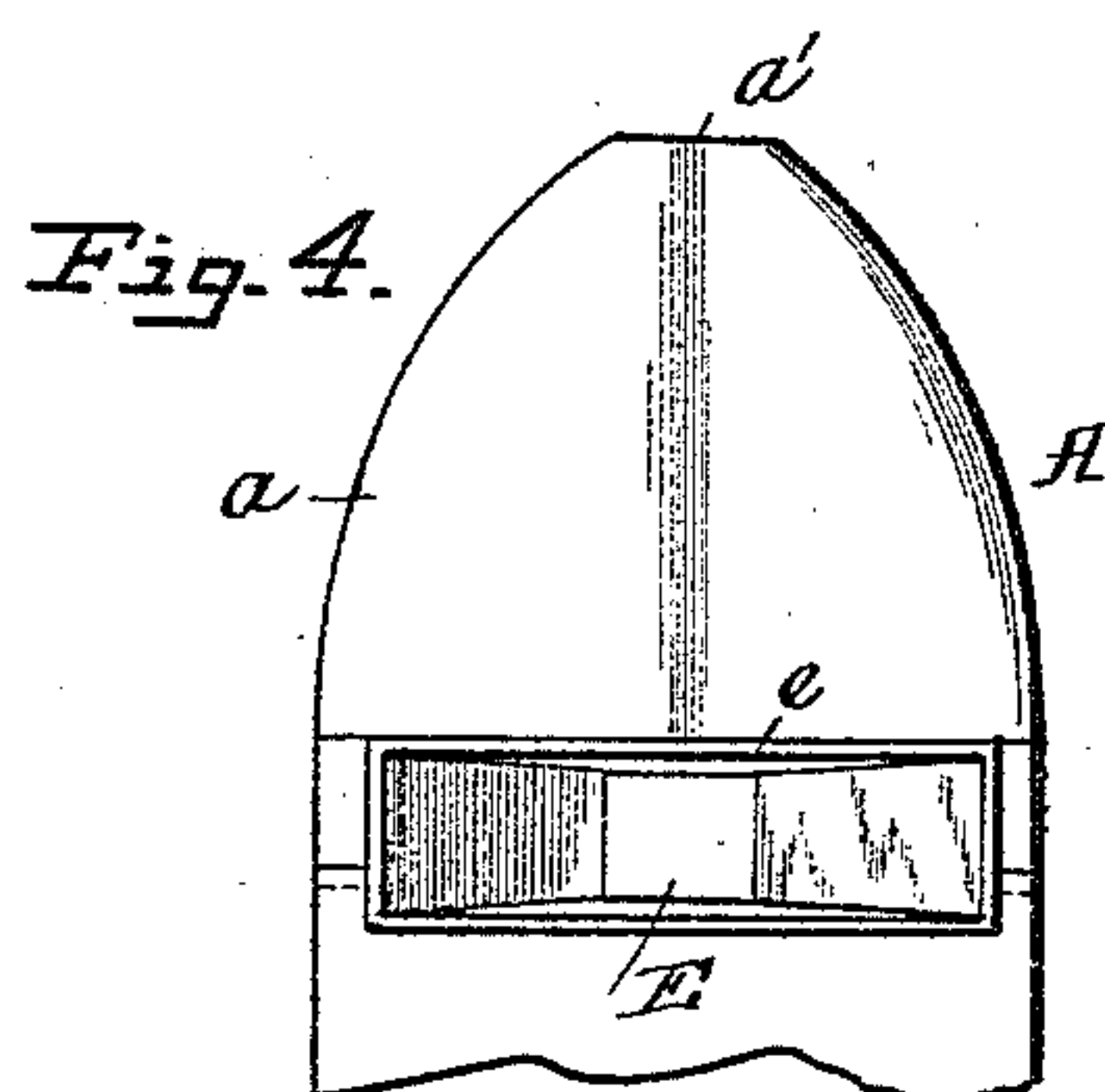
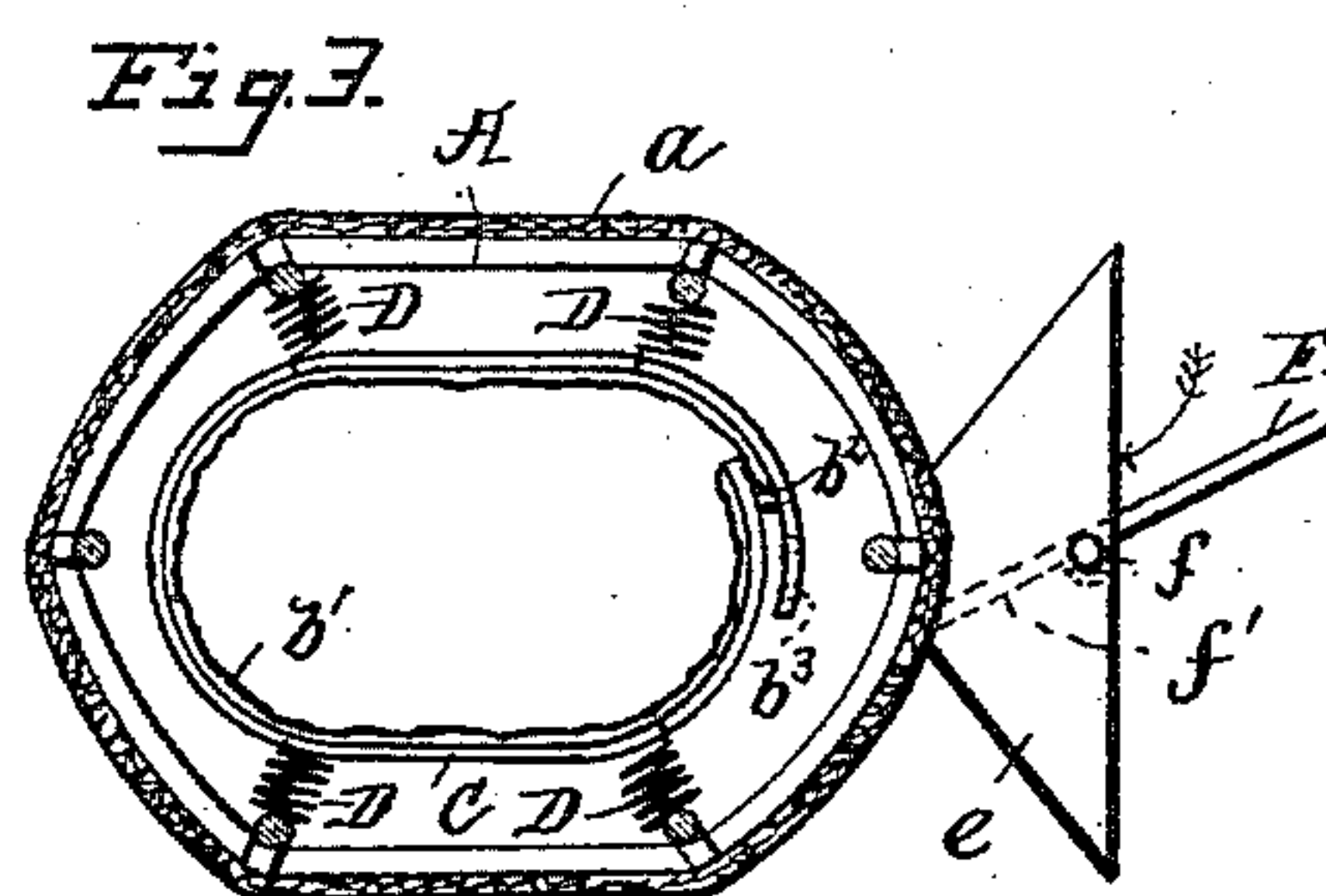
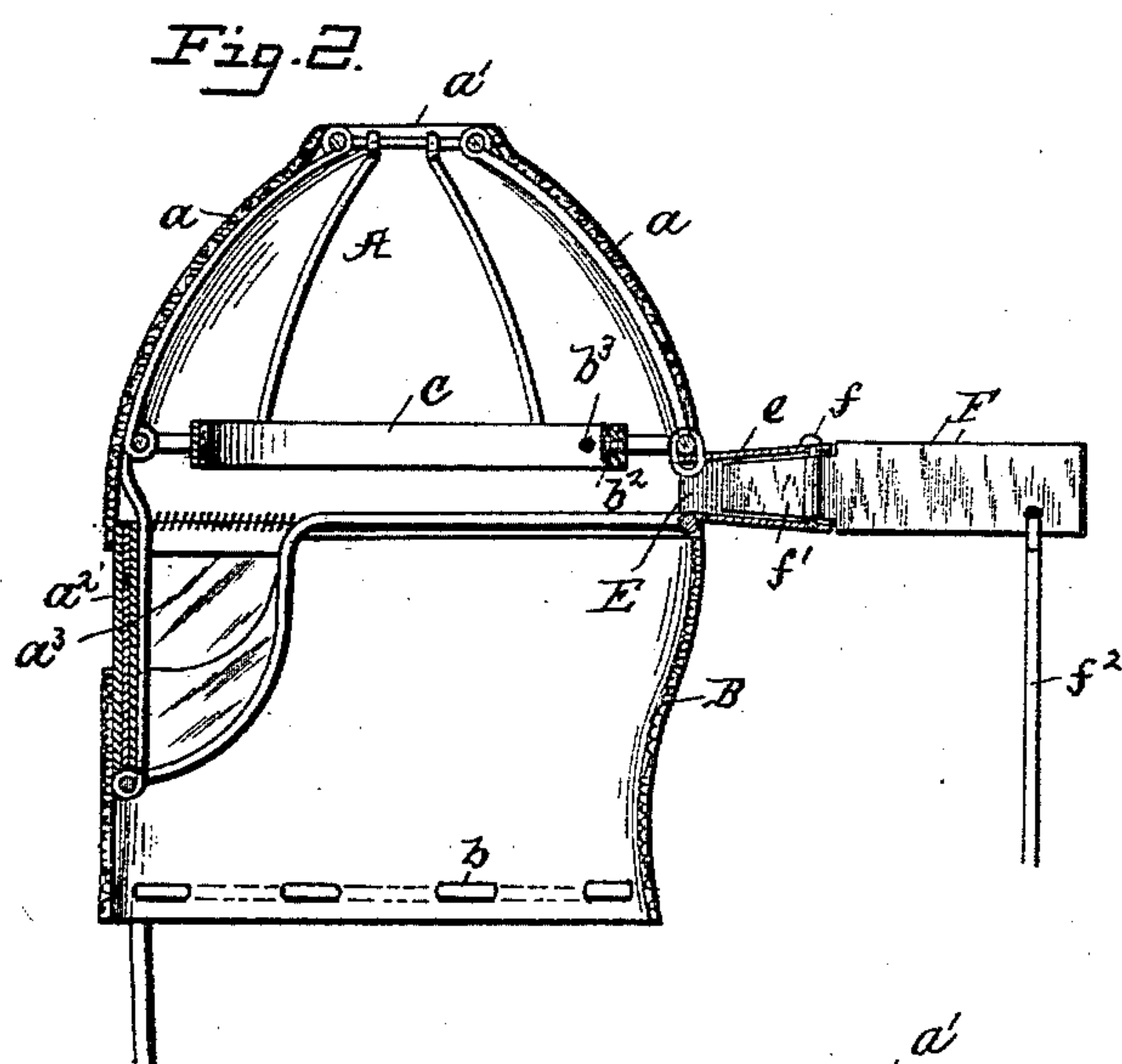
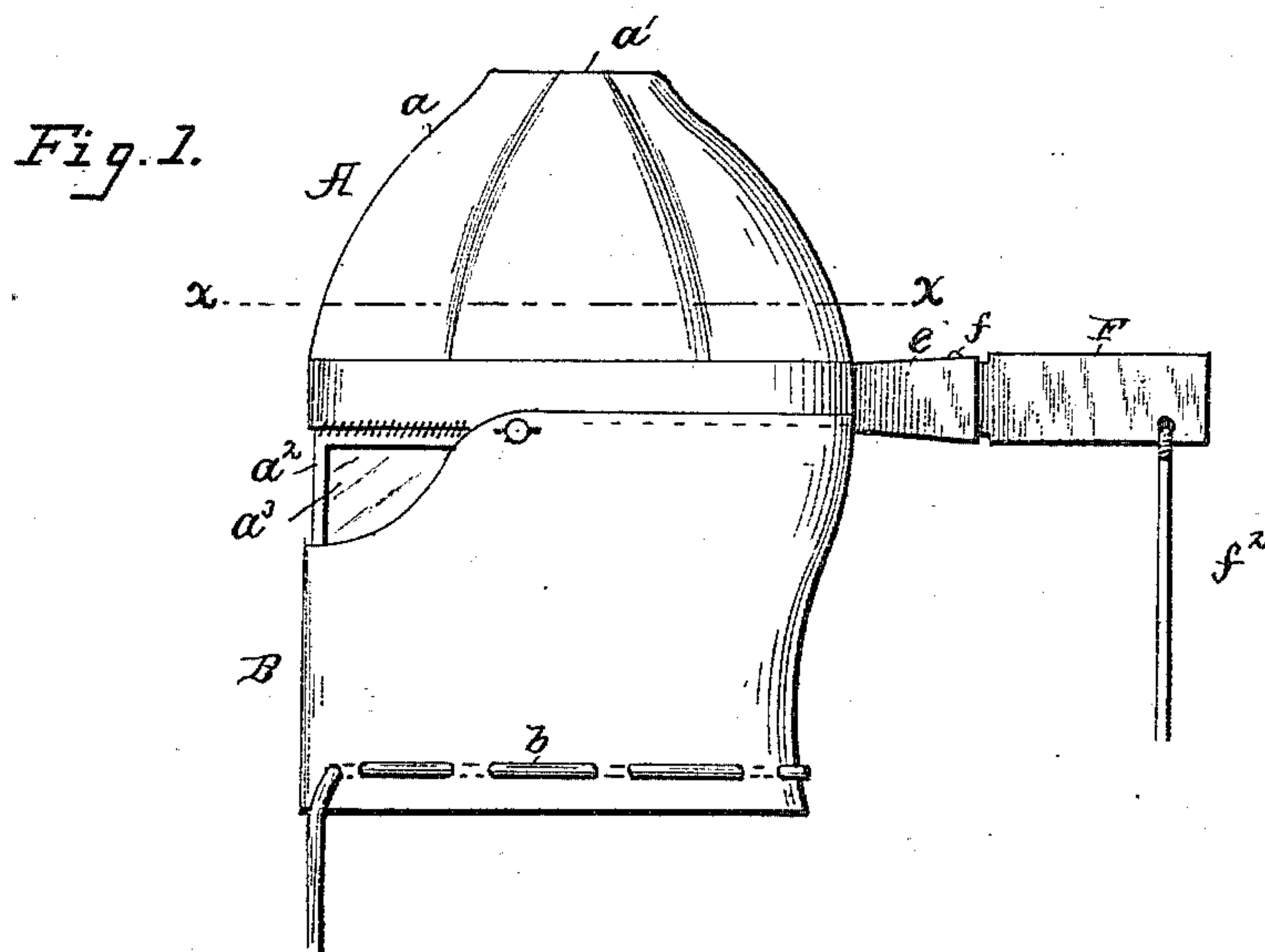


(No Model.)

J. C. JENSEN.
HEAD PROTECTING RESPIRATOR.

No. 437,995.

Patented Oct. 7, 1890.



Witnesses

Wm S. Hodges
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Inventor:

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UNITED STATES PATENT OFFICE.

JENS C. JENSEN, OF DENMARK, KANSAS.

HEAD-PROTECTING RESPIRATOR.

SPECIFICATION forming part of Letters Patent No. 437,995, dated October 7, 1890.

Application filed June 3, 1890. Serial No. 354,128. (No model.)

To all whom it may concern:

Be it known that I, JENS C. JENSEN, a citizen of the United States of America, residing at Denmark, in the county of Lincoln and State of Kansas, have invented certain new and useful Improvements in Head-Protectors, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to an improved head-protector for use by thrashing-machine attendants, and it has for its object the production of improved means for protecting the head from dust and in providing a free circulation of air within the helmet.

The invention consists in a cap or helmet having front viewing-points, an inner flexible band for fitting snugly on the wearer's head, and providing a continuous space or passage-way terminating in an upper opening and a rear opening for admission of air, which is directed in its passage by a movable cowl or vane, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of my improved head-protector. Fig. 2 is a vertical longitudinal sectional view thereof. Fig. 3 is a horizontal sectional view on the line xx , Fig. 1. Fig. 4 is a rear elevation.

Referring to the drawings, A designates the cap or helmet made of wire frame, having a covering a of any suitable material. The upper end of the cap or helmet has a hole or opening a' formed therein. The lower front extension a^2 of said cap or helmet is provided with two sight-openings covered with isinglass a^3 . A lower extension or neck-covering B is secured to the lower edge of helmet A, and the same is provided with draw-strings b , by which it is drawn in around the neck of the wearer.

C is a flexible band having an inner padded face b' . The ends of this band are adjustably connected together by a stud b^2 , of one end entering any one of a series of holes or slots b^3 in the other end. A series of coil-springs D, placed at suitable distances apart, are connected to band C at their inner ends, their outer ends being secured to the lower circular wire of the helmet-frame. By this means the

protector is made so as to fit different sizes of heads, and a space is always preserved between the head of the wearer and the helmet.

In the rear portion of helmet A is an opening E for the admission of air, the same being directed thereto by a deflector e , the ends of which diverge outwardly some distance.

F is a cowl or vane pivotally connected by a rod or pin f in the outer central portion of deflector e , the inner end f' of said cowl or vane corresponding in shape to the inclination of said deflector. By means of a rod f^2 , connected to the outer end of cowl F, the same can be moved so as to throw its inner end from one side of opening E to the other, and in this manner the air which is caught by said cowl is readily conveyed through said opening, the cowl being moved according to the direction of the wind. When the latter is blowing directly toward the opening and deflector, the cowl or vane is unnecessary, and can be removed.

The advantages of my invention are apparent, and it will be seen that in addition to providing a covering and protector for the head of an operator I also insure a free circulation of air, no matter in what direction the wind may be blowing.

I claim as my invention—

1. A head-protector having an upper opening, a continuous space or passage-way, a rear air-opening, and a movable cowl or vane, substantially as set forth.

2. In a head protector, the helmet having an upper opening, a continuous space or passage-way, a rear opening, and a deflector, the movable cowl or vane having its inner end located in said deflector, the pivotal pin therefor, and the rod connected to the outer end of said cowl or vane, substantially as set forth.

3. In a head-protector, the helmet having the wire frame, the flexible band having its ends adjustably connected, and the coil-springs connected to said band and to said frame, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JENS C. JENSEN.

Witnesses:

THOMAS THOMPSON,
GEORGE OTTO BATELSON.