

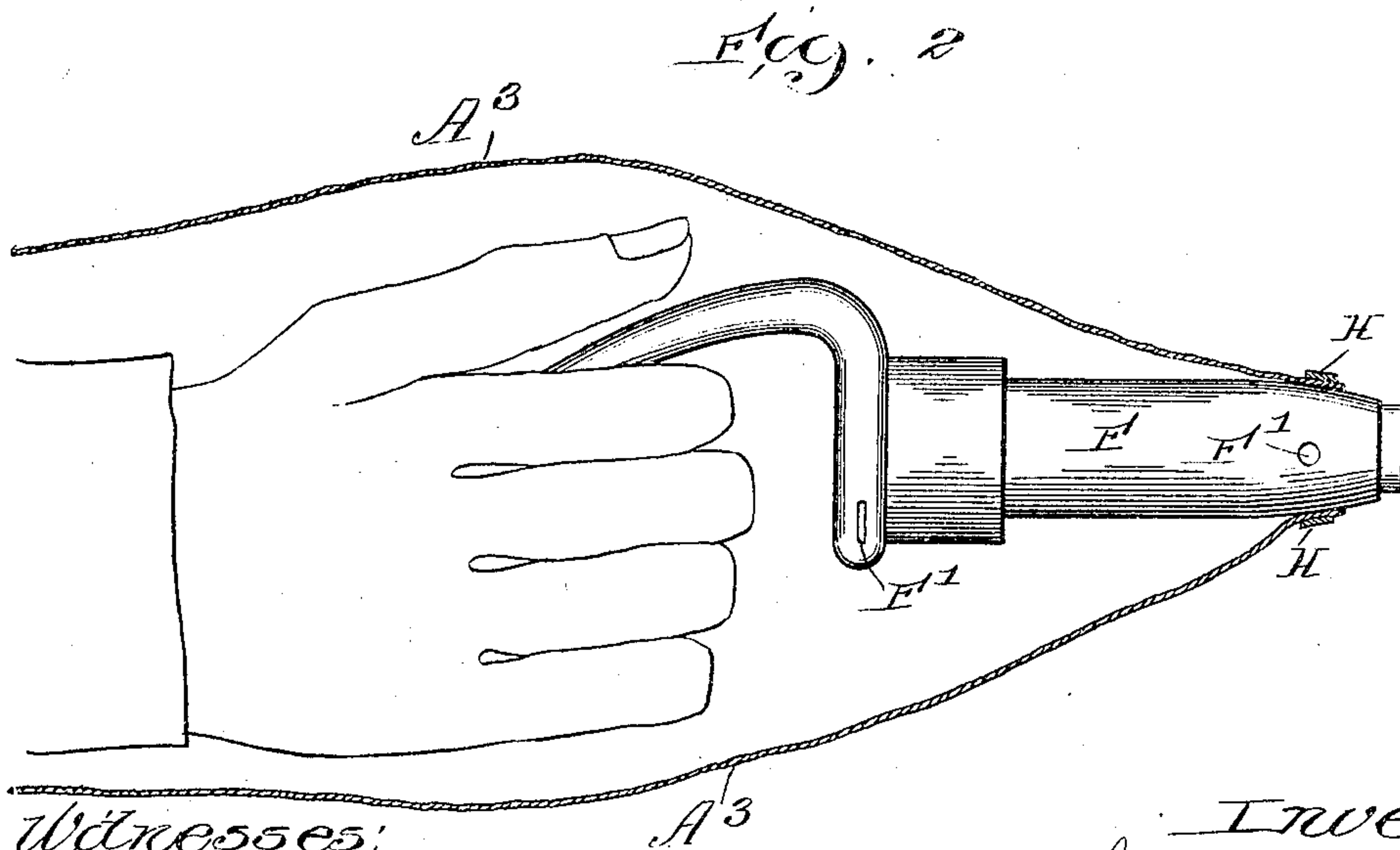
