

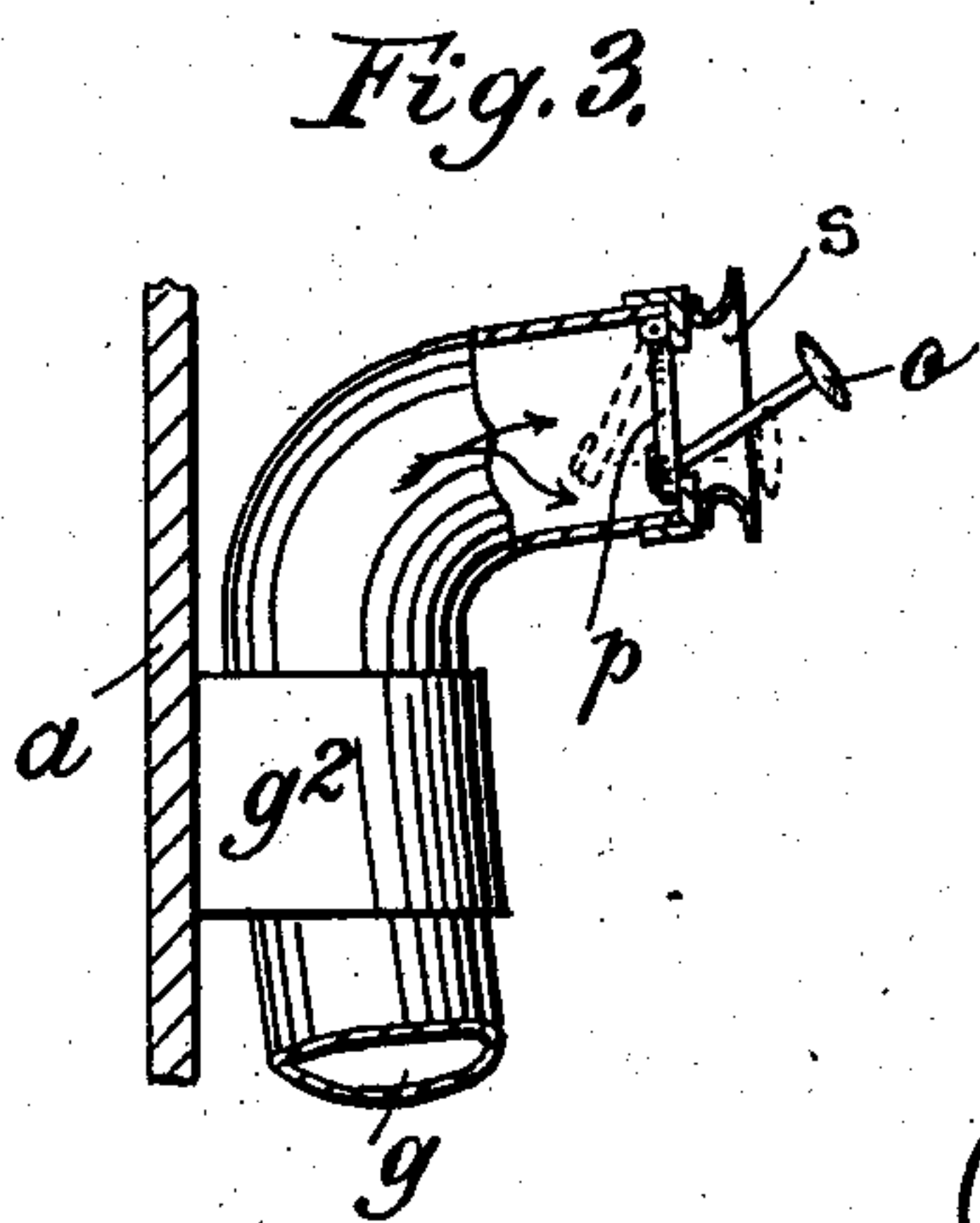
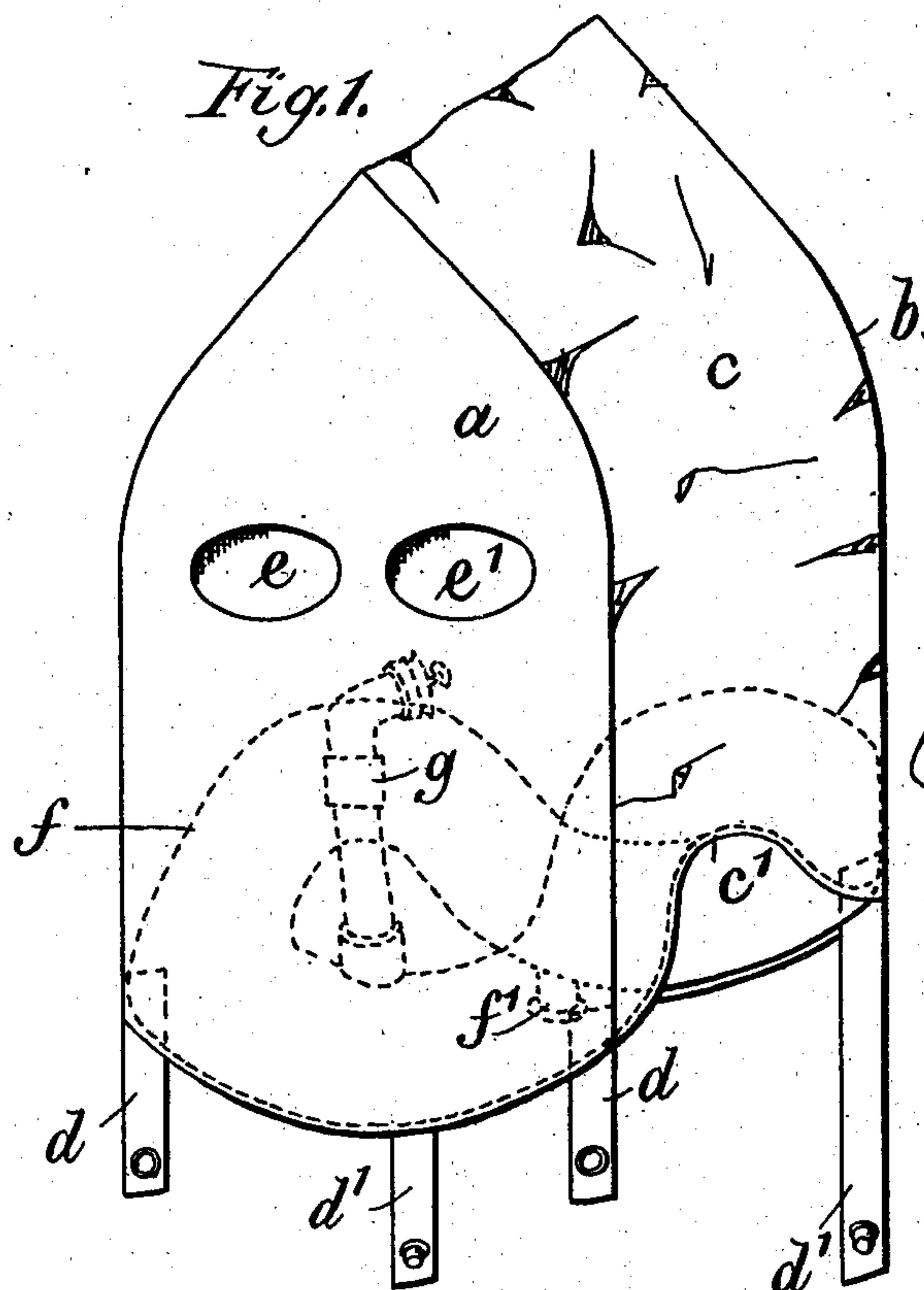
No. 728,476.

PATENTED MAY 19, 1903.

E. LANGER.
PROTECTIVE HOOD.

APPLICATION FILED AUG. 29, 1900. RENEWED SEPT. 24, 1902.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

ESTHER LANGER, OF BROOKLYN, NEW YORK.

PROTECTIVE HOOD.

SPECIFICATION forming part of Letters Patent No. 728,476, dated May 19, 1903.

Application filed August 29, 1900. Renewed September 24, 1902. Serial No. 124,701. (No model.)

To all whom it may concern:

Be it known that I, ESTHER LANGER, a citizen of the United States, residing at No. 123 Stanhope street, Brooklyn, Kings county, State of New York, have invented certain new and useful Improvements in Protective Hoods, of which the following is a full, clear, and exact specification, reference being had to the accompanying drawings, wherein—

Figure 1 is an isometric view of my improved fire-hood; Fig. 2, a sectional view thereof, showing it in position when in use; and Fig. 3 is an enlarged detail of the mouthpiece.

My invention relates to fire protective apparatus; and it consists of the hereinafter-described construction of a protective hood suitable to be placed over the head of persons entrapped in a burning building to protect their eyes and pulmonary organs from the effects of smoke and to enable them to find their way out of the burning building or compartment.

The hood consists of front part *a* and rear part *b*, which are made approximately of the shape shown in Fig. 1 of the drawings and preferably of some stiff material, such as leather, which may be fireproof or covered with some fireproofing substance on the outside, though that is not essential to my invention. These two parts *a* and *b* are united by the strip *c*, which is made of similar but not necessarily stiff material and sufficiently wide to permit the hood to be placed over the head of the person. At the ends of this strip *c* are provided recesses *c'* to admit the shoulders of the person wearing the hood, and in connection with these recesses bands *d* and *d'* may be provided for fastening the hood.

In the front part *a* of the hood are provided look-holes *e* and *e'*, wherein panes of glass or mica are set to permit the person wearing the hood to see, and around the lower rim of the hood tube *f*, preferably of rubber, though it may be made of any suitable air-tight material, is secured to the rim within the hood. A smaller tube *g* is connected to the tube *f* by suitable fitting *g'* and approximately in the middle of the front part *a* of the hood. This

tube extends upwardly and is affixed to the front part *a* of the hood by means of a tie *g²*.

The tube *g* extends for some distance above the tie *g²* and may be provided with a suitable mouthpiece *s*, which is so located that it will stand approximately opposite the mouth of the person when the hood is in use. Tube *g* is normally closed by back-pressure valve *p*, which is operated by means of a button *o*, projecting from the mouthpiece, so that when the person using the hood takes the mouthpiece *s* into his mouth he may by pressing with his tongue upon the button *o* open the valve, as indicated in dotted lines in Fig. 3, and then inhale the air contained in the tube *f*. *f'* is a nipple with a back-pressure valve for inflating the tube *f*.

The tube *f* is moderately inflated by air and serves two purposes. For one, it fills up the spaces between the body of the person wearing the hood and the sides of the hood, thus shutting up the hood and preventing the smoke from penetrating into the interior thereof. For the second, the air contained in the tube *f* is available in case of necessity by the person using the hood for breathing, whereby the period for which the hood will afford protection against smoke is considerably extended.

It will be noticed that the hood is so shaped as to form a peak above the head of the wearer. The purpose of this shape is to provide an air-space within the hood wherein a small supply of air will be found, which may in some cases be sufficient to enable the wearer of the hood to breathe and to pass through a smoke-filled compartment or hall without resorting to the supply of the air in the tube *f*.

My protective hood is intended for use as an expedient in case of danger by persons entrapped in burning buildings to enable them to escape therefrom through halls usually filled with smoke. It is designed for such extraordinary use, which of course is only of short duration. At the same time the hood is designed in such manner that it may always be kept ready for use and conveniently stored in bed-rooms or other compartments.

I claim as my invention and desire to secure by Letters Patent—

A protective hood having look-holes *e* and *e'* in the front part thereof provided with
5 panes of mica or other transparent material;
a pneumatic tube *f* secured to the lower edge thereof and provided with a nipple *f'* and a branch tube *g* having a back-pressure valve

and a suitable mouthpiece at its end; and means for operating the valve substantially as described.

ESTHER LANGER.

Witnesses:

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