

Aug. 14, 1923.

G. PHILLIPS ET AL

1,464,883

PAINTER'S MASK

Filed Feb. 8, 1919

Fig. 1.

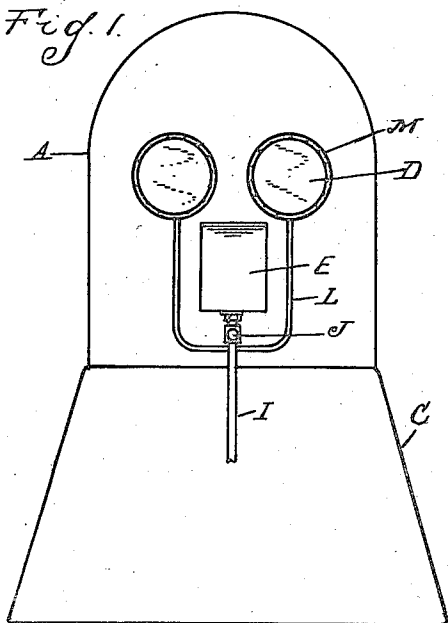


Fig. 2.

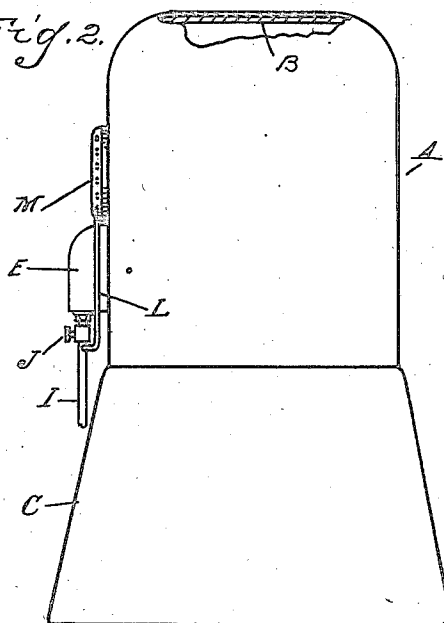


Fig. 4.

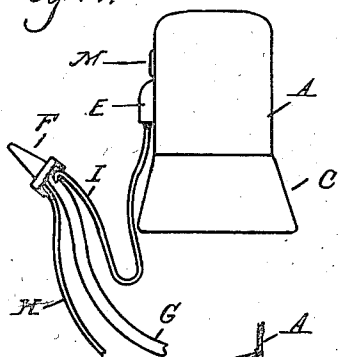


Fig. 5.

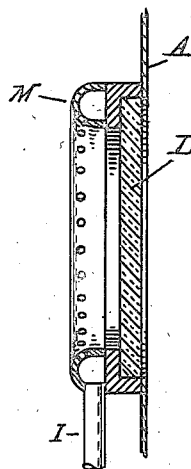
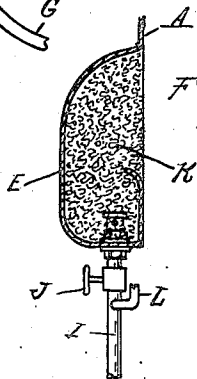


Fig. 3.



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UNITED STATES PATENT OFFICE.

GORDON PHILLIPS AND PATRICK HANLON, OF DETROIT, MICHIGAN, ASSIGNORS OF
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PAINTER'S MASK.

Application filed February 8, 1919. Serial No. 275,706.

To all whom it may concern:

Be it known that we, GORDON PHILLIPS and PATRICK HANLON, both citizens of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Painters' Masks, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to masks particularly designed for use by painters and other workmen exposed to injurious fumes, mists and smokes.

The invention consists in the means employed for maintaining a constant supply of pure air, and more specifically in the combination between the air supply for the mask and an air brush for applying the paint. The invention further comprises various features of construction as hereinafter set forth.

In the drawings:

Figure 1 is a front elevation of the mask;

Figure 2 is a side elevation thereof;

Figure 3 is a section showing the air connections;

Figure 4 is an elevation showing the connection between the mask and air brush;

Figure 5 is a cross-section through the eye piece of the mask.

In the present state of the art, painting is rapidly performed by the use of an air brush, which in its operation ejects the paint in a fine mist against the surface to be covered. One objectionable feature of the process is that the paint mist fills the air and renders it unfit for breathing, so that it has been found necessary to provide the operators with masks. These masks are provided with a moist sponge or other means for filtering the air, but it has been found difficult to completely purify the air in this manner. Furthermore, the mist of paint-deposit on the sponge soon hardens and renders it impervious. To protect the eyes of the workman the mask is constructed with a transparent panel or eye-piece, but the mist of paint-deposit on the glass soon obscures the vision.

To overcome the difficulties above described we have devised a construction of mask which has an attachment to the air brush through which fresh air is supplied within the mask. We have also provided

means for preventing the deposit of paint mist upon the eye-piece, so that clear vision is maintained.

In detail A is a mask for protecting the face of the workman, preferably in the form of a hood completely covering the head. This hood is preferably formed of paper or other light material and may, if desired, be provided with a felt pad B at the top for resting upon the operator's head. There is also preferably provided a depending flexible skirt C. D are eye openings covered with glass panels, and E is a nose-piece. F is the air brush which is connected to a flexible air conduit G and a flexible paint conduit H; said conduits being respectively connected to a source of compressed air and liquid paint (not shown). I is a flexible conduit connecting the air conduit of the air brush with the nose-piece E, a controlling valve J being provided to regulate the pressure. The space within the nose-piece is preferably filled with a sponge or other porous body K through which the air is distributed and from which it passes into the space within the hood. L are air conduits connecting into the air conduit I in advance of the valve J and leading to the eye-pieces D and preferably connecting to annular conduits M surrounding said eye-pieces with discharge apertures distributed thereabout. The construction is such that currents of air encircling the glass meet at a point a short distance in front of the surface of the glass to prevent deposit of paint mist thereupon.

With the construction as described, the operator having the hood placed upon his head is completely protected from the paint mist, and inasmuch as it is necessary for him to carry the air brush wherever he goes, fresh air is constantly supplied through the connecting conduit I. A portion of this air entering the nose-piece is distributed within the hood for breathing, while the air passing through the conduits L and annular conduits M will form a protecting dome over the surfaces of the glass to keep the same clear from paint. Consequently the operator is enabled to continue the work for any length of time without injury.

What we claim as our invention is:

1. The combination with a mask having a transparent panel or eye-piece, of means surrounding the space in front of the eye-piece for directing currents of air across and

in front of the same, and an air conduit connecting into said mask and current directing means.

2. The combination with a mask having
a transparent panel or eye-piece, of means
for supplying air to the mask, and an annular conduit connected to the air supplying
means outside of said mask and located near
the periphery of said eye-piece, said conduit
10 having provision for directing air across
and in front of said eye-piece.

3. The combination with a mask having

a transparent panel or eye-piece, of an annular conduit surrounding the space in front
of said eye-piece, and an air conduit connecting into said mask and annular conduit,
the latter being provided with a series of
discharge apertures on its inner peripheral
side for directing currents across and in
front of said eye-piece. 15

In testimony whereof we affix our signatures. 20

GORDON PHILLIPS.
PATRICK HANLON.