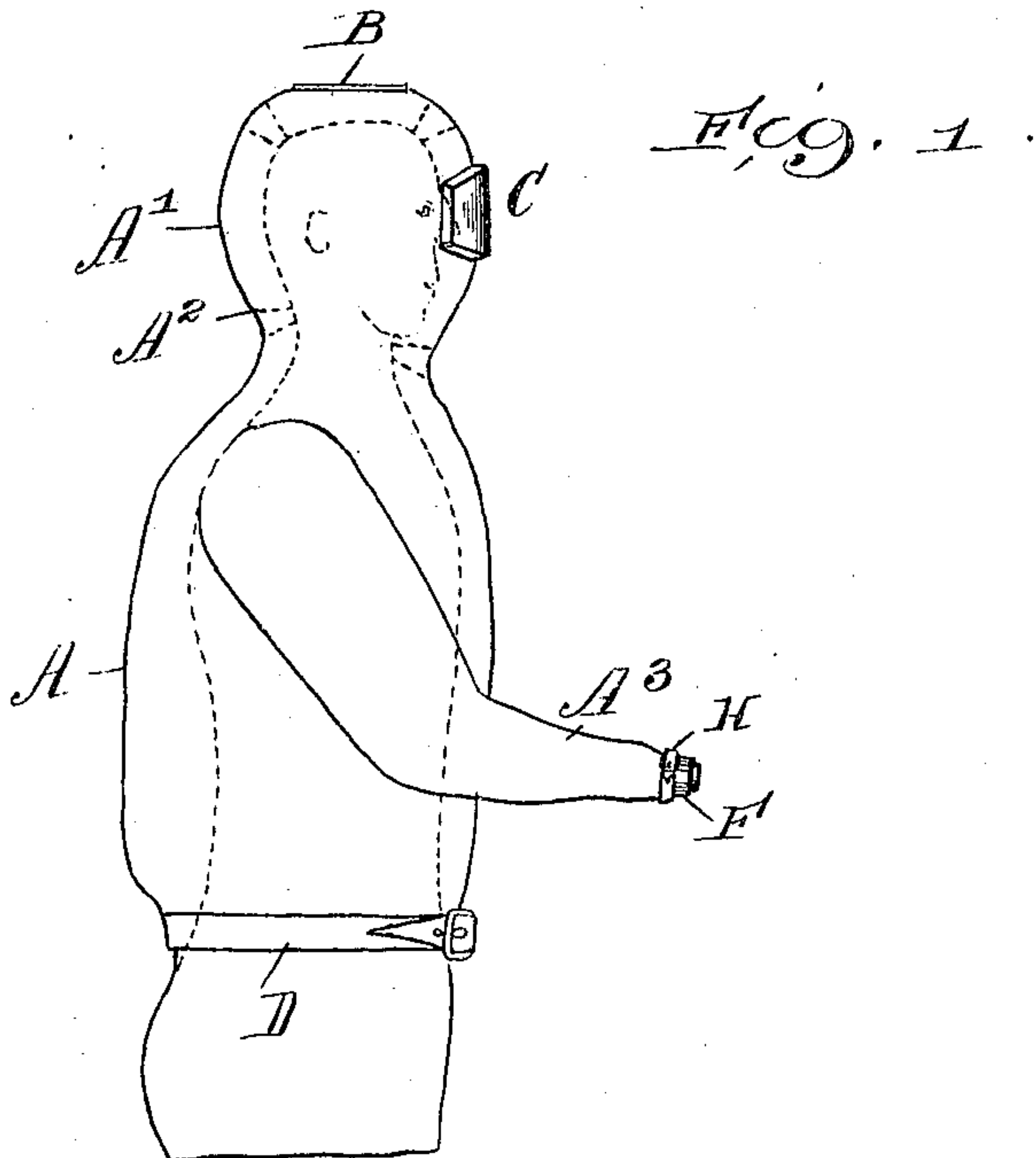
No. 807,610.

PATENTED DEC. 19, 1905.

H. J. ELLIS.

GARMENT.

APPLICATION FILED MAR. 20, 1903.



Witnesses:

Harry B. White  
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# UNITED STATES PATENT OFFICE.

HUGH J. ELLIS, OF CHICAGO, ILLINOIS.

## GARMENT.

No. 807,610.

Specification of Letters Patent.

Patented Dec. 19, 1905.

Application filed March 20, 1903. Serial No. 148,774.

*To all whom it may concern:*

Be it known that I, HUGH J. ELLIS, a citizen of the United States of America, and a resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Garments, of which the following is a specification.

My invention relates to garments, and has for its object the construction of an article of personal wear so arranged that it may be used to convey fresh air to the face of the wearer. More particularly, is it used to convey air from the exhaust of a pneumatically-operated tool to the operator of the tool for breathing purposes when the surrounding air is unfit for breathing. It is also arranged so that the exhaust may pass around the body of the operator, and thus act as a cooling medium when the operator has to work in a hot place.

In the accompanying drawings, Figure 1 represents the garment as it appears when worn by an operator and secured to an ordinary pneumatic tool; and Fig. 2 is an enlarged section through the lower end of one sleeve of the garment, showing a pneumatic tool held in the hand of the operator.

In the said drawings, A is a cloth jacket in the form of a jumper, the upper end A' of which is extended to inclose the head of the wearer. Projections, as A<sup>2</sup>, on the inner face of the part A' are used to prevent the garment lying too close to the head and face. These projections may be placed at any suitable points that will serve the purpose described and will not impede the circulation of air. At the top of the part A' over the crown of the head of the wearer is an opening B, which for convenience may be closed with a wire screen.

On the side of the part A' in front of the eyes of the operator is a window C, which may be closed with glass or mica, as desired, and through which the operator may see what he is doing. The lower end of the jacket or jumper is closed by a belt D, which goes around the body of the wearer, and the lower end of the sleeve of the left arm may be closed in the same way. The object of this is to prevent air from escaping through other passage-ways than the opening B.

The right sleeve A<sup>3</sup> of the garment is extended down beyond the hand of the wearer and is arranged to inclose that part of a

pneumatic tool which contains one or both of its exhaust-ports. A pneumatic tool of an ordinary kind is shown at F and its exhaust-ports at F'. The extreme end of the sleeve A<sup>3</sup> is secured to the tool F by a strap H.

In using this device the exhaust from the tool F passes out through the ports F', up through the sleeve A<sup>3</sup>, the body A, and the head part A', and thence out through the opening B. It will be obvious that the communication between the exhaust-ports and the head-piece A' might be by way of an exhaust-pipe, in which case the belt D might be around the neck of the wearer and there would be no body A and no sleeve A<sup>3</sup>. In some cases this may be desirable; but as small pneumatic tools are frequently used in cleaning scale from the inside of boilers recently blown off and in other hot and stuffy places it is desirable to have the exhaust pass around the body of the wearer as a means of relief from uncomfortable temperature. It will be evident that by suitable arrangements the exhaust from the pneumatic tool can be made to circulate to a greater or less extent around the body of the operator without in any way interfering with the usefulness of the air for breathing purposes.

It is not necessary for the garment to be air-tight. All that is necessary is that it be sufficiently impervious to a current of air to cause a sufficient quantity to be conveyed to the face of the operator for breathing. As the volume of air exhausted by an ordinary pneumatic tool is much in excess of the amount used for breathing, there may be considerable leaks without impairing the efficiency of the device as a fresh-air supply.

What I claim is—

The combination with a pneumatic tool adapted to be held in the hand and providing an exhaust-aperture adjacent thereto, of a garment inclosing the body and head of the operator and having one sleeve elongated so as to extend beyond the hand and engage said tool whereby the exhaust from said tool travels up said sleeve and through the garment.

Signed at Chicago, Illinois, this 17th day of March, 1903.

HUGH J. ELLIS.

Witnesses:

WM. A. ROWLAND,  
C. L. REDFIELD.