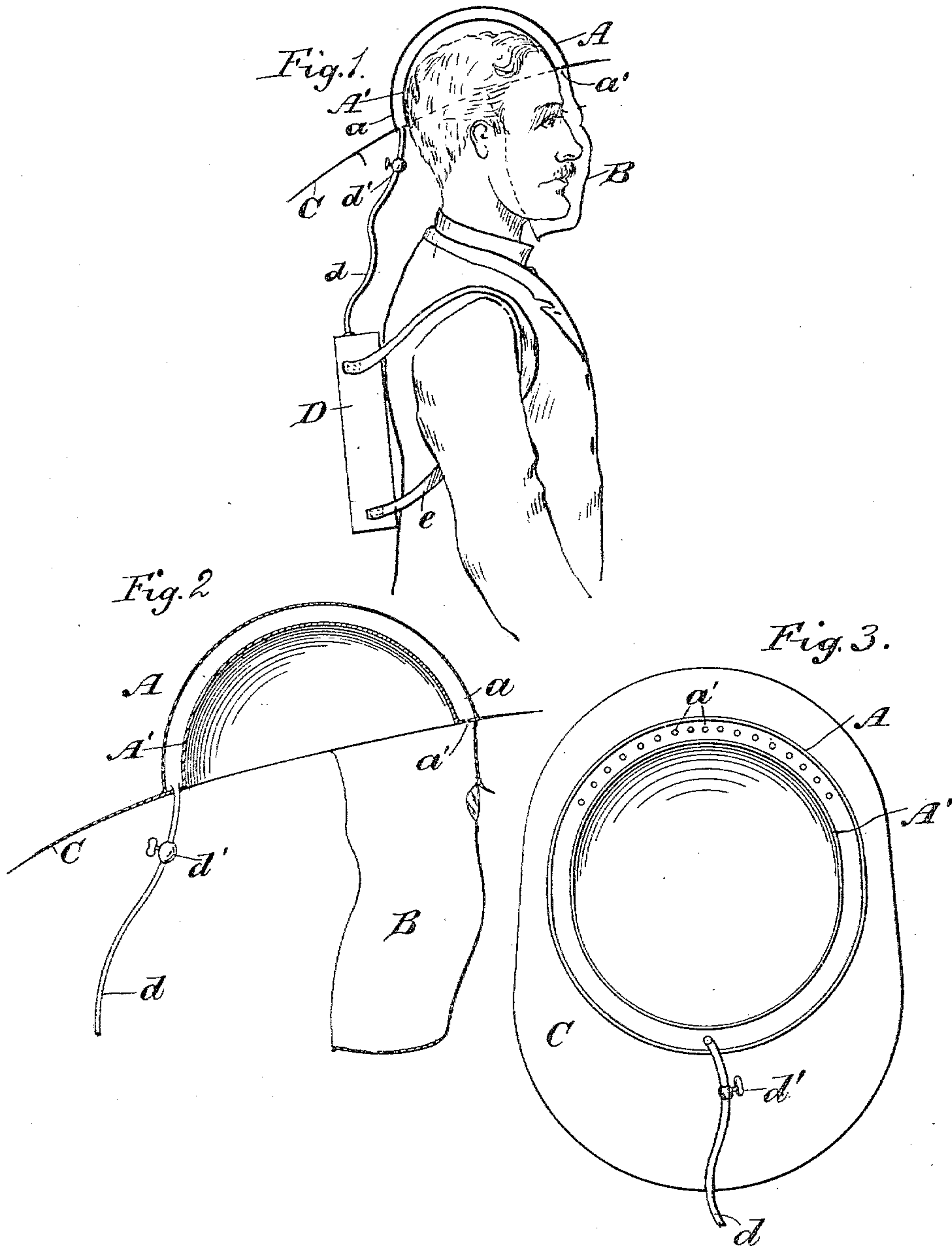
(No Model.)

G. F. BAYLES & T. B. JOHNSON.

FIREMAN'S RESPIRATOR.

No. 566,557.

Patented Aug. 25, 1896.



WITNESSES:

Signature of Mark Levy
Mark Levy

INVENTORS

George F. Bayles, and
Thomas B. Johnson

BY

Signature of Barker, Balaban, & Legendre

ATTORNEYS

UNITED STATES PATENT OFFICE.

GEORGE F. BAYLES AND THOMAS B. JOHNSON, OF MORRISTOWN,
NEW JERSEY.

FIREMAN'S RESPIRATOR.

SPECIFICATION forming part of Letters Patent No. 566,557, dated August 25, 1896.

Application filed August 14, 1895. Serial No. 559,215. (No model.)

To all whom it may concern:

Be it known that we, GEORGE F. BAYLES and THOMAS B. JOHNSON, citizens of the United States, residing at Morristown, in the county of Morris and State of New Jersey, have invented certain new and useful Improvements in Anti-Smoke-Inhaling Attachments for Firemen's Helmets, of which the following is a full, clear, and exact specification.

Our invention relates to firemen's helmets; and the object of the invention is to provide pure air for a person to breathe when enveloped or operating in smoke.

In the accompanying drawings, Figure 1 represents an elevational sectional view of a helmet as constructed after the manner of our invention and shows the manner of wearing same in connection with a face-mask and an air-reservoir. Fig. 2 is an enlarged view of the device shown in Fig. 1 as detached from the head and without the air-reservoir, and Fig. 3 is a plan view of the helmet as seen from its under side.

A is a fireman's ordinary helmet, inside of which is secured an additional crown A', adapted to fit the head, and which is secured to the outer portion or ordinary crown of the said helmet at the interior portion of the rim C, thereby forming a space *a* for the circulation or conveyance of air, which is stored under pressure in a reservoir D, which latter device is carried on the back of a fireman by means of shoulder-straps *e*, secured to said reservoir, or by other suitable means, and communicates with the area *a* in the said helmet by means of a flexible tube *d*, having a cock *d'* to govern the flow of air compressed in said reservoir to the said helmet, and thence, through the holes *a'*, formed along the front under edge thereof, between the face and a mask B, which latter depends from the said helmet in front and covers the face. The said mask is connected with the hat or helmet and is arranged to be held clear from the face of the wearer, so that a free circulation of air is provided over the face, the edges of said mask being also free and clear from

the face, allowing air to pass away at all points, or be exhaled, except at the top portion of the mask, where close connection is made between it and the hat or helmet, preferably, as shown in the drawings, by being secured at the under side of the brim of said hat or helmet. It is obvious that this arrangement will provide fresh air to a person, though he be entirely enveloped by smoke or fumes, for a long time, the constant flow of the air from the reservoir over the face and out at the mask edges preventing the entrance of smoke between the face and helmet, and thereby preventing suffocating and choking.

What we claim as new, and desire to protect by Letters Patent, is—

1. The combination of a helmet comprising concentric parallel partitions, substantially hemispherical in shape, an annular partition uniting the edges inclosing an air-space between said partitions, a mask depending from the front of the helmet, a plurality of openings in the annular partition extending along the front portion of the helmet, and an air-supply located at the rear of the helmet, adapted to cause a current of air to constantly flow, while in use, over the head and across the face of the wearer.

2. The combination of a hollow helmet having partitions forming an air-passage from the rear to the front over the crown and across the sides thereof, a mask depending from the front portion of the helmet, an opening or openings in front of the helmet extending laterally at either side and means for introducing compressed air at the rear of the helmet, adapted to cause a constant stream of cool air to flow over the head and downward over the entire face.

In testimony that we claim the foregoing we have hereunto set our hands this 6th day of June, 1895.

GEORGE F. BAYLES.
THOMAS B. JOHNSON.

Witnesses:

JOSEPH ABSALON,
WILLIAM S. JOHNSON.