

(No Model.)

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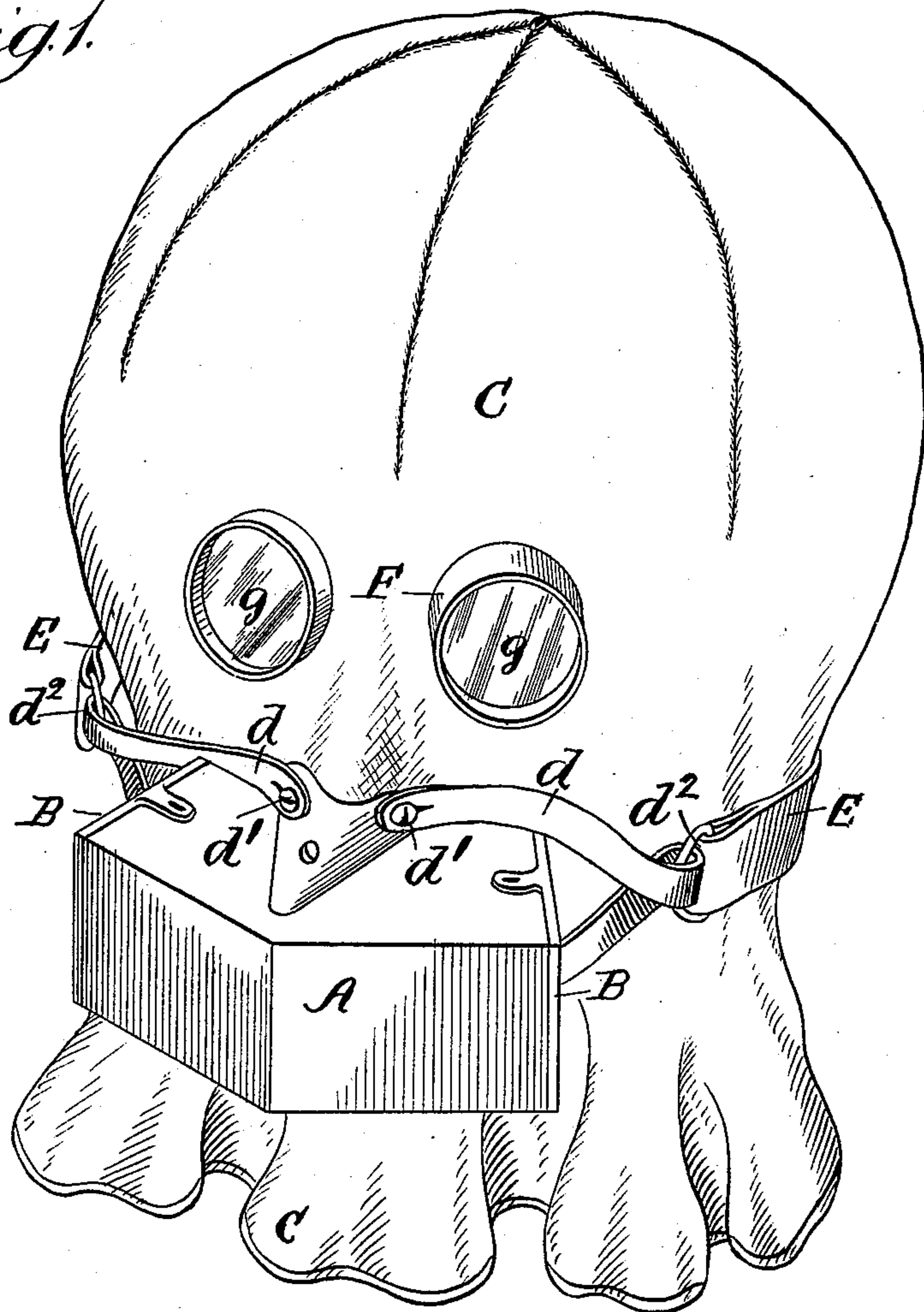
G. POZDENA & F. CHURAN.

FIRE MASK.

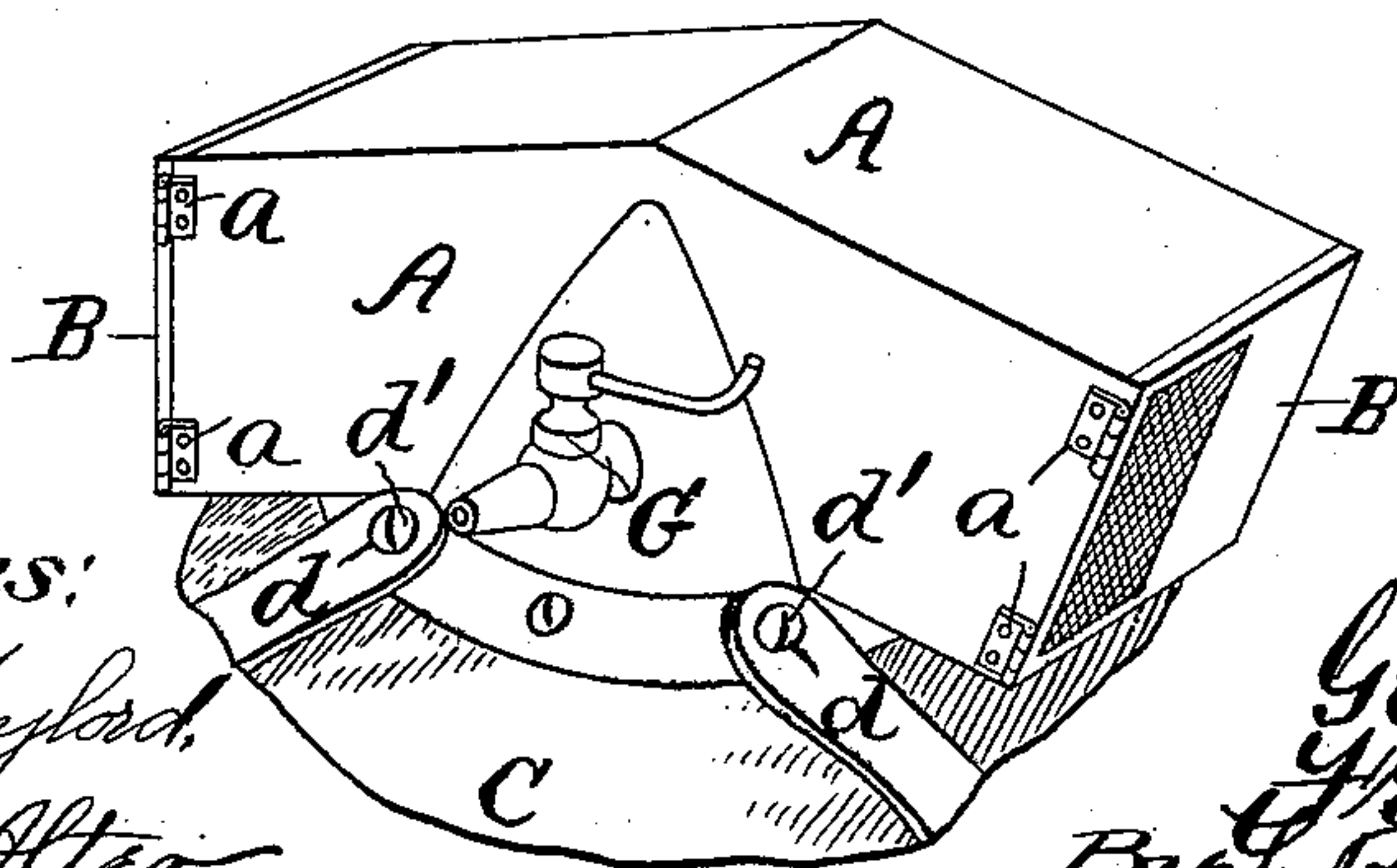
No. 521,939.

Patented June 26, 1894.

*Fig. 1.*



*Fig. 2.*



Witnesses:

*Chas. E. Gaylord,*  
*Lute S. Alter*

Inventors:

*Gustave Pozdena,*  
*Frank Churan,*  
*By L. B. Coupland & Co*  
*Attys.*

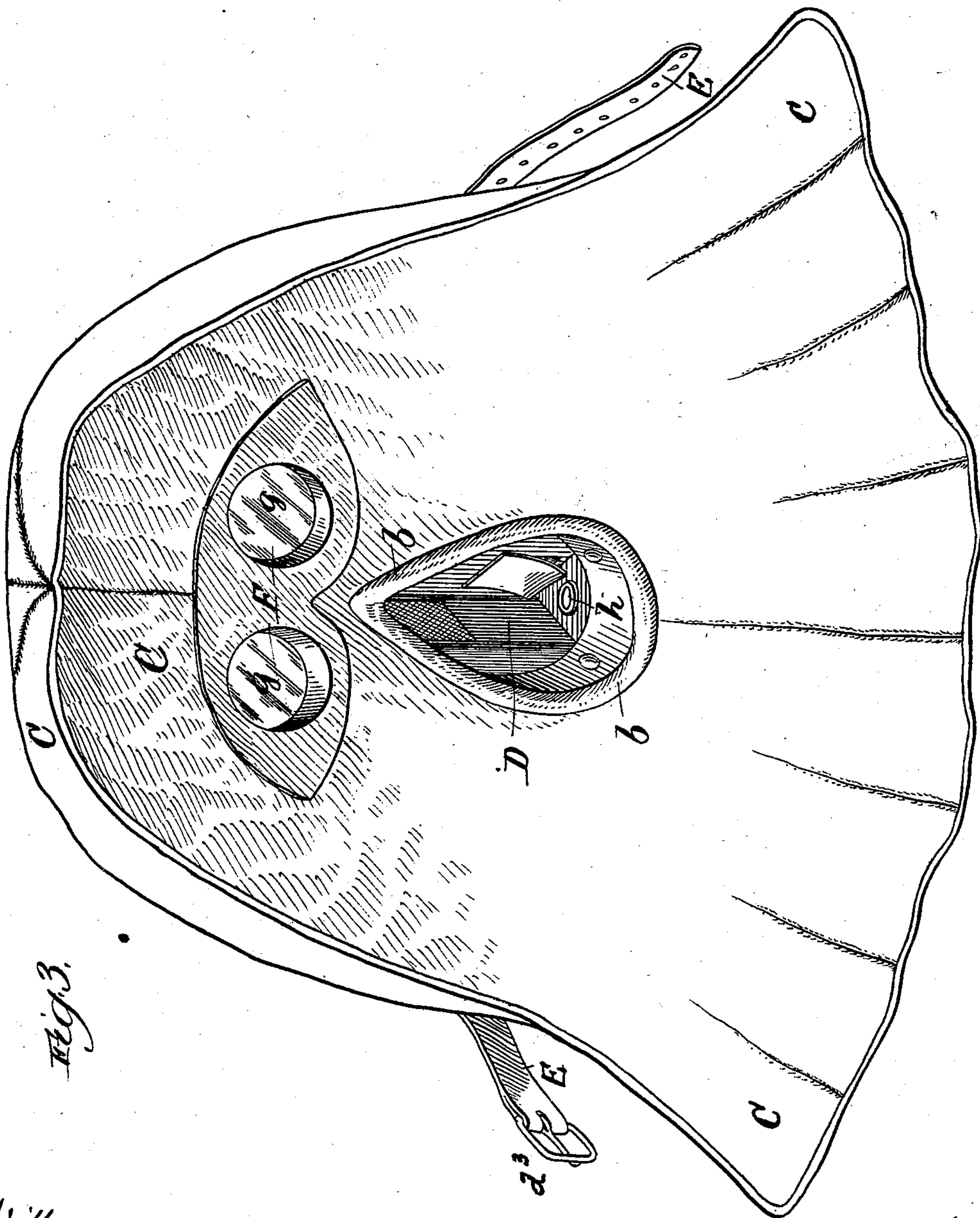
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2 Sheets—Sheet 2.

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# UNITED STATES PATENT OFFICE.

GUSTAVE POZDENA AND FRANK CHURAN, OF CHICAGO, ILLINOIS.

## FIRE-MASK.

SPECIFICATION forming part of Letters Patent No. 521,939, dated June 26, 1894.

Application filed October 23, 1893. Serial No. 488,969. (No specimens.)

*To all whom it may concern:*

Be it known that we, GUSTAVE POZDENA and FRANK CHURAN, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Respirators, of which the following is a full, clear, and exact description, that will enable others to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to improvements in that class of devices set forth in United States Letters Patent, No. 476,486, dated June 7, 1892.

The object of the present invention is to provide an improved attachment for respirators in the form of a hood-covering to protect the head and neck of the wearer when exposed to fire, and is especially intended for the use of firemen. A valve attachment also provides for the admission of an additional volume of air.

Figure 1 is a front elevation of a device embodying our improved features. Fig. 2 is a broken-away inverted perspective bottom view; and Fig. 3, a rear elevation.

The interior construction of the respirator proper is the same as that set forth in the patent herein referred to; a detail description will therefore be omitted.

In the drawings, A is a casing or chambered body, inclosing air-passages, which will ordinarily be of the form or contour shown. This casing may be constructed of any suitable material, metallic or otherwise, and is provided in its respective ends with perforated doors B, hinged as at *a*, through which the air is admitted and expelled in the process of respiration. The hood or head-covering C will ordinarily be manufactured of asbestos cloth, however, any other fire-proof fabric, suitable for the purpose, may be used. The respirator and hood are neatly joined together, as shown in Fig. 1. The opposite inner side (Fig. 3.) is provided with the mouth and nose-opening or recess D. This opening is bordered by an elastic cushion *b*. The contour

of this border corresponds to the form of the face so as to be close-fitting and air-tight, and at the same time to present a soft, yielding surface that will be comfortable to the wearer.

The device is secured to the head by means of two loop-straps *d d*, having their respective ends secured to the upper and under side of the respirator, as at *d'*, (Figs. 1 and 2) and the neck-band E, connected at their front ends to the loop-straps, as at *d''*, and the rear ends joined by a buckle *d'''*. The goggles F are secured to the hood in such a manner as to be a permanent part thereof, so that when the hood is placed on the head the goggles are in proper position without additional attention. The transparent parts *g* are ordinarily composed of mica. The air-valve G is inserted in the under side (Fig. 2) of the respirator and opens into the respiratory chamber, as shown at *h*, Fig. 3. This valve is manipulated by hand, and is an auxiliary attachment, to be used as circumstances may require, for the purpose of inhaling a greater volume of air than that supplied through the ends of the respirator. By this arrangement a device is provided that is easily and quickly adjusted to the head, and will enable the wearer to remain in a heated and smoke-charged atmosphere for some considerable time without injury or inconvenience.

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

The combination with a respirator, having air-passages therethrough from each end and provided in the rear side with a respiratory chamber, of an air-valve, inserted in said respirator and communicating with said chamber, and a hood-attachment, as described, inclosing the respiratory-chamber, but having the air-valve exterior thereto, substantially as set forth.

GUSTAVE POZDENA.  
FRANK CHURAN.

Witnesses:

L. M. FREEMAN,  
J. B. DONALSON